

USER ACCEPTANCE TESTING (UAT) AUTOMATION TOOL

Terms of Reference

Goods and Services

Mode of Procurement – Public Bidding

Version Number	:	1.0
Final as of	:	07 February 2022
Printed on	:	07 February 2022
Author	:	UAT Automation Tool Technical Working Group

Table of Contents

1.	NAME AND DESCRIPTION OF THE PROJECT
2.	PROJECT OBJECTIVE
З.	PROJECT SCOPE
4.	SYSTEM REQUIREMENTS 10
5.	DELIVERY TIME/COMPLETION SCHEDULE
6.	DELIVERY SITE AND SCHEDULE 17
7.	COST ANALYSIS SHEET 18
8.	QUALIFICATION REQUIREMENTS 19
9 .	PROPOSAL REQUIREMENTS
10.	OTHER TERMS AND CONDITIONS

ANNEXES

ANNEX A	FIRM CREDENTIALS INFORMATION SHEET
ANNEX B	CUSTOMER SATISFACTION SURVEY FORM
ANNEX C	PROJECT TEAM INFORMATION SHEET
ANNEX D	VENDOR PERFORMANCE ASSESSMENT AND MONITORING REPORT
ANNEX E	POST-QUALIFICATION REQUIREMENTS

1. Name and Description of the Project

System Development Life Cycle (SDLC) is model which include procedures for developing or enhancing system throughout its life cycle. It has different phases, one of which is the Test Phase. Under Test Phase, System Testing and User Acceptance Testing (UAT) are conducted and all support documentations and plans are finalized and approved.

During preparation for UAT, test cases and scripts are finalized and approved. These will be used by the testers as their basis in their conduct of UAT. Currently, creation and execution of test scripts are done manually by testers.

In the current industry practice, UAT Automation Tool is used to efficiently manage the UAT. The tool is a software which will be used by the testers during recording and execution of test scripts, validation and reporting of test results.

2. Project Objective

To acquire UAT Automation Tool which will improve the quality of the application deployed in production and shorten the duration of the test execution.

3. Project Scope

The scope of the Project includes *implementation of an off-the-shelf UAT Automation Tool* which shall have the following functionalities:

- Automated recording of test scripts
- Automated execution of recorded scripts, including scheduled run and validation of expected result vis-à-vis actual result.
- Generation of reports (e.g., test results of the executed test scripts, etc.)

The Solution Provider is expected to deliver a UAT Automation Tool inclusive of one (1) year maintenance agreement.

The project must take into account all related implementation activities and processes such as systems integration, project management, system development lifecycle, change management, technology transfer (training and documentation), and maintenance and support.

The Training Requirements of the Project include:

- "Train The Trainors" Training;
- Technical Training;
- Knowledge Transfer and Handover workshops; and
- Other system-related training activities.

The Approved Budget for the Contract (ABC) shall be the upper limit or ceiling for the proposal, and shall cover all project costs, including, but not limited to the following:

- Software costs including software application, 8 concurrent perpetual licenses and other components;
- Implementation cost which includes project management, consulting, requirements validation, training, integration and user acceptance testing, production deployment, system integration, change management and other out-of-pocket expenses (e.g., transportation allowance, per diem, etc.);
- Ninety-day warranty/post Go Live support starting from the Production cut-over date;
- Maintenance and support;
 - One-year maintenance and support for all software components will commence after the end of the 90-day warranty/post Go Live support period;
 - The maintenance cost shall not exceed 20% of the software licenses cost. LANDBANK shall pay the maintenance support at the start of the maintenance period.
- All applicable taxes, service fees and charges (e.g., fund transfers fees, foreign exchange difference)

Other Requirements

Once the project is awarded, Solution Provider must comply with the following:

a. Performance Security

(NOTE: this is different from the Security/Bidder's Bond under Sec. 27.1 to 27.2, RA 9184)

For Bidding

Form of Performance Security	Amount of Performance Security (Not less than the required percentage of the Total Contract Price)
a) Cash or cashier's/manager's check issued by a Universal or Commercial Bank	Goods and Services – Five percent (5%)
 b) Bank draft/guarantee or irrevocable letter of credit issued by a Universal or Commercial Bank: Provided, however, that it shall be confirmed or authenticated by a Universal or Commercial Bank, if issued by a foreign bank 	

- Shall be denominated in Philippine Pesos
- Shall be furnished by Solution Provider within a maximum period of ten (10) calendar days from the receipt of the Notice of Award or upon the signing of the contract
- Shall form part of the contract

- Shall be forfeited in the event it is established that the Solution Provider is in default in any of its obligations under the contract
- May be released after the issuance of the Certificate of Final Acceptance, (after the 90day warranty period) if:
 - a) There are no claims filed against the Solution Provider
 - b) There are no claims based on the other terms of the contract

Additional

- Additional performance security on cumulative increase of more than ten percent (10%) over the original value of the contract as a result of amendments to order or change orders, extra work orders and supplemental agreements
- Extension of the validity of the performance security to cover approved contract time extensions

Reduction

- Part of the service under the contract had already been delivered or completed, and accepted
- Proportional reduction in the value of the performance security is allowed only when the contract allows for partial deliveries or performance.
- Reductions must be more than ten percent (10%), and the aggregate of such reductions must not be more than fifty percent (50%) of the original performance security

b. Personnel

Replacement Before the awarding of Contract:

There should be no replacement of key personnel before the awarding of the contract, except for justifiable reason as may be determined by the BAC (Bids and Award Committees), such as illness, death, or resignation provided it is duly supported by relevant certificates or any delay caused by the Procuring Entity. The BAC shall immediately consider negotiation with the next ranked bidder if unjustifiable the replacement of personnel by the first ranked firm is made.

Replacement of Key Personnel during the effectivity of the contract/after awarding of Contract:

In case of personnel replacement during the course of the project, the solution provider shall submit project team information sheet of the incoming personnel for approval of LANDBANK's project team. Also, LANDBANK shall be notified/advised 30 days before the effectivity of such replacement.

If LANDBANK finds that any of the personnel has committed serious misconduct or has been charged for the commission of criminal offense under Philippine Law, or has reasonable cause to be dissatisfied with the performance of any of the personnel, then the Solution Provider must, at LANDBANK's written request specifying the grounds therefor, forthwith provide as replacement a person with qualifications and experience acceptable to LANDBANK. The replacement should have equal or better qualifications but will receive remuneration not exceeding that which would have been payable to the person replaced. The Solution Provider shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of staff.

Subcontracting:

Solution Provider shall notify LANDBANK of any subcontracting arrangement and the same shall be agreed upon. The following minimum conditions shall be observed:

- The extent to which subcontractors perform additional services should be limited to peripheral or support functions while the core services should rest with the main service provider
- Contracting service provider shall remain fully responsible with respect to parts of the services which were further outsourced to subcontractors
- It should also consider including notification and approval requirements regarding changes to the service provider's significant subcontractors

c. Threshold for findings during UAT

A threshold for the issues/findings (Severity 1 and 2) based on the number of test cases or scenarios during User Acceptance Testing (UAT) shall be determined and agreed upon by LANDBANK and Solution Provider during UAT planning

If the set threshold for the issues/findings is reached during UAT, LANDBANK shall suspend the UAT, require the Solution Provider to correct all deficiencies, perform and provide LANDBANK with another Unit and Integration Testing (UIT) certificate. This period will be subjected to the imposition of liquidated damages as specified in the Special Condition Contract (SCC). In addition, due to this delay, equivalent penalty that will be imposed by regulators/agencies will be borne by the Solution Provider.

Over-all validation of test results against the requirements agreed and accepted shall be made prior to acceptance

d. Issue resolution during warranty period

During the warranty/post Go Live support period, turnaround time for resolution of any related system incident or problem is as follows:

SEVERITY CLASSIFICATION	DESCRIPTION	RESOLUTION PERIOD
1	The system is not operational and could not be recovered immediately, and there is no identified work around that can be performed to deliver the necessary user and business requirements. Problem may have been caused by fraudulent	Within 3 days
	activities.	
2	There is significant business functionality issue that affects	Within 5 days

	several users [e.g., system	
	slow down]	
	There is an available work around that can address users and business requirements.	
3	The problem is on the delivery of reports/processing of transactions with less significant impact on business operation and affects very few users [e.g., non- generation of report, incorrect data displayed in the report, specific fields are not functioning accordingly, mapping error]. There is an available	Within 1 month
	workaround that can address users and business requirements.	
4	The problem is aesthetics/cosmetic [e.g., incorrect access of individual users, discrepancies on the reports/documents of a single account, incorrect messages, screen and report format/layout]	Within 2 months
	There is an available workaround that can address users and business requirements	

Failure to resolve Severity 1 and 2 within the specified resolution time will extend the warranty/post Go Live support period and maintenance agreement will be put on hold.

Should there be system errors encountered upon usage and within 90 days therefrom which are attributable to the Solution Provider, LANDBANK shall have the right to call on the performance security.

e. Performance Monitoring

After awarding of the contract:

- LANDBANK, shall conduct performance monitoring which shall be done annually. For contracts with a period of one year or less, assessment shall be made upon maturity. Such monitoring shall be against metrics identified and assigned by LANDBANK (Please see Annex D for the sample Vendor Performance Assessment and Monitoring Report).
- The solution provider is also required to submit Net Financial Contracting Capacity (NFCC) to establish its liquidity, capacity to absorb the obligations in connection with the existing contract/project, and to finance its implementation or completion.

The NFCC shall be based on the latest Audited Financial Statements and computes as follows:

Particulars	Amount
Current Assets	XXXX
Less: Current Liabilities	XXXX
Sub-total	XXXX
Multiplied by 15	XXXX
Sub-total	XXXX
Less: Value of Outstanding	XXXX
Contracts	
NFCC	XXXX

f. Liquidated Damages

- a. Failure to satisfactorily complete the services required under the contract within the specified period (delay), inclusive of duly granted time extensions, if any, or unnecessary delays incurred which are attributable to the Service Provider
- b. In an amount equal to one-tenth (1/10) of one percent (1%) or 0.001 of the cost of unperformed portion for every day of delay
- c. Shall not reach ten percent (10%) of the contract amount
- d. Automatic contract recission if damages reached more than 10% without prejudice to other courses of action and legal remedies available under the law
- e. Contract take over by LANDBANK upon recission or award to a qualified Solution Provider through negotiation
- f. Erring Solution Provider's performance security shall also be forfeited

Modification of Terms and Conditions/Extensions

- Cumulative increase of more than ten percent (10%) over the original value of the contract as a result of amendments to order or change orders, extra work orders
 - Shall be covered by rules on direct contracting or negotiated procurement (adjacent/contiguous)

- Man-day rate to be used for any out-of-scope services to be performed by the solution provider under a Change Request shall be the same rate as that of the existing contract
- The contractor shall use the same prices or lower unit prices as in the original contract less mobilization cost

g. Contract Termination

• Termination in whole - shall occur at the end of contract

By LANDBANK:

- Termination for default any of the following
 - Outside of force majeure, Solution Provider fails to deliver or perform the Outputs and Deliverables within the period(s) specified in the contract, or within any extension thereof granted by LANDBANK pursuant to a request made by the Solution Provider prior to the delay
 - As a result of force majeure, the Solution Provider is unable to deliver or perform a material portion of the Outputs and Deliverables for a period of not less than sixty (60) calendar days after the Solution Provider's receipt of the notice from LANDBANK stating that the circumstance of force majeure is deemed to have ceased
 - The Solution Provider fails to perform any other obligation under the contract
- Termination for convenience in whole or in part, at any time based on any or concurrence of the following:
 - existence of conditions that make Project Implementation economically, financially or technically impractical
 - unnecessary, such as, but not limited to, fortuitous event(s) or changes in law and national government policies
- Termination for Insolvency
 - Solution Provider is declared bankrupt or insolvent as determined with finality by a court of competent jurisdiction
 - Termination will be without compensation to the Supplier
 - Without prejudice to any right of action or remedy which has accrued or will accrue thereafter to the LANDBANK and/or Solution Provider
- Termination for Unlawful Acts
 - There is prima facie evidence that Solution Provider has engaged, before or during the implementation of the contract, in unlawful deeds and behaviors relative to contract acquisition and implementation
 - Unlawful acts include, but are not limited to, the following:
 - a) Corrupt, fraudulent, collusive and coercive practices
 - b) Drawing up or using forged documents
 - c) Using adulterated materials, means or methods, or engaging in production contrary to rules of science or the trade

By Solution Provider:

User Acceptance Testing (UAT) Automation Tool Terms of Reference : NEW SYSTEM DEVELOPMENT

LANDBANK is in material breach of its obligations pursuant to the contract, without any fault on the part of the Solution Provider, and has not remedied the same within sixty (60) calendar days following its receipt of the Solution Provider's notice specifying such breach

h. Support Services

- Solution Provider shall provide responsibilities regarding hardware, software and infrastructure upgrades, including notification of all systems changes that will affect LANDBANK
- Solution Provider shall provide responsibilities regarding on-line communication availability and schedule of availability and timeliness of service:
 - All contact information (e.g., telephone number, hotline, email address) must be available and provided in the proposal
- Solution Provider guarantees that it has an established communication transmission line security, and transaction authentication
- Solution Provider shall provide schedule of availability of timeliness of services.

4. System Requirements

This section documents the project stakeholders' expectations, and the functional and non-functional requirements that the proposed solution must satisfy or exceed in order for the proposed solution to qualify for consideration.

The Solution Provider must respond to each requirement and provide information for the following columns:

- A. Percentage Compliance (e.g., 100% for full compliance, nn% for partial compliance)
 - 100% Fully compliant, base-product functionality; no customization required
 - nn% Partially compliant; customization required
- B. Customization Estimates (expressed in man-days);
- C. Response

If no exception, explanation, or clarification is required in the Solution Provider's response to a specific requirement, the Solution Provider shall indicate the following response"

"Solution Provider's Name understands and will comply."

Failure to conform to any of the above specifications may be sufficient grounds for disqualification.

Requirement No.	Requirement Statement	Priority	Percentage Compliance	Customization Estimates Effort (Man- Days)	Remarks	
4.1. Functiona	l Requirements					
4.1.1.	4.1.1. Functional Scope					

Requirement No.	Requirement Statement	Priority	Percentage Compliance	Customization Estimates Effort (Man- Days)	Remarks
ATT-411-001	Proposed solution shall allow the user to maintain (view, add, edit, delete) automation test cases/ test scripts with script-less feature, meaning without the need of writing the complex code	Mandatory			
ATT-411-002	Proposed solution shall allow the user to maintain (view, add, edit, delete) the automation test cases/ test scripts with the help of any scripting languages (e.g., VB, .Net, etc.) and simple plain English commands instead of scripts for custom or tailored use cases.	Mandatory			
ATT-411-003	Proposed solution shall automatically record test scripts while navigating the system to be tested.	Mandatory			
ATT-411-004	Proposed solution shall allow the user to generate and print the created automation test cases/ test scripts	Mandatory			
ATT-411-005	Proposed solution shall allow the user to maintain (view, add, edit, delete) schedule of execution of test run. Business rule: Can be per selected test case/ test script. Shall automatically run based on the defined schedule.	Mandatory			
ATT-411-006	Proposed solution shall allow the user to execute the automated test cases/ test scripts on demand or as the need arises.	Mandatory			
ATT-411-007	Proposed solution shall allow running/ processing of negative test scenarios.	Mandatory			
ATT-411-008	Proposed solution shall allow the user to export and import stored automation test cases/ test scripts	Mandatory			
ATT-411-009	Proposed solution shall have the capability to test End to End with multiple interfaces and technologies in one single solution/script	Mandatory			
ATT-411-010	Proposed solution shall detect/ determine if the input data is successfully forwarded to the interfaced system	Mandatory			
ATT-411-011	Proposed solution shall have the ability to "Record and replay" the user action	Mandatory			
ATT-411-012	Proposed solution shall be able to test various test data inputs that supplied as part of the test scripts	Mandatory			

Requirement	Requirement Statement	Priority	Percentage	Customization Estimates	Remarks
No.	Requirement Statement	FIOR	Compliance	Effort (Man- Days)	i cinai ka
ATT-411-013	Proposed solution shall have image- based testing capabilities to validate images and logos	Mandatory			
ATT-411-014	Proposed solution shall have the ability to wait the page to completely load (e.g., until the objects appear) based on the defined period.	Mandatory			
	Business rule: Must run/ execute the test case/ test script after the defined period.				
ATT-411-015	Proposed solution shall allow the user to maintain (add, edit, delete) waiting period for the loading of page.	Mandatory			
ATT-411-016	Proposed solution shall have the ability to identify the object or text with varying or dynamic values	Mandatory			
ATT-411-017	Proposed solution shall have the ability to perform/ execute multiple platforms (e.g., web, native mobile, mobile web, tablet, etc.) with single automation script	Mandatory			
	Business rule: Can be executed across multiple web browsers and versions				
ATT-411-018	Proposed solution shall have the capability to develop the various test automation frameworks (e.g., Modular, Keyword driven, Data driven, Al driven, etc.)	Mandatory			
ATT-411-019	Proposed solution shall have the capability to validate the expected results against the actual results for each step/ test script	Mandatory			
ATT-411-020	Proposed solution shall have the capability to take the screenshots or video recordings of the test execution for each step/ test script	Mandatory			
ATT-411-021	The system shall provide push notifications for the status of executed test scripts.	Recommended			
ATT-411-022	Proposed solution shall be able to log failed test cases Business rule: Failed test cases can be recurring, new, closed or open	Mandatory			
ATT-411-023	Proposed solution shall allow the user to view the failed test cases and its	Mandatory			

Requirement No.	Requirement Statement	Priority	Percentage Compliance	Customization Estimates Effort (Man- Days)	Remarks		
	details						
ATT-411-023	Proposed solution shall allow the user to view the test results of the executed automated test cases/ scripts	Mandatory					
4.1.2.	4.1.2. Artificial Intelligence and Machine Learning						
ATT-412-001	Proposed solution shall have AI enabled smart testing techniques (e.g., technology agnostics, Visual identification of objects with human like intelligence, AI-based recording, AI- based text matching, AI-based test cases/ scripts development)	Recommended					
ATT-412-002	Proposed solution shall have the capability to automatically generate Large, Complex and Random test data that required for test execution	Recommended					
	tional Requirements						
4.2.1.	Interface/ Usability Requirements	1	1	1	Γ		
ATT-421-001	Proposed solution shall have parallel testing capabilities of different system applications at the same time	Recommended					
ATT-421-002	Proposed solution shall have the ability to integrate with different environments (e.g., Integrated Development Environment (IDE), UAT, etc.) of the system application.	Mandatory					
ATT-421-003	Proposed solution shall be capable of testing the systems' interfaces with the third-party solutions.	Recommended					
4.2.2.	Performance Requirements						
ATT-422-001	Proposed solution shall be able to recover from the unexpected failures like windows pop up messages or any other system error messages	Mandatory					
ATT-422-002	Proposed solution shall accommodate multiple users without system slow down.	Mandatory					
ATT-422-003	Proposed solution shall allow only one (1) active session per user.	Mandatory					
ATT-422-004	Proposed solution shall pass the vulnerability assessment of the Bank.	Mandatory					
ATT-422-005	The service providers must address findings in the vulnerability report.	Mandatory					
4.2.3.	Operational Requirements	1	ſ	Γ			
ATT-423-001	Proposed solution shall be capable to work with application mockups when real applications are under development or unavailable for the test	Mandatory					
ATT-423-002	Proposed solution shall be capable for	Mandatory					

Requirement No.	Requirement Statement	Priority	Percentage Compliance	Customization Estimates Effort (Man- Days)	Remarks
	modular testing.				
ATT-423-003	Proposed solution shall be able to automate the functional testing on various application types (i.e., web- based, stand alone, desktop, mainframe, enterprise applications, etc.) based on the defined test cases/ test scripts. Business rule:	Mandatory			
	Can select from the list of test cases/				
ATT-423-004	test scripts Proposed solution shall have the ability to automate the functional testing of non-graphical user interface (GUI) based applications (e.g., API Testing - XML, JSON, HTTP, & Web services, etc.) based on the defined test cases/ test scripts.	Mandatory			
	Business rule: Can select from the list of test cases/ test scripts				
ATT-423-005	Proposed solution shall have the ability to automate the functional testing on the Mobile based applications' OS (e.g., IOS, Android, Windows, etc.) based on the defined test cases/ test scripts. Business rule:	Mandatory			
	Can select from the list of test cases/ test scripts				
ATT-423-006	Proposed solution shall have various add-ins out of the box (e.g., Terminal Emulators, Excel, PDF, ActiveX, power builder, Visual Studio, etc.).	Mandatory			
ATT-423-007	Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, IE, Edge, Safari, Firefox, Phantom JS & Other browser Technologies - HTML, XML)	Mandatory			
ATT-423-008	Proposed solution shall support various Database technologies (e.g., My SQL, Oracle, MS SQL, Postgres, ODBC Drivers, etc.)	Mandatory			
ATT-423-009	Proposed solution shall be accessible and fully functional using the bank's remote access (e.g., VPN, etc.).	Mandatory			
ATT-423-010	Proposed solution shall be able to	Mandatory			

Requirement No.	Requirement Statement	Priority	Percentage Compliance	Customization Estimates Effort (Man- Days)	Remarks
	accommodate multiple users at any given time.				
ATT-423-011	Proposed solution shall comply with the existing IT infrastructure and architecture of the bank.	Mandatory			
ATT-423-012	Proposed solution shall have a facility to back-up and restore all files in the database (e.g., user profiles).	Mandatory			
ATT-423-013	Proposed solution shall be able to back-up and restore all files in the application server.	Mandatory			
4.2.4.	Reportorial Requirements				
ATT-424-001	Proposed solution shall allow the user to set and modify the desired parameters before generating the reports.	Mandatory			
ATT-424-002	Proposed solution shall allow the user to view, download, and print reports in different file formats (e.g., HTML, DOC/ DOCX, PDF, XLS/ XLSX, CSV, etc.)	Mandatory			
ATT-424-003	Proposed solution shall allow the user to generate the following reports: 1. Test results of the executed test cases/ test scripts	Mandatory			
ATT-424-004	2. Failed test cases/ scripts	Mandatory			
ATT-424-005	3. Test cases/ scripts with status	Mandatory			
4.2.5.	Maintainability Requirements				
ATT-425-001	Proposed solution shall have the ability to update the automation scripts with minimal efforts	Mandatory			
ATT-425-002	Proposed solution shall have the ability of reusing testing components, test scripts & test data	Mandatory			
ATT-425-003	Proposed solution shall have a facility that allows the user to view the tables and database content.	Mandatory			
ATT-425-004	Proposed solution shall provide available system updates (e.g., release of fix, patches, etc.).	Mandatory			
4.2.6.	Portability Requirements				
ATT-426-001	Proposed solution shall adapt to changes in LBP IT architecture, hardware, software, and database platforms that are currently supported by the Bank. Example: Windows 2016, Oracle 12c, etc.	Mandatory			
427	Audit Requirements	<u> </u>			<u> </u>
7.2.1.	nuan neguitemento				

Requirement No.	Requirement Statement	Priority	Percentage Compliance	Customization Estimates Effort (Man- Days)	Remarks
ATT-427-001	Proposed solution shall have a facility to log application errors (e.g., database error, connectivity error).	Mandatory			
ATT-427-002	Proposed solution shall have a facility for the user (administrator) to view/ display application error (e.g., database error, connectivity error) logs.	Mandatory			
4.2.8.	Legal Requirements	•			
ATT-428-001	The vendor shall comply with RA 9184, otherwise known as the "Government Procurement Act of 2016".	Mandatory			
4.2.9.	Miscellaneous Requirements	•	•		
ATT-429-001	The vendor shall conduct training for system and application administration, users and interface development.	Mandatory			
ATT-429-002	The Bank shall be provided with a Product/Generic User's Manual or its equivalent document which shall contain Operating Procedures.	Mandatory			
ATT-429-003	The Bank must be provided with an Application Maintenance Manual or equivalent document.	Mandatory			
ATT-429-004	The Bank must be provided with Manuals/Documentations to continue maintainability of the system. Example: a. Server Hardware/ Software Installation Procedures b. Front End Hardware/ Software Installation Procedures c. Applicable administration/ housekeeping routines d. Problem Management Procedures, including documentation on System Errors, Messages and Codes (e.g. Quick Fix/Troubleshooting Guide) e. Application information and configuration on: o Back-end/front-end software o Server configuration o Storage allocation o IP, Network details o User roles/profiles o Capacity planning f. Vendor support contact details g. Maintenance Contract with Service Level Agreement h. Technical/System Manual i. Data Flow Diagrams (e.g. level 1 and 2)	Mandatory			

Requirement No.	Requirement Statement	Priority	Percentage Compliance	Customization Estimates Effort (Man- Days)	Remarks
	j. Database Schema k. Data Dictionary l. Disaster Recovery Document m. Operating Procedures n. Quick Reference Guide o. User and Security Administration				
ATT-429-005	The vendor shall provide a document which shall contain procedures on system customization (e.g., system set- up, additional tables/parameters).	Mandatory			
ATT-429-006	The vendor shall provide inputs to the Bank's documentary requirements (e.g., Data Migration Plan, Deployment Plan).	Mandatory			
ATT-429-007	The vendor shall allow LBP's internal and external auditor and regulatory authorities to have access to information relevant to this project.	Mandatory			
ATT-429-008	The Bank shall be provided with the following documentations before implementation: o System backup	Mandatory			
ATT-429-009 ATT-429-010	o Database backup o Implementation procedures	Mandatory Mandatory			

5. Delivery Time/Completion Schedule

The Project must be completed within six (6) weeks, inclusive of LANDBANK's User Acceptance Testing (UAT). Commencement date will be from the receipt of Notice To Proceed (NTP) by the winning bidder from the Procurement Department of the Bank.

6. Delivery Site and Contact Person

Ronaldo E. Buenaventura Project Team Leader IT Project Management Department 17F LBP Plaza, 1598 MH Del Pilar cor. Dr J. Quintos Sts., Malate Manila Contact Details: Telephone: (02) 8405700 local 7729; Mobile Phone: +639209476198

Rhea F. Abana Project Secretariat IT Project Management Department 17F LBP Plaza, 1598 MH Del Pilar cor. Dr J. Quintos Sts., Malate Manila Contact Details: Mobile Phone: +639357218743

7. Cost Analysis Sheet

Cost Breakdown

Cost Component	Cost (PHP)
Software Cost Software Application and Licenses (8 concurrent licenses) Other Software Components	XXX,XXX,XXX.XX XXX,XXX,XXX.XX
Implementation Cost (project management, consulting, requirements validation, training, integration and user acceptance testing, production deployment, system integration, change management, etc.) and other out-of-pocket expenses, etc.)	XXX,XXX,XXX.XX
Maintenance and Support Cost (including cost of upgrades) 1 st Year	XXX,XXX,XXX.XX
TOTAL INVESTMENT COST	XXX,XXX,XXX.XX

- All bid prices shall be considered as fixed price
- Shall be denominated and payable in Philippine currency OR payable in foreign currency but shall be converted to Philippine currency based on the exchange rate prevailing as established by BSP on the day of the bid opening
- For contracts denominated in foreign currency, a Provisional sum, not exceeding ten percent (10%) of the Approved Budget for the Contract (ABC) to cover the possible increase of the actual amount of expenditure of the procuring entity resulting from the appreciation/depreciation of the peso from the day of contract signing. Any excess in the exchange rate covered by the provisional sum shall be borne by the supplier
- Shall not be subject to price adjustment and escalation during contract implementation, except under extraordinary circumstances (under R.A. 9184) and upon prior approval of the GPPB
- Contract price adjustment shall be made or appropriate relief shall be applied on a no loss-no gain basis (actual adjustment or change caused by the supervening issuance or governmental act)* when cost of the awarded contract is affected by any applicable new laws, ordinances, regulations, or other acts of the Government of the Philippines
- Breakdown of the cost shall be presented
- All applicable taxes shall be for the account of the TPSP
- Cost of all taxes, (e.g., value added tax (VAT), income tax, local taxes, and other fiscal levies and duties) which shall be itemized and reflected in the detailed estimates
- All applicable fees and charges, in instances of fund transfer to and where foreign currency is used for payments shall be for the account of TPSP.

Payment Milestone

Payment Milestone	Amount Due (PHP)
Software/ License Cost	
50% upon delivery and installation of base solution	XXX,XXX,XXX.XX
50% upon Go-Live/Pilot Implementation	XXX,XXX,XXX.XX
Implementation and Other Cost	
15% for mobilization fee upon contracting signing and approval of detailed project work plan	XXX,XXX,XXX.XX
20% upon installation of system in LANDBANK's environment; issuance of Unit and Integration Testing (UIT) Certificate and conduct of system walkthrough	XXX,XXX,XXX.XX
25% upon UAT completion (UAT Sign-off)	XXX,XXX,XXX.XX
10% upon completion of training/knowledge transfer Each trainee shall be able to successfully record and execute test scripts at the end of the training.	XXX,XXX,XXX.XX
20% upon Go Live/ Pilot Implementation	XXX,XXX,XXX.XX
10% upon completion of 90 days warranty period	XXX,XXX,XXX.XX
Total Software, Implementation and Other Costs	XXX,XXX,XXX.XX
1 st Year Maintenance and Support Cost	XXX,XXX,XXX.XX
TOTAL PROJECT COST (VAT and ALL taxes inclusive)	XXX,XXX,XXX.XX

TOTAL PROJECT COST (in words): _____

8. Qualification Requirements

Evaluation Criteria	Minimum Required Standards
A. Firm Credentials (Experience, Expertise and Capability) This criterion evaluates the bidder's and/or system developer's / licensor's experience, expertise and capability to deliver the proposed solution, as well as the results of satisfaction ratings of previous engagements, are considered.	 Bidders must: ✓ Have at least three (3) years of relevant experience in successfully implementing the proposed solution. Provide the Client Name, Project Name, Project Description, Project Start Date, Project Completion/Implementation Date, and Contact Person and Number/Email Address using the Firm Credentials Information Sheet (Annex A). ✓ Submit at least two (2) fully filled-out

	Evaluation Criteria	Minimum Required Standards
		 Customer Satisfaction Survey Forms (Annex B) with "satisfactory" ratings for previous successful engagements. Submit at least two (2) fully filled-out Customer Satisfaction Survey Forms (CSS) with "satisfactory" ratings for previous successful engagements. Submitted CSS form must be sealed and signed when provided to LANDBANK. ✓ With local or regional implementation of the proposed solution.
т	Personnel Qualifications This criterion assesses the relevant work experience and educational attainment	Submit biographical information using the prescribed Project Team Information Sheet template (Annex C)
0	f the bidder key personnel (i.e., Project	✓ Project Manager:
L	lanager, Business Analyst Technical ead, and Technical Support Staff) dentified to implement the proposed	 At least three (3) years of experience in IT as Project Manager; and
	olution.	 At least two (2) years of actual experience in implementing the UAT Automation Tool in banking or financial institution.
		✓ Technical Team Lead:
		 At least two (2) years of experience as Technical Team Lead; and
		 At least two (2) years of actual experience in implementing the UAT Automation Tool in banking or financial institution.
		 ✓ Technical Support Staff (i.e., Systems Analyst and Programmer):
		 At least two (2) years of experience as Technical Support Staff (i.e., Systems Analyst and Programmer):
		 Each technical support staff should have at least two (2) years actual experience in implementing the UAT Automation Tool in banking or financial institution
C. F	it to Functional Requirements	✓ The software solution should be 100%
Т	his criterion assesses the proposed	compliant to the Mandatory Functional

	Evaluation Criteria	Minimum Required Standards
	solution against the user requirements that it must satisfy and the functions that it should perform, to support the system owner's business needs and objectives.	requirements* with maximum 20% for customization ✓ The software solution should be at least 66% compliant to <i>Recommended</i> Functional requirements* *Based on the Solution Provider's accomplished requirements on section 4.
D.	Fit to Non-Functional Requirements This criterion considers the proposed solution's fit to the non-functional requirements, i.e., the constraints on various attributes of the system and the development process relating to the functional requirements	 ✓ The software solution should be 100% compliant to the <i>Mandatory</i> Non-Functional requirements* with maximum 20% for customization ✓ The software solution should be at least 50% compliant to the <i>Recommended</i> Non-Functional requirements* *Based on the Solution Provider's accomplished requirements on section 4.
Ε.	Implementation Methodology This criterion evaluates the proposed implementation approach with regards to be logical and systematic sequencing of activities, realistic estimation of work effort and duration, timely and quality delivery of work products, management of project schedule, scope and resources, and the overall soundness of the implementation methodology.	 ✓ Bidder's proposed solution must clearly discuss the following: Proposed Solution Architecture Overview Technical Architecture Solution components (software, services) Implementation and project management methodology Statement Of Work Detailed description of all major tasks, Deliverable item, if any, for each of the major tasks, and Completion criteria for each of the major tasks LANDBANK Responsibilities Specific responsibilities Specific responsibilities relating to resources, skills, infrastructure, documentations, processes, etc., that LANDBANK must satisfy Assumptions, Constraints, Dependencies Schedules Major milestones,

	Evaluation Criteria	Minimum Required Standards
		 Delivery schedule, and Project schedule (major tasks, durations, start and end dates, Gantt chart). Organizational Chart of the Project Team Subscription-based implementation strategy is not allowed.
F.	Support Base This criterion considers capability of the bidder to provide immediate and cost- effective on-site/off-site support or assistance	Bidder must have or must set up a Support Center within the Philippines manned by skilled and experienced technical support staff for the proposed solution. This shall be stipulated in the contract. Proof of location or certification that support center is within the Philippines to be issued by the bidder.

9. Proposal Requirements

The technical proposal must include the following required information/documents:

- A. Requirements compliance response to each requirement. Standard response to each requirement shall be "*Solution Provider's Name* understands and will comply". Refer to Section 4. System Requirements on how to fill-out the requirements compliance.
- B. Implementation Methodology Document which discusses the following information:
 - 1. Proposed Solution Architecture Overview
 - ✓ Technical Architecture,
 - ✓ Solution components (software, services), and
 - 2. Implementation and project management methodology
 - ✓ Statement Of Work
 - ✓ Detailed description of all major tasks,
 - ✓ Deliverable item, if any, for each of the major tasks, and
 - ✓ Completion criteria for each of the major tasks
 - 3. LANDBANK Responsibilities
 - ✓ Specific responsibilities relating to resources, skills, infrastructure, documentations, processes, etc., that LANDBANK must satisfy
 - 4. Assumptions, Constraints, Dependencies
 - 5. Schedules
 - ✓ Major milestones,
 - ✓ Delivery schedule, and
 - ✓ Project schedule (major tasks, durations, start and end dates, Gantt chart).
 - 6. Organizational Chart of the Project Team
- C. Firm Credentials Information Sheet Annex A

- D. Customer Satisfaction Survey Forms Annex B
- E. Brief Company Profile
- F. Business Continuity Plan (BCP) of the Solution Provider (shall be stipulated in any form of documents)-

How the Solution Provider plans to continue to undertake the services needed due from disastrous scenarios, pandemics, calamities and catastrophic events that have impact on the delivery of services brought by either Acts of Nature or are Man-made (should also include the Solution Provider assurance that it has acquired the necessary insurance for fidelity and fire)

- G. Service Level Agreement (SLA) for the maintenance and support to all software components which shall include details on production incidents as to Severity, Response Time, Resolution Time and Permanent Solution.
- H. License, Maintenance Agreements, as applicable
- I. Project Team Information Sheet Annex C
- J. Proof of location or certification that support center is within the Philippines to be issued by the bidder.
- K. Certification to be issued by the bidder that it has well-defined security policies and procedures in place to ensure confidentiality, integrity and availability of Bank's data and privacy of personal information

Failure to submit any of the above requirements is sufficient cause for disqualification.

10. Other Terms and Conditions

10.1 Terms of Reference Standard Information

This Terms Of Reference (TOR) is issued in accordance with the Implementing Rules and Regulations Part A (IRR-A) of Republic Act Number 9184 (RA 9184). In case of conflict, the more stringent guideline/provision shall prevail.

The contents of this document, including all appendices and attachments, are confidential to LANDBANK and are provided solely for the purpose of this TOR.

10.1.1 Discussions/Negotiations

Notwithstanding the acceptance of the proposal and award in favor of the Solution Provider without discussions, LANDBANK is not precluded and has the right to initiate discussions with the Solution Provider as LANDBANK deems necessary. The Solution Provider should be prepared to send qualified personnel to the LANDBANK office to discuss the technical, commercial and other contractual aspects of its proposal.

10.1.2 Award of Contract

Award of contract will be made to the Solution Provider only after successful negotiations and determination that its proposal is the most advantageous to LANDBANK.

10.2 Proposal Preparation

This TOR provides the instructions governing the proposal to be submitted and a description of the mandatory requirements. To be eligible for consideration, the Solution Provider must meet the intent of all mandatory requirements. Compliance with the intent of all the requirements will be determined by the LANDBANK Head Office Bids and Awards Committee (HOBAC).

The Solution Provider must organize its proposal into sections following the format of this TOR, with tabs separating each section. Refer to Section 9 Proposal Requirements for the required information/document that must be included in the proposal.

In case the Solution Provider's proposal does not comply with the specified proposal format, or is difficult to understand, read, or lacks any of the requested information, the proposal will be returned for immediate revision. Revision shall be undertaken not later than three (3) days from its return.

Responses similar to, "Refer to our literature..." or "Please see www......com" are not acceptable. All materials related to a response must be submitted together with the proposal and not just referenced. Any references in an answer to another location in the TOR materials must indicate the specific page numbers and sections stated in the reference.

10.2.1 Price Sheet

For the financial portion of the proposal, the Solution Provider must utilize the form Cost Analysis Sheet and Payment Milestones found in Section 7, which will serve as the basis for evaluating its price quotation. The Solution Provider should include additional information as necessary to explain in detail its price quotation.

10.3 Proposal Submission

Only electronic bids that are successfully uploaded to the Secure File Transfer Facility (SFTF) of LANDBANK on or before the deadline shall be accepted. Submission of the physical bid (hard copy) shall not be accepted. The prescribed procedures in the submission and opening of electronic bids are stated in the Detailed Procedures in Submission and Opening of Electronic Bids. Late bids shall not be accepted.

The Solution Provider must submit:

- Two (2) sets of its technical and financial proposals
- Its proposal to the LANDBANK's HOBAC on or before the deadline set.

10.3.1 Signed Proposals

The proposals must be signed in ink by the Solution Provider's authorized personnel to make them legally binding documents.

10.3.2 Validity Period

The submitted proposal will not be modified, withdrawn or cancelled by the Solution Provider for a 120-day period following the deadline for submission, or receipt of best and final offer, if required.

10.4 Post-qualification

10.4.1 Oral Presentation / Product Demonstration

The Solution Provider will be required to make an oral presentation and product demonstration to clarify its response or to further define its proposals. Oral presentations and product demonstrations, shall be at the Solution Provider's expense and shall be attended by their Technical personnel or any Subject Matter Experts of the solution.

This criterion assesses bidder's base software compliance to the functional and nonfunctional requirements. Base software should satisfactorily fulfill the major Mandatory Functional and Non-functional requirements as listed on the Post-qualification Requirements document (Annex E).

10.5 Compliance with Laws, Policies, Processes, Regulations and Standards

The Solution Provider must, in performance of work under this contract, fully comply with all applicable national or local laws and executive orders, regulations, and LANDBANK policies, processes; and Project Management and System Development Life Cycle standards. Any subletting or subcontracting by the Contractor subjects subcontractors to the same provision.

10.6 Contract Contents

This TOR and any addenda, the Solution Provider's response including any amendments, any best and final offers, any Supplemental/Bid Bulletins, and any negotiations shall be included in any resulting contract. Section 9. Proposal Requirements enumerates all the required information and documents that the Solution Provider must submit as part of its proposal to qualify for further consideration, and will serve as basis for any contract between the Bank and the Solution Provider.

10.7 Security Measures

Physical and Environmental Protection

Solution Provider shall be subject to LANDBANK's physical security measures established to protect computer facilities and equipment from damage or unauthorized access

Security Administration And Monitoring

Solution Provider shall be subject to LANDBANK's procedures on access rights and use of system resources and application systems

10.8 Confidentiality

The Solution Provider must comply with the LANDBANK's Information Security policies and guidelines to ensure confidentiality and security of LANDBANK's data.

The Solution Provider representative/s must sign Confidentiality Agreement and Acceptable Use Policy Compliance Commitment Certificate.

10.9 Settlement of dispute and venue of suit

- Resolution of dispute or difference shall be through mutual consultation
- Governing law shall be the laws of the Philippines
- Venue of suit shall be the Courts of the City of Manila

Project Name Technical Working Group:

NAME	SIGNATURE
Ronaldo E. Buenaventura, ITPMD	REB
Ryan Anthony R. Mercene, TMG	AA-
Kenneth Q. Abellido, ITPMD	- wither
Rhea F. Abana, ITPMD	Roband
Christian Al B. Gan, ESD	the
Benjames A. Acuña, RBSD	Br
Manuel Antonio F. Magaling, SID	for:
Ace B. Solde, ePD	
Veralyn C. Mangubat, ePD	margutat
Gian Angelo M. Laxamana, AOSD	-p



ANNEX A

Firm Credentials Information Sheet

List of Implemented Projects

Client Name	Project Name	Project Description	Project Start Date	Project Completion/ Implementation Date	Contact Person and Contact Number/Email Address

ANNEX B

|--|

Project Name

Procurement of xxx

LANDBANK OF THE PHILIPPINES 1598 M. H. del Pilar corner Dr. J. Quintos St., Malate, Manila Tel No. 5220000

CUSTOMER SATISFACTION SURVEY FORM

Name of Reference Company Project Referenced Resource Person Telephone no./ Email Address

	Very Satisfactory	Satisfactory	Unsatisfactory	Remarks
1. How are you going to rate their performance on this project?				
2. When was it completed?				
What was the project duration? Was the duration				
considerable? Was it completed on time?				
Please rate.				
3. What is the scope of the engagement?				
How are you going to rate the specific functions they have performed?				
Major tasks: Task 1:				
Task 2:				
Task 3:				
Task 4: Task 5:				
4. Was the budget, cost and				
other financial matters within				
the set controls and				
limitations?				
Was there any form of				

financial disagreements that		
surfaced during the		
engagement?		
Please rate financial matters.		
5. How would you rate the		
value of their services as		
against the project cost?		
6. How are you going to rate		
the project relationship of the		
firm with your company?		
inni with your company:		
Did the firm personnel have a		
harmonious relationship with		
•		
your employees?		
7.11		
7. How are you going to rate		
the usefulness of the software		
you acquired in relation to		
your actual operations?		
8. How user-friendly is their		
system?		
Have you encountered major		
problems in using the		
system?		
9. How are you going to rate		
their post implementation		
support?		
How responsive and		
accommodating are they with		
your problems and queries?		
10. What is your overall rating		
with the following based on		
your experience?		
a. firm		
b. product		
Mould you atill consider this		
Would you still consider this		
firm on your next projects?		

Would you recommend the following to other companies?		
b. product		
11. OVERALL RATING		



ANNEX C

Project Team Information Sheet

Name	
Proposed Project Team Role	
Responsibilities	

Educational Attainment

Name of Institution	Period of Attendance	Diploma/Degree/ Equivalent	Awards/Distinctions Received

Work Experience as to the Proposed Project Role

Client Name	Project Name	Project Description	Role	Start and End Dates of Project Involvement (mm/yyyy to mm/yyyy)	Contact Person and Contact Number/Email Address

Actual Experience in Implementing the Proposed Solution/Software Application

Client Name	Project Name	Project Description	Role	Start and End Dates of Project Involvement (mm/yyyy to mm/yyyy)	Contact Person and Contact Number/Email Address

Covered Period:

Name of Vendor:

Software/Syste	m Name:		Performance Asse	essment Date:		
Evalu	ation Criteria	Performance Standards	Weight	Rating	Weighted Rating	Remarks
Scope of Work	Project Documentation	Quality: 4 - 100% of the documents are signed off without significant revisions/changes 3 - There are 1-2 significant revisions on the document prior to sign off 2 - There are 3-4 significant revisions on the document prior to sign off 1 - There are more than 4 significant revisions on the document prior to sign off	15%		0	
		Timeliness: 4 - Project documents are submitted ahead of schedule 3 - Project documents are submitted within the schedule 2 - Project documents are submitted 2 weeks behind the schedule 1 - Project documents are submitted more than 2 weeks behind the schedule			0	
	Change Management (as applicable)	Quality: 4 - Assessment is complete as it relates to the baseline project parameters (i.e. scope, schedule and cost) 3 - There are 1 - 2 items which are not considered in the assessment 2 - There are 3 - 4 items which are not considered in the assessment 1 - There are more than 4 items which are not considered in the assessment	15%		0	
		Timeliness: 4 - Impact assessment is submitted within a week 3 - Impact assessment is submitted within 2 weeks 2 - Impact assessment is submitted after 2 to 3 weeks 1 - Impact assessment is submitted after more than 3 weeks			0	
Defect and Incident Management	Defect Rate (DR)	Acceptable Rate/Acceptable Quality Level (AQL) - 3% 4 - Less than 3.00% 3 - 3.00% to 3.99% 2 - 4.00% to 4.99% 1 - 5.00% and above	6%		0	
	Defect Resolution Time (DRT)	Acceptable Rate - 85% to 90% 4 - 91.00% and above 3 - 85.00% to 90.99% 2 - 80.00% to 84.99% 1 - Below 80.00%	6%		0	
	Defect Reopen Ratio (DRR)	Acceptable Rate - 15% to 20% 4 - Less than 15% 3 -15.00% to 20.99% 2 - 21.00% to 24.99% 1 - 25.00% and above	6%		0	
	UAT Completion Time	Timeliness: 4 - UAT is signed off ahead of schedule 3 - UAT is signed off within the schedule 2 - UAT is signed off 1 to 2 weeks behind the schedule 1 - UAT is signed off more than 2 weeks behind the schedule	6%		0	

Vendor Performance Assessment Report

Eva	aluation Criteria	Performance Standards	Weight	Rating	Weighted Rating	Remarks
	Incident Resolution Time (IRT)	Acceptable Rate - 85% to 90% 4 - 91.00% and above 3 - 85.00% to 90.99% 2 - 80.00% to 84.99% 1 - Below 80.00%	6%		0	
Financial Condition	Net Financial Contracting Capacity (NFCC)	 4 - NFCC is more than the Approved Budget for the Contract (ABC) 3 - NFCC is at least equal to ABC 2 - NFCC is at least 80% to 99.99% of ABC 1 - NFCC is less than 80% of ABC 	20%		0	
Vendor Resources	Vendor Evaluation Survey	Overall Score 4 - Total score of 15 to 16 3 - Total score of 11 to 14 2 - Total score of 6 to 10 1 - Total score of 1 to 5	20%		0	

Total

100%

Weighted Rating	0.00
Adj. Rating	FALSE
Excellent	3.4 - 4.0
Good	2.3 - <3.4
Needs	17-<23
Improvement	1.7 - <2.3
Poor	1.0 - <1.7

Prepared by:

Project Manager

Approved by:

Head, ITPMD

Head, TMG

Head, Group/Project Sponsor

Noted by:

Requirement No.	Requirement Statement	Priority	Pass or Fail?	Remarks
4.1. Functional Requ	irements			
4.1.1.Functio	nal Scope			
	Proposed solution shall allow the user to maintain (view, add, edit, delete) automation	Mandatory		
ATT-411-001	test cases/ test scripts with script-less feature, meaning without the need of writing the			
	complex code			
	Proposed solution shall allow the user to maintain (view, add, edit, delete) the	Mandatory		
	automation test cases/ test scripts with the help of any scripting languages (e.g., VB, .Net,			
ATT-411-002	etc.) and simple plain English commands instead of scripts for custom or tailored use			
	cases.			
	Proposed solution shall automatically record test scripts while navigating the system to	Mandatory		
ATT-411-003	be tested.	Walldatory		
	Proposed solution shall allow the user to generate and print the created automation test	Mandatory		
ATT-411-004	cases/ test scripts	ivialitatol y		
	Proposed solution shall allow the user to maintain (view, add, edit, delete) schedule of	Mandataw		
	execution of test run.	Mandatory		
ATT-411-005				
	Business rule:			
	Can be per selected test case/ test script. Shall automatically run based on the defined			
	schedule.			
ATT-411-006	Proposed solution shall allow the user to execute the automated test cases/ test scripts	Mandatory		
	on demand or as the need arises.			
ATT-411-007	Proposed solution shall allow running/ processing of negative test scenarios.	Mandatory		
ATT-411-008	Proposed solution shall allow the user to export and import stored automation test	Mandatory		
//// /111 0000	cases/ test scripts			
ATT-411-009	Proposed solution shall have the capability to test End to End with multiple interfaces and	Mandatory		
	technologies in one single solution/script			
ATT-411-010	Proposed solution shall detect/ determine if the input data is successfully forwarded to	Mandatory		
	the interfaced system			
ATT-411-011	Proposed solution shall have the ability to "Record and replay" the user action	Mandatory		
ATT-411-012	Proposed solution shall be able to test various test data inputs that supplied as part of the	Mandatory		
A11-411-012	test scripts			
ATT-411-013	Proposed solution shall have image-based testing capabilities to validate images and	Mandatory		
ATT-411-015	logos			
	Proposed solution shall have the ability to wait the page to completely load (e.g., until the	Mandatory		
	objects appear) based on the defined period.			
ATT-411-014				
	Business rule:			
	Must run/ execute the test case/ test script after the defined period.			
ATT 411 015	Proposed solution shall allow the user to maintain (add, edit, delete) waiting period for	Mandatory		
ATT-411-015	the loading of page.	-		
	Proposed solution shall have the ability to perform/ execute multiple platforms (e.g.,	Mandatory		
	web, native mobile, mobile web, tablet, etc.) with single automation script	1		
ATT-411-017				
	Business rule:			
	Can be executed across multiple web browsers and versions			
		Mandatory		
ATT-411-018	Proposed solution shall have the capability to develop the various test automation			
	frameworks (e.g., Modular, Keyword driven, Data driven, Al driven, etc.)			
	Proposed solution shall have the capability to validate the expected results against the	Mandatory	1	1
ATT-411-019	actual results for each step/ test script	mandatory		
	Proposed solution shall have the capability to take the screenshots or video recordings of	Mandatory	1	
ATT-411-020	the test execution for each step/ test script	i viandator y		
L				

ATT-411.021 Business rule: Mandatory ATT-411.021 Business rule: Recommended ATT-411.022 The system shall provide push notifications for the status of executed test scripts. Recommended ATT-411.023 Proposed solution shall allow the user to view the failed test cases and its details. Mandatory ATT-411.024 Executed its cases for its view the failed test cases and its details. Mandatory ATT-411.024 Executed its cases for its view the failed test cases and its details. Mandatory E2. Non-Functional Requirements Its cases for its view its view the test results of the executed automated its cases for its view its pailed test cases. Mandatory E2. Interfree? Unability Requirements Its cases for its view its pailed test cases. Its cases for its view its pailed test cases. ATT 422.001 Proposed solution shall be capable to work with application mockups when real policitations are under development or unavailable for the test. Mandatory ATT 423.001 Proposed solution shall be able to automate the functional testing on Noncouspitication. Mandatory ATT 423.002 Business rule: Business rule: Business rule: Can select from the list of test cases/ test scripts. Mandatory Business rule: ATT 423.002 Business rule: Can select from the list of test cases/ test scripts. Mandatory ATT 423.005 R		Proposed solution shall be able to log failed test cases	Mandatori	r		
Business rule: Recommended ATT-411-022 The system shall provide push notifications for the status of executed test scripts. Recommended ATT-411-022 Proposed solution shall allow the user to view the failed test cases and its details Mandatory ATT-411-022 Proposed solution shall allow the user to view the test results of the executed automated Mandatory ATT-411-024 Proposed solution shall allow the user to view the test results of the executed automated Mandatory ATT-411-023 Proposed solution shall be capable of testing the systems' interfaces with the third-party solutions. Recommended ATT-421-003 Proposed solution shall be capable of testing the systems' interfaces with the third-party solutions. Recommended ATT-421-003 Proposed solution shall be capable to work with application mockups when real applications are under development or unavailable for the test. Mandatory ATT-423-001 Business rule: Mandatory Mandatory ATT-423-003 Review based, shall obligit to submate the functional testing on VAIIOus applications, etc.) Mandatory Business rule: Gamedical test cases/ test scripts. Mandatory Recommended solution shall be applications (e.g., AN Tresting - XML, ISON, HTP, & Web services, etc.) based on the defined test cases/ test scripts			wanuatory			
Image: constraint of the state of execution is the state of executed test scripts. Recommended ATT-411-022 The system shall provide push notifications for the status of executed test scripts. Mandatory ATT-411-022 Proposed solution shall allow the user to view the failed test cases and its details Mandatory ATT-411-024 Proposed solution shall allow the user to view the test results of the executed automated Mandatory ATT-411-024 Reguimements Image: Constraint of the state of the systems' interfaces with the third-party solutions. Mandatory ATT-421-003 Proposed solution shall be capable of testing the systems' interfaces with the third-party solutions. Recommended solutions. ATT-423-003 Proposed solution shall be capable to work with application mackups when real applications are under development or unavailable for the test scripts. Mandatory ATT-423-001 Proposed solution shall be capable to automate the functional testing on various applications (e.g., API Testing - XML, JSON, HTP, & Mandatory Mandatory ATT-423-002 Proposed solution shall have the ability to automate the functional testing on the Mobile test cases/ test scripts. Mandatory ATT-423-003 Proposed solution shall have the ability to automate the functional testing on the Mobile test cases/ test scripts. Mandatory ATT-423-004 <t< td=""><td>ATT-411-021</td><td>Business rule:</td><td></td><td></td><td></td><td></td></t<>	ATT-411-021	Business rule:				
ATT-411-022 The system shall provide push notifications for the status of executed test scripts. Recommended ATT-411-023 Proposed solution shall allow the user to view the failed test cases and its details Mandatory ATT-411-024 Proposed solution shall allow the user to view the test results of the executed automated Mandatory ATT-411-024 Proposed solution shall allow the user to view the test results of the executed automated Mandatory 4.2. Non-Functional Requirements Image: Composed solution shall be capable of testing the systems' interfaces with the third-party Recommended 4.1.1. Attr-421-003 Proposed solution shall be capable to testing the systems' interfaces with the third-party Recommended 4.2.3. Operational Requirements Image: Composed solution shall be capable to work with application mockups when real solutions are under development or unavailable for the test: Composed solution shall be actionable for the string or various applications, etc.) Mandatory ATT-423-001 based on the defined test cases/ test scripts. Mandatory Business rule: Composed solutions for the solutions (e.g., API Testing - XML, ISON, HTTP, & Wandatory Mandatory ATT-423-004 Web services, etc.) based on the defined test cases/ test scripts. Mandatory						
ATT-411-023 Proposed solution shall allow the user to view the test results of the excuted automated tasks and its details Mandatory ATT-411-024 Proposed solution shall allow the user to view the test results of the excuted automated tasks and its details Mandatory 42. Non-Functional Requirements Image: Comparison of the excuted automated tasks and the user to view the test results of the excuted automated tasks and the user to view the test results of the excuted automated tasks and the user tasks and its details 47. 421-003 Proposed solution shall be capable of testing the systems' interfaces with the third-party solutions are under development or unavailable for the test solution shall be able to automate the functional testing on various application Mandatory 47. 423-001 Proposed solution shall be capable to automate the functional testing on various application types (i.e., web-based, stand alone, desktop, mainframe, enterprise applications, etc.) Mandatory ATT-423-001 Business rule: Mandatory Con select from the fils of test coses/ test scripts. Mandatory Proposed solution shall be applications (e.g., API Testing - XML, ISON, HTTP, & Web Service, etc.) based on the defined test cases/ test scripts. Mandatory ATT-423-004 Business rule: Con select from the list of test coses/ test scripts. Mandatory ATT-423-005 Reservice the ablify to automate the functional testing on the Mobile based applications' OS (e.g., IOS, Android, Win	ATT-411-022		Recommended			
All-all-024 test cases/ scripts image: cases/ scripts 4.2. Non-Functional Requirements image: cases/ scripts image: cases/ scripts 4.1. Interface/ Usability Requirements image: cases/ scripts image: cases/ scripts 4.1. Interface/ Usability Requirements image: cases/ scripts image: cases/ scripts 4.1. All-023-001 Proposed solution shall be capable to work with application mockups when real applications are under development or unavailable for the test: proposed solution shall be able to automate the functional script icasing on various application Mandatory ATT-423-003 Proposed solution shall be able to automate the functional testing on various application Mandatory ATT-423-003 Business rule: Can select from the list of test cases/ test scripts. Mandatory atTr-423-004 Web services, etc.) based on the defined test cases/ test scripts. Mandatory Mandatory atTr-423-004 Web services, etc.) based on the defined test cases/ test scripts. Mandatory Mandatory atTr-423-004 Web services, etc.) based on the defined test cases/ test scripts. Mandatory Mandatory attr-423-004 Web services, etc.) based on the defined test cases/ test scripts. Mandatory Mandatory attr-423-005 Cases/ test scripts. Mandat	ATT-411-023	Proposed solution shall allow the user to view the failed test cases and its details	Mandatory			_
4.2.1. Interface/Usability Requirements Image: Constraint of the state of th	ATT-411-024		Mandatory			
ATT-421-003 Proposed solution shall be capable of testing the systems' interfaces with the third-party solutions. Recommended 4.2.3. Operational Requirements Proposed solution shall be capable to work with application mockups when real applications are under development or unavailable for the test Mandatory ATT-423-001 Proposed solution shall be able to automate the functional testing on various application Mandatory ATT-423-003 Based on the defined test cases/ test scripts. Mandatory Business rule: Can select from the list of test cases/ test scripts. Mandatory Proposed solution shall have the ability to automate the functional testing of Non. Mandatory graphical user interface (GUI) based applications (e.g., API Testing - XML, ISON, HTTP, & Mandatory Web services, etc.) based on the defined test cases/ test scripts. Mandatory Business rule: Can select from the list of test cases/ test scripts. Mandatory ATT-423-004 Web services, etc.) based on the defined test cases/ test scripts. Mandatory ATT-423-004 Proposed solution shall have the ability to automate the functional testing on the Mobile Mandatory ATT-423-005 Business rule: Can select from the list of test cases/ test scripts. Mandatory ATT-423-005 Proposed solution shall have the abilit						
ATI-421-003 Solutions. 4.2.3. Operational Requirements ATT-423-001 Proposed solution shall be capable to work with application mockups when real applications are under development or unavailable for the test Mandatory Proposed solution shall be able to automate the functional testing on various application Mandatory ATT-423-003 based on the defined test cases/ test scripts. Mandatory ATT-423-003 based on the defined test cases/ test scripts. Mandatory ATT-423-004 Proposed solution shall have the ability to automate the functional testing of Non-graphical user interface (GUI) based applications (e.g., API Testing - XML, JSON, HTTP, & Web services, etc.) based on the defined test cases/ test scripts. Mandatory ATT-423-004 Web services, etc.) based on the defined test cases/ test scripts. Mandatory Business rule: Can select from the list of test cases/ test scripts. Mandatory ATT-423-004 Web services, etc.) based on the defined test cases/ test scripts. Mandatory Business rule: Can select from the list of test cases/ test scripts. Mandatory ATT-423-005 Can select from the list of test cases/ test scripts. Mandatory ATT-423-005 Can select from the list of test cases/ test scripts. Mandatory ATT-423-005 Can select	4.2.1. Interfa					
ATT-423-001 Proposed solution shall be capable to work with application mockups when real applications are under development or unavailable for the test. Mandatory ATT-423-003 Wandstory Mandatory ATT-423-003 Business rule: Mandatory Business rule: Conselect from the list of test cases/ test scripts. Mandatory ATT-423-004 Proposed solution shall have the ability to automate the functional testing of Non-graphical user interface (GUI) based applications (e.g., API Testing - XML, JSON, HTTP, & Web services, etc.) based on the defined test cases/ test scripts. Mandatory ATT-423-004 Proposed solution shall have the ability to automate the functional testing of Non-graphical user interface (GUI) based applications (e.g., API Testing - XML, JSON, HTTP, & Web services, etc.) based on the defined test cases/ test scripts. Mandatory Business rule: Conselect from the list of test cases/ test scripts. Mandatory ATT-423-005 Proposed solution shall have the ability to automate the functional testing on the Mobile based applications' OS (e.g., IOS, Android, Windows, etc.) based on the defined test Mandatory ATT-423-005 Proposed solution shall have the ability to automate the functional testing on the Mobile based applications' OS (e.g., IOS, Android, Windows, etc.) based on the defined test Mandatory ATT-423-005 Proposed solution shall have the ability to automate the functional testing on the Mobile based applicati	ATT-421-003		Recommended			
A11-423-001 applications are under development or unavailable for the test Mandatory Proposed solution shall be able to automate the functional testing on various applications, etc.) Mandatory ATT-423-003 based on the defined test cases/ test scripts. Mandatory Business rule: Can select from the list of test cases/ test scripts. Mandatory Proposed solution shall have the ability to automate the functional testing of Non-graphical user interface (GUI) based applications (e.g., API Testing - XML, JSON, HTTP, & Mandatory ATT-423-004 Web services, etc.) based on the defined test cases/ test scripts. Mandatory Business rule: Can select from the list of test cases/ test scripts. Mandatory ATT-423-004 Web services, etc.) based on the defined test cases/ test scripts. Mandatory ATT-423-005 Exect from the list of test cases/ test scripts. Mandatory ATT-423-005 Proposed solution shall have the ability to automate the functional testing on the Mobile based applications' OS (e.g., IOS, Android, Windows, etc.) based on the defined test cases/ test scripts. Mandatory ATT-423-005 Exect From the list of test cases/ test scripts. Mandatory ATT-423-006 Proposed solution shall have various add-ins out of the box (e.g., Terminal Emulators, Can select from the list of test cases/ test scripts. Mandatory	4.2.3. Operat	ional Requirements				
ATT-423-003 types (i.e., web-based, stand alone, desktop, mainframe, enterprise applications, etc.) minorecord Business rule: Can select from the list of test cases/ test scripts. Mandatory Proposed solution shall have the ability to automate the functional testing of Non-graphical user interface (GUI) based applications (e.g., API Testing - XML, JSON, HTTP, & Web services, etc.) based on the defined test cases/ test scripts. Mandatory ATT-423-004 Web services, etc.) based on the defined test cases/ test scripts. Mandatory ATT-423-005 <i>Business rule:</i> Can select from the list of test cases/ test scripts. Business rule: Can select from the list of test cases/ test scripts. Mandatory ATT-423-005 Business rule: Mandatory Can select from the list of test cases/ test scripts. Mandatory Business rule: Can select from the list of test cases/ test scripts. Business rule: Can select from the list of test cases/ test scripts. Mandatory ATT-423-006 Proposed solution shall have various add-ins out of the box (e.g., Terminal Emulators, Excel, PDF, ActiveX, power builder, Visual Studio, etc.). Mandatory ATT-423-007 Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, IE, Edge, Safari, Firefox, Phantom 15 & Other browser Technologies - HTML, XML) Mandatory	ATT-423-001	applications are under development or unavailable for the test	Mandatory			
ATT-423-003 based on the defined test cases/ test scripts. Business rule: Can select from the list of test cases/ test scripts Proposed solution shall have the ability to automate the functional testing of Non-graphical user interface (GUI) based applications (e.g., API Testing - XML, JSON, HTTP, & Web services, etc.) based on the defined test cases/ test scripts. Mandatory ATT-423-004 Web services, etc.) based on the defined test cases/ test scripts. Mandatory Business rule: Can select from the list of test cases/ test scripts. Mandatory ATT-423-005 Easer from the list of test cases/ test scripts. Mandatory Business rule: Can select from the list of test cases/ test scripts. Mandatory ATT-423-005 Business rule: Can select from the list of test cases/ test scripts. Mandatory ATT-423-006 Excel, PDF, ActiveX, power builder, Visual Studio, etc.). Mandatory Mandatory ATT-423-007 Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, Headless Mandatory ATT-423-009 Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory		Proposed solution shall be able to automate the functional testing on various application	Mandatory			
ATT-423-003 Business rule: Can select from the list of test cases/ test scripts. Proposed solution shall have the ability to automate the functional testing of Non- graphical user interface (GUI) based applications (e.g., API Testing - XML, JSON, HTTP, & Web services, etc.) based on the defined test cases/ test scripts. Mandatory ATT-423-004 Web services, etc.) based on the defined test cases/ test scripts. Mandatory Business rule: Can select from the list of test cases/ test scripts Mandatory ATT-423-005 Proposed solution shall have the ability to automate the functional testing on the Mobile based applications' OS (e.g., IOS, Android, Windows, etc.) based on the defined test cases/ test scripts. Mandatory ATT-423-005 Business rule: Can select from the list of test cases/ test scripts Mandatory ATT-423-006 Proposed solution shall have various add-ins out of the box (e.g., Terminal Emulators, Excel, PDF, ActiveX, power builder, Visual Studio, etc.). Mandatory ATT-423-007 Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, IE, Edge, Safari, Firefox, Phantom JS & Other browser Technologies - HTML, XML) Mandatory ATT-423-009 Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory						
Business rule: Can select from the list of test cases/ test scripts Proposed solution shall have the ability to automate the functional testing of Non- graphical user interface (GUI) based applications (e.g., API Testing - XML, JSON, HTTP, & Web services, etc.) based on the defined test cases/ test scripts. Mandatory ATT-423-004 Web services, etc.) based on the defined test cases/ test scripts. Mandatory Business rule: Can select from the list of test cases/ test scripts Mandatory Can select from the list of test cases/ test scripts. Mandatory Business rule: Can select from the list of test cases/ test scripts. Mandatory ATT-423-005 Business rule: Can select from the list of test cases/ test scripts Business rule: Can select from the list of test cases/ test scripts Mandatory ATT-423-005 Excel, PDF, ActiveX, power builder, Visual Studio, etc.). Mandatory ATT-423-007 Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, IE, Edge, Safari, Firefox, Phantom JS & Other browser Technologies - HTML, XML) Mandatory ATT-423-000 Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory	ATT-423-003	based on the defined test cases/ test scripts.				
Can select from the list of test cases/ test scripts Mandatory Proposed solution shall have the ability to automate the functional testing of Non-graphical user interface (GUI) based applications (e.g., API Testing - XML, JSON, HTTP, & Web services, etc.) based on the defined test cases/ test scripts. Mandatory ATT-423-004 Web services, etc.) based on the defined test cases/ test scripts. Mandatory Business rule: Can select from the list of test cases/ test scripts. Mandatory ATT-423-005 Proposed solution shall have the ability to automate the functional testing on the Mobile based applications' OS (e.g., IOS, Android, Windows, etc.) based on the defined test cases/ test scripts. Mandatory ATT-423-005 Business rule: Can select from the list of test cases/ test scripts. Business rule: Can select from the list of test cases/ test scripts. Mandatory ATT-423-006 Proposed solution shall have various add-ins out of the box (e.g., Terminal Emulators, Excel, PDF, ActiveX, power builder, Visual Studio, etc.). Mandatory ATT-423-007 Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, IE, Edge, Safari, Firefox, Phantom JS & Other browser Technologies - HTML, XML) Mandatory ATT-423-009 Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory	/					
ATT-423-004 graphical user interface (GUI) based applications (e.g., API Testing - XML, JSON, HTTP, & Web services, etc.) based on the defined test cases/ test scripts. Business rule: Can select from the list of test cases/ test scripts. Mandatory Proposed solution shall have the ability to automate the functional testing on the Mobile based applications' OS (e.g., IOS, Android, Windows, etc.) based on the defined test cases/ test scripts. Mandatory ATT-423-005 Froposed solution shall have the ability to automate the functional testing on the Mobile based applications' OS (e.g., IOS, Android, Windows, etc.) based on the defined test cases/ test scripts. Mandatory Business rule: Can select from the list of test cases/ test scripts. Mandatory ATT-423-006 Proposed solution shall have various add-ins out of the box (e.g., Terminal Emulators, Excel, PDF, ActiveX, power builder, Visual Studio, etc.). Mandatory ATT-423-007 Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, IE, Edge, Safari, Firefox, Phantom JS & Other browser Technologies - HTML, XML) Mandatory ATT-423-009 Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory						
ATT-423-004 graphical user interface (GUI) based applications (e.g., API Testing - XML, JSON, HTTP, & Web services, etc.) based on the defined test cases/ test scripts. Business rule: Can select from the list of test cases/ test scripts. Mandatory Proposed solution shall have the ability to automate the functional testing on the Mobile based applications' OS (e.g., IOS, Android, Windows, etc.) based on the defined test cases/ test scripts. Mandatory ATT-423-005 Proposed solution shall have various add-ins out of the box (e.g., Terminal Emulators, Excel, PDF, ActiveX, power builder, Visual Studio, etc.). Mandatory ATT-423-007 Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, Headless Chrome, IE, Edge, Safari, Firefox, Phantom JS & Other browser Technologies - HTML, XML) Mandatory ATT-423-009 Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory		Can select from the list of test cases/ test scripts				
ATT-423-004 Web services, etc.) based on the defined test cases/ test scripts. Business rule: Can select from the list of test cases/ test scripts Proposed solution shall have the ability to automate the functional testing on the Mobile based applications' OS (e.g., IOS, Android, Windows, etc.) based on the defined test cases/ test scripts. Mandatory ATT-423-005 Business rule: Can select from the list of test cases/ test scripts Business rule: Can select from the list of test cases/ test scripts Mandatory ATT-423-006 Proposed solution shall have various add-ins out of the box (e.g., Terminal Emulators, Excel, PDF, ActiveX, power builder, Visual Studio, etc.). Mandatory ATT-423-007 Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, Headless Chrome, IE, Edge, Safari, Firefox, Phantom JS & Other browser Technologies - HTML, XML) Mandatory ATT-423-009 Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory			Mandatory			
ATT-423-004 Business rule: Can select from the list of test cases/ test scripts Proposed solution shall have the ability to automate the functional testing on the Mobile based applications' OS (e.g., IOS, Android, Windows, etc.) based on the defined test cases/ test scripts. ATT-423-005 Business rule: Can select from the list of test cases/ test scripts Business rule: Mandatory Can select from the list of test cases/ test scripts ATT-423-006 Proposed solution shall have various add-ins out of the box (e.g., Terminal Emulators, Excel, PDF, ActiveX, power builder, Visual Studio, etc.). ATT-423-007 Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, IE, Edge, Safari, Firefox, Phantom JS & Other browser Technologies - HTML, XML) Mandatory ATT-423-009 Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory						
Can select from the list of test cases/ test scripts Mandatory Proposed solution shall have the ability to automate the functional testing on the Mobile based applications' OS (e.g., IOS, Android, Windows, etc.) based on the defined test cases/ test scripts. Mandatory ATT-423-005 Business rule: Can select from the list of test cases/ test scripts Mandatory ATT-423-006 Proposed solution shall have various add-ins out of the box (e.g., Terminal Emulators, Excel, PDF, ActiveX, power builder, Visual Studio, etc.). Mandatory ATT-423-007 Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, IE, Edge, Safari, Firefox, Phantom JS & Other browser Technologies - HTML, XML) Mandatory ATT-423-009 Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory	ATT-423-004	web services, etc.) based on the defined test cases/ test scripts.				
Can select from the list of test cases/ test scripts Mandatory Proposed solution shall have the ability to automate the functional testing on the Mobile based applications' OS (e.g., IOS, Android, Windows, etc.) based on the defined test cases/ test scripts. Mandatory ATT-423-005 Business rule: Can select from the list of test cases/ test scripts Mandatory ATT-423-006 Proposed solution shall have various add-ins out of the box (e.g., Terminal Emulators, Excel, PDF, ActiveX, power builder, Visual Studio, etc.). Mandatory ATT-423-007 Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, IE, Edge, Safari, Firefox, Phantom JS & Other browser Technologies - HTML, XML) Mandatory ATT-423-009 Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory		Rusiness rules				
ATT-423-005 based applications' OS (e.g., IOS, Android, Windows, etc.) based on the defined test cases/ test scripts. Image: Cases/ test scripts. Business rule: Can select from the list of test cases/ test scripts Image: Can select from the list of test cases/ test scripts ATT-423-006 Proposed solution shall have various add-ins out of the box (e.g., Terminal Emulators, Excel, PDF, ActiveX, power builder, Visual Studio, etc.). Mandatory ATT-423-007 Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, IE, Edge, Safari, Firefox, Phantom JS & Other browser Technologies - HTML, XML) Mandatory ATT-423-009 Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory						
ATT-423-005 based applications' OS (e.g., IOS, Android, Windows, etc.) based on the defined test cases/ test scripts. Image: Cases/ test scripts. Business rule: Can select from the list of test cases/ test scripts Image: Can select from the list of test cases/ test scripts ATT-423-006 Proposed solution shall have various add-ins out of the box (e.g., Terminal Emulators, Excel, PDF, ActiveX, power builder, Visual Studio, etc.). Mandatory ATT-423-007 Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, IE, Edge, Safari, Firefox, Phantom JS & Other browser Technologies - HTML, XML) Mandatory ATT-423-009 Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory		Proposed solution shall have the ability to automate the functional testing on the Mobile	Mandatory			
ATT-423-005 cases/ test scripts. Business rule: Image: Can select from the list of test cases/ test scripts ATT-423-006 Proposed solution shall have various add-ins out of the box (e.g., Terminal Emulators, Excel, PDF, ActiveX, power builder, Visual Studio, etc.). Mandatory ATT-423-007 Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, IE, Edge, Safari, Firefox, Phantom JS & Other browser Technologies - HTML, XML) Mandatory ATT-423-009 Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory			in an addory			
ATT-423-005 Business rule: Can select from the list of test cases/ test scripts Proposed solution shall have various add-ins out of the box (e.g., Terminal Emulators, Excel, PDF, ActiveX, power builder, Visual Studio, etc.). Mandatory ATT-423-007 Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, IE, Edge, Safari, Firefox, Phantom JS & Other browser Technologies - HTML, XML) Mandatory ATT-423-009 Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory						
Can select from the list of test cases/ test scripts Mandatory ATT-423-006 Proposed solution shall have various add-ins out of the box (e.g., Terminal Emulators, Excel, PDF, ActiveX, power builder, Visual Studio, etc.). Mandatory ATT-423-007 Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, IE, Edge, Safari, Firefox, Phantom JS & Other browser Technologies - HTML, XML) Mandatory ATT-423-009 Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory	ATT-423-005					
Can select from the list of test cases/ test scripts Mandatory ATT-423-006 Proposed solution shall have various add-ins out of the box (e.g., Terminal Emulators, Excel, PDF, ActiveX, power builder, Visual Studio, etc.). Mandatory ATT-423-007 Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, IE, Edge, Safari, Firefox, Phantom JS & Other browser Technologies - HTML, XML) Mandatory ATT-423-009 Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory		Business rule:				
ATT-423-006 Proposed solution shall have various add-ins out of the box (e.g., Terminal Emulators, Excel, PDF, ActiveX, power builder, Visual Studio, etc.). Mandatory ATT-423-007 Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, IE, Edge, Safari, Firefox, Phantom JS & Other browser Technologies - HTML, XML) Mandatory ATT-423-009 Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory		Can select from the list of test cases/ test scripts			 	
Excel, PDF, ActiveX, power builder, Visual Studio, etc.). Mandatory ATT-423-007 Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, IE, Edge, Safari, Firefox, Phantom JS & Other browser Technologies - HTML, XML) Mandatory ATT-423-009 Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory	ATT-422 006	Proposed solution shall have various add-ins out of the box (e.g., Terminal Emulators,	Mandatory			
ATT-423-007 Proposed solution shall support various browser technologies (e.g., Chrome, Headless Chrome, IE, Edge, Safari, Firefox, Phantom JS & Other browser Technologies - HTML, XML) Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory	ATT-425-000	Excel, PDF, ActiveX, power builder, Visual Studio, etc.).				
ATT-423-007 Chrome, IE, Edge, Safari, Firefox, Phantom JS & Other browser Technologies - HTML, XML) ATT-423-009 Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory		Proposed solution shall support various browser technologies (e.g., Chrome, Headless	Mandatory	Т		
ATT-423-009 Proposed solution shall be accessible and fully functional using the bank's remote access Mandatory	ATT-423-007					
I I(e.g., VPN, etc.).	ATT-423-009		Mandatory			
			Mandata			
ATT-423-012 Proposed solution shall have a facility to back-up and restore all files in the database (e.g. Mandatory	ATT-423-012		Mandatory			
user profiles).		user promes).	Mandatory			
ATT-423-013 Proposed solution shall be able to back-up and restore all files in the application server. Mandatory	ATT-423-013	Proposed solution shall be able to back-up and restore all files in the application server.	ivialiuatory			
4.2.4. Reportorial Requirements	4.2.4. Report	· · · · · · · · · · · · · · · · · · ·				
ATT-424-001 Proposed solution shall allow the user to set and modify the desired parameters before generating the reports. Mandatory	ATT-424-001		Mandatory			
ATT-424-002 Proposed solution shall allow the user to view, download, and print reports in different file formats (e.g., HTML, DOC/ DOCX, PDF, XLS/ XLSX, CSV, etc.) Mandatory	ATT-424-002	Proposed solution shall allow the user to view, download, and print reports in different	Mandatory			
Proposed solution shall allow the user to generate the following reports: Mandatory	ATT 424 002		Mandatory			
ATT-424-003 1. Test results of the executed test cases/ test scripts	ATT-424-003	· · · · · · · · · · · · · · · · · · ·				

ATT-424-004	2. Failed test cases/ scripts	Mandatory	
ATT-424-005	3. Test cases/ scripts with status	Mandatory	
4.2.7. Audit Requirements			
ATT-427-001	Proposed solution shall have a facility to log application errors (e.g. database error,	Mandatory	
	connectivity error).		