

<b>RFP for Procurement of Solution and Services for Bharat Bill Payment System (BBPS)</b> <b>Implementation</b> <b>RFP Ref: SBI/GITC/CGM(C&amp;O)INB&amp;CMP/2019/597 dated 04.05.2019</b> <b>CORRIGENDUM- II DATED 27.05.2019</b>				
S. No	Page Number	Clause No.	Existing Clause	Updated/New Clause
1	15	16. Technical Evaluation:	Bidder will support the Bank as required in peak days of business (month-end and start of the month) and during switching over process from PR to DR and vice versa.	<p>Bidder will support the Bank as required in peak days of business (month-end and start of the month) and during switching over process from PR to DR and vice versa and in case of any urgency as per requirement of the Bank.</p> <p><b><u>Definition:</u></b></p> <p>PR refers to Primary Sites and DR refers to Disaster recovery sites.</p>
2	30	41. Patent Rights/Intellectual Property Rights:	v. The source code /object code /executable code and compilation procedures of the Software Solution made under this agreement are the proprietary property of the Bank and as such the vendor shall make them available to the Bank after successful User Acceptance Testing. Vendor agrees that the Bank owns the entire right, title and interest to any inventions, designs, discoveries, writings and works of authorship, including all Intellectual Property Rights, copyrights. Any work made under this agreement shall be deemed to be 'work made for hire' under any Indian/U.S. or any other applicable copyright laws.	v. The source code /object code /executable code and compilation procedures of the Software Solution made under this agreement are the proprietary property of the Bank with perpetual rights and as such the vendor shall make them available to the Bank after successful User Acceptance Testing. Vendor agrees that the Bank owns the entire right, title and interest to any inventions, designs, discoveries, writings and works of authorship, including all Intellectual Property Rights, copyrights. Any work made under this agreement shall be deemed to be 'work made for hire' under any Indian/U.S. or any other applicable copyright laws. However, Bank shall not sell the product / software / technology to any third party.
3	53	Annexure-C: Technical & Functional	b) Alongside, Bidder should submit the tentative project implementation plan: (Refer end of section "Broad Scope of Work" for more details)	b) Bidder should submit the tentative Project implementation plan: (Refer end of section "Broad Scope of Work" for more details) and this will carry a Weightage of 30 points. Of the 30 Weightage

		Specifications		<p>points, Technical soundness will be given a weightage of 20 points and timelines for Milestones/Phase-I/II implementation will give a weightage of 10.</p> <p><b><u>Note:</u></b></p> <ul style="list-style-type: none"> <li>• Only Maximum timelines for implementation is mentioned by the Bank as part of the RFP, but the Bidder is free to quote any time less than the same by taking into consideration of all Lead time and dependencies.</li> <li>• Minimum Qualification for 'Project Implementation plan' will be based on Bids received.</li> <li>• Bank has the right to reject the Bid solely based on the 'Project implementation plan'; if the 'Project implementation plan' is not technically sound or it is inferior in comparison to other Bids.</li> </ul>
4	53	Annexure-C: Technical & Functional Specifications	Supporting documents will be verified only if the Bidder satisfies minimum criteria laid above.	<p>Project Implementation plan should cover complete scope mentioned in,</p> <ul style="list-style-type: none"> <li>• Annexure – C: Technical and functional specifications,</li> <li>• Annexure – E: Broad Scope of Work.</li> </ul> <p>Supporting documents on individual clauses/requirements with respect to Annexure- C are not required.</p>
5	54	Annexure-C: Technical & Functional Specifications	<p><b><u>Terminologies:</u></b></p> <ul style="list-style-type: none"> <li>• COU – Customer Operating Unit,</li> <li>• BOU – Biller Operating Unit,</li> <li>• BBPS – Bharat Bill Payment System,</li> </ul>	<p><b><u>Terminologies:</u></b></p> <ul style="list-style-type: none"> <li>• COU – Customer Operating Unit,</li> <li>• BOU – Biller Operating Unit,</li> <li>• BBPS – Bharat Bill Payment System,</li> </ul>

			<ul style="list-style-type: none"> <li>• CMS – Complaint Management System,</li> <li>• DMS – Dispute Management System,</li> <li>• MIS – Management Information System,</li> <li>• NPCI – National Payments Corporation of India,</li> <li>• RBI – Reserve Bank of India.</li> </ul>	<ul style="list-style-type: none"> <li>• CMS – Complaint Management System,</li> <li>• DMS – Dispute Management System,</li> <li>• MIS – Management Information System,</li> <li>• NPCI – National Payments Corporation of India,</li> <li>• HSM – Hardware Security Module,</li> <li>• RBI – Reserve Bank of India.</li> </ul> <p><b><u>Definition of Pre-login:</u></b></p> <p>Where customer doesn't need a Bank's login/authentication to View or Pay Bills.</p> <p><b><u>Definition of Post-login:</u></b></p> <p>Where Customer is authenticated by any Bank's system.</p> <p><b><u>Note:</u></b></p> <ul style="list-style-type: none"> <li>• Pre-login customers can be of any Bank and considering the same, registration/corresponding modules to be built accordingly.</li> <li>• Pre-login customers should be provided with History, Bill Presentation, etc., after Authentication. Authentication mechanisms can be like OTP, Token, etc., as decided by the Bank.</li> <li>• Post login solution should support single sign on/reduced authentications as desired by the Bank.</li> </ul>
6	57	Annexure-C: Technical & Functional	The bidder should also ready to provide solution for migrating existing Bill payment solutions in State Bank of India. The scope of the same will be decided based	The bidder should also ready to provide solution for migrating existing Bill payment solutions in State Bank of India. The scope of the same will be decided based on

		<p>Specifications</p> <p>on the implementation satisfaction of the bidder at the discretion of the bank.</p> <p><b><u>Note:</u></b></p> <p>The migration here may/may not include data migration.</p>	<p>the implementation satisfaction of the bidder at the discretion of the bank.</p> <p>Migration includes but not limited to,</p> <ul style="list-style-type: none"> <li>• Simple Data Migration (For Data retention),</li> <li>• Migrating Standing Instructions data,</li> <li>• Biller migration/ Biller addition when we onboard Billers on NPCI Eco-system,</li> <li>• Integrating with Bank's existing Bill payment system,</li> <li>• Management of Bank's existing Bill payment System (In case, the Bank opts not to migrate due to any reasons).</li> </ul> <p><u>Integrating with Bank's existing platform</u></p> <ul style="list-style-type: none"> <li>• Existing SBI platform may have Bill services from both BBPS and Non-BBPS Billers (Through Aggregators). Bidder should provide an integrated solution/ User experience wherein customer request is received by Bidder solution and segregates BBPS, Non-BBPS transactions based on agreed identifier as defined by the Bank. There should be no disruption to the existing services of the Bank.</li> <li>• After identifying, BBPS transaction should be processed through NPCI and Non-BBPS transaction should be processed through aggregator without any change in operations (Any operational changes/ development is to managed by the Bidder without additional cost to the Bank).</li> </ul>
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				<ul style="list-style-type: none"> <li>Corresponding operations and support should be managed by the bidder.</li> </ul> <p><b><u>Note:</u></b></p> <ul style="list-style-type: none"> <li>Integrated solution/ User experience should be provided in both API based approach and SDK based approach.</li> <li>In SDK based approach, NPCI and Bank's UI/UX should be inbuilt.</li> <li>Migrating Standing Instructions data requires Consent from customer which is to be obtained online through Bidder's solution (Integrated with Bank's existing system) and data migration should happen automatically based on the consent of the customer.</li> <li>SBI being not certified as BOU in NPCI Eco-system; only new onboarding will be there. But this new onboarding may require Data migration and Migrating Standing Instructions data, if the Biller is already having relationship with SBI other than BBPS.</li> <li>Scope of each migration will be decided by the Bank on a case-to-case basis.</li> <li>In case of Management of Bank's existing Bill payment System, Bidder has to provide end-to-end support for the same without additional cost to the Bank. Indicative list of Technology stack used in Bank's existing system is defined in "Annexure- E: Broad scope of work: Project Implementation Plan – Part- B". However the same is not exhaustive.</li> </ul>
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7	58	Annexure-C: Technical & Functional Specifications	<p>The bidder should integrate with Bank's SMS Aggregators/ Gateway for sending SMS notifications with no additional cost to the Bank. The solution should also be able to send Push notifications to mobile applications.</p> <p><b><u>Note:</u></b></p> <p>SMS contents and triggers to send SMS notifications will be based on Bank's decision.</p>	<p>The bidder should integrate with Bank's SMS Aggregators/ Gateway for sending SMS notifications with no additional cost to the Bank. The solution should also be able to send Push notifications to mobile applications.</p> <p><b><u>Note:</u></b></p> <ul style="list-style-type: none"> <li>• SMS contents and triggers to send SMS notifications will be based on Bank's decision.</li> <li>• SMS delivery cost will be borne by the Bank. No additional cost in terms of integration, support, etc., will be borne by the Bank.</li> </ul>
8	58	Annexure-C: Technical & Functional Specifications	<p>The bidder should integrate with Bank's Mail Aggregators/ Gateway for sending Mail notifications with no additional cost to the Bank.</p> <p><b><u>Note:</u></b></p> <p>Mail contents and triggers to send Mail notifications will be Bank's discretion. Mail might contain attachments also.</p>	<p>The bidder should integrate with Bank's Mail Aggregators/ Gateway for sending Mail notifications with no additional cost to the Bank.</p> <p><b><u>Note:</u></b></p> <ul style="list-style-type: none"> <li>• Mail contents and triggers to send Mail notifications will be Bank's discretion.</li> <li>• Mail might contain attachments also.</li> <li>• Mail delivery cost will be borne by the Bank. No additional cost in terms of integration, support, etc., will be borne by the Bank.</li> </ul>
9	59	Annexure-C: Technical & Functional Specifications	<p>The solution should also provide facility to 'View Bill Payment history' for the customer.</p>	<p>The solution should also provide facility to 'View Bill Payment history' for the Customers, Billers, Agent Institutions, Internal Admin Users (Admin Portal).</p> <p><b><u>Note:</u></b></p> <ul style="list-style-type: none"> <li>• Bill payment History should be accompanied by Graphical representations like Bar Chart,</li> </ul>

				<p>Pie Chart, etc., as desired by the Bank.</p> <ul style="list-style-type: none"> <li>• Bill Payment History in Admin Portal should be usable for Customer relationship management, fraud detection (Based on History), etc.,</li> </ul>
10	62	Annexure-C: Technical & Functional Specifications	<p>The Bidder should Benchmark infrastructure of individual channels, Billers, Agents and provide reports to bank during initial deployment and as when requested by the Bank.</p> <p><b><u>Note:</u></b></p> <ul style="list-style-type: none"> <li>• Benchmarking to be done in Pre-production environment of the Bank/Simulated environment using automation tools/scripting without additional cost to the Bank.</li> <li>• Even when not requested, Benchmarking should be done minimum on Quarterly basis on an ongoing basis.</li> </ul>	<p>The Bidder should Benchmark infrastructure of individual channels, Billers, Agents and provide reports to bank during initial deployment and as when requested by the Bank.</p> <p><b><u>Note:</u></b></p> <ul style="list-style-type: none"> <li>• Benchmarking to be done in Pre-production environment of the Bank/Simulated environment using automation tools/scripting without additional cost to the Bank.</li> <li>• Wherever Benchmarking requires simulated environment, the same to be managed and benchmarked by the Bidder by coordinating with required stakeholders.</li> <li>• Even when not requested, Benchmarking should be done minimum on Half-Yearly basis on an ongoing basis, however capacity planning should be reviewed by the Bidder on a monthly basis; corresponding reports to be made available to the Bank when deemed necessary.</li> </ul>
11	66	Annexure-C: Technical & Functional Specifications	<p>The solution must have the ability to perform key management (dynamic &amp; static) including data encryption as per the Bank and NPCI standards.</p> <p><b><u>Note:</u></b></p>	<p>The solution must have the ability to perform key management (dynamic &amp; static) including data encryption as per the Bank and NPCI standards.</p> <p><b><u>Note:</u></b></p>

			<ul style="list-style-type: none"> <li>• All keys should be protected with strong policies in the Infrastructure where it is available. I.e. Software implementation of Hardware Security Module (HSM).</li> <li>• If required by the Bank, Architecture should also support integration with Physical Hardware Security Module (HSM) and the same should be attained in a modular way.</li> </ul>	<ul style="list-style-type: none"> <li>• All keys should be protected with strong policies in the Infrastructure where it is available.</li> <li>• Architecture should also support integration with Physical Hardware Security Module (HSM) and the same should be attained in a modular way.</li> <li>• Refer “Annexure- E: Broad scope of work: Project Implementation Plan – Part- D” for more details.</li> </ul>
12	67	Annexure-C: Technical & Functional Specifications	<p>The disaster recovery drill for the solution should be tested periodically as and when requested by the Bank and as per regulatory compliance.</p> <p><b><u>Note:</u></b></p> <ul style="list-style-type: none"> <li>• The disaster recovery to be configured with Automation tools (Infrastructure for hosting tools will be provided by the Bank).</li> <li>• Infrastructure maintenance and support (Where tools are hosted for automation) to be handled by the Bidder along with integration; however Infrastructure for hosting Automation tools will be provided by the Bank.</li> <li>• The reports should be made available in the portal (More detailed scope of portal functionality is mentioned later).</li> <li>• Bank may or may not decide to provide license for the Disaster recovery automation tool. In case, the license is not provided by the Bank; the same should be managed by the Bidder without additional cost to the Bank.</li> </ul>	<p>The disaster recovery drill for the solution should be tested periodically as and when requested by the Bank and as per regulatory compliance.</p> <p><b><u>Note:</u></b></p> <ul style="list-style-type: none"> <li>• The disaster recovery to be configured with Automation tools (Infrastructure for hosting tools will be provided by the Bank).</li> <li>• Automation tools should be able to handle switching between sites, Syncing data between sites, etc., without manual intervention at all tiers/layers.</li> <li>• Infrastructure maintenance and support (Where tools are hosted for automation) to be handled by the Bidder along with integration; however Infrastructure for hosting Automation tools will be provided by the Bank.</li> <li>• The reports should be made available in the portal (More detailed scope of portal functionality is mentioned later).</li> <li>• Bank may or may not decide to provide license for the Disaster</li> </ul>



				<p>recovery automation tool. In case, the license is not provided by the Bank; the same should be managed by the Bidder without additional cost to the Bank.</p> <ul style="list-style-type: none"> <li>When license is provided by the Bidder, Bank based on its review, may not allow a certain tools/products, in which case Bidder has to choose alternative tools/products without additional cost to the Bank. Bank decision in this regard is final.</li> </ul>
13	68	Annexure-C: Technical & Functional Specifications	<p>The bidder should provide for mobile application and support for all major Mobile operating system. I.e. Android, iOS.</p> <p><b><u>Note:</u></b></p> <ul style="list-style-type: none"> <li>Mobile applications (wherever mentioned) should support Android (4.4 and above), iOS (9 and above) and necessary competence testing should be done by the Bidder with no additional cost to the Bank.</li> <li>Bank may choose to add more operating systems for support when required.</li> </ul>	<p>The bidder should provide for mobile application and support for all major Mobile operating system. I.e. Android, iOS.</p> <p><b><u>Note:</u></b></p> <ul style="list-style-type: none"> <li>Mobile applications (wherever mentioned) should support Android (4.4 and above), iOS (9 and above) and necessary competence testing should be done by the Bidder with no additional cost to the Bank.</li> <li>Bank may choose to add more operating systems for support when required.</li> </ul> <p><b><u>Definition of Support:</u></b></p> <ul style="list-style-type: none"> <li>Bidder Support is required for applications developed as part of the solution.</li> <li>Bidder support is also required for Bank's applications, which are integrated with the solution. Bidder support for 'Applications integrated' will be specific to the services delivered as part of the solution.</li> </ul>

14	69	Annexure-C: Technical & Functional Specifications	<p>The Bidder should integrate with Proactive Risk monitoring solution of the Bank at no additional cost to the Bank.</p> <p>The Bidder should integrate with Proactive Risk monitoring (PRM) solution of the Bank at no additional cost to the Bank.</p> <p><b><u>Note:</u></b></p> <ul style="list-style-type: none"> <li>• Bidder's Solution should support integration with PRM solution of the Bank in both XML/Standard Format through TCP/IP and Message Queue; Bank will decide on the mode of integration to be implemented. Solution should also support both Real time and Near Real Time reporting to the PRM solution of the Bank.</li> <li>• Wherever PRM flags a Suspicious transaction, Solution should provide Web services to Block Customer, Agent, Biller, etc.,.</li> <li>• These reports should also be made available in the Admin Portal.</li> <li>• Solution should also be able to distinguish various transactions/operations in solution through Reference sequence/Flag.</li> </ul> <p><b><u>Definition of Real time reporting:</u></b></p> <p>In Real time reporting, Payment Leg should be allowed only after PRM Approval.</p> <p><b><u>Definition of Near Real Time reporting:</u></b></p> <p>In Near Real time reporting, the financial data will be reported to the PRM solution of the Bank but Payment Leg can be processed without PRM approval.</p>
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15	71	Annexure-C: Technical & Functional Specifications	<p>The bidder should provide solution for onboarding Agent institutions under Bharat Bill Payment Eco-System. The agent onboarding should be made possible in channels deemed necessary by the Bank.</p> <p>Indicative list of channels are provided from Sr. No. 1 to 7 under 'General' requirements.</p>	<p>The bidder should provide solution for onboarding Agent institutions under Bharat Bill Payment Eco-System. The agent onboarding should be made possible in channels deemed necessary by the Bank.</p> <p>Indicative list of channels are provided from Sr. No. 1 to 7 under 'General' requirements.</p> <p><b><u>Note:</u></b></p> <ul style="list-style-type: none"> <li>• Agent, Biller Onboarding/ Off-Boarding should get registered in BBPS Eco-System wherever applicable.</li> <li>• NPCI doesn't support API based Agent registration as of now, but the solution should be flexible enough to accommodate API based Onboarding/ Off-Boarding without additional cost to the Bank.</li> <li>• Onboarding/ Off-Boarding module should also support Automatic file generation as per the specification of NPCI to onboard manually and the same should be made configurable without any hardcoding.</li> <li>• Co-ordination with respect to any issues/activities for Agent/Biller Onboarding/ Off-Boarding will be responsibility of the Bidder.</li> </ul>
16	74	Annexure-C: Technical & Functional Specifications	<p>The solution to accommodate data categorization for customer relationship management and Biller relationship management.</p> <p><b><u>Note:</u></b></p> <ul style="list-style-type: none"> <li>• Bidder to define categorization of Customer</li> </ul>	<p>The solution to accommodate data categorization for customer relationship management and Biller relationship management.</p> <p><b><u>Note:</u></b></p> <ul style="list-style-type: none"> <li>• Bidder to define categorization of Customer and Biller Tier</li> </ul>

			<p>and Biller Tier profiling based on the volume, value of transactions, etc., on an ongoing basis in discussion with the Bank.</p> <ul style="list-style-type: none"> <li>• Bidder to define work flows for relationship management based on the tier, priority and impact.</li> <li>• The solution should also accommodate to integrate with Customer Relationship management solution (CRM) solution of the Bank through web services.</li> </ul>	<p>profiling based on the volume, value of transactions, etc., on an ongoing basis in discussion with the Bank.</p> <ul style="list-style-type: none"> <li>• Bidder to define work flows for relationship management based on the tier, priority and impact.</li> <li>• The solution should also accommodate to integrate with Customer Relationship management (CRM) solution of the Bank through web services.</li> <li>• Tentative count of Web services to be integrated is 25 with respect to CRM. Count of services mentioned herein is tentative and Bank will not incur any additional cost, in case Count of Web services exceed the same.</li> </ul> <p><u>Background of Existing Customer Relationship management (CRM) of the Bank</u></p> <p>Bank has implemented CRM solution for integrated management of Sales, Service and Marketing activity relating to a customer. The functionalities include Lead management module for different business segments, case management, Customer 360 for one view of customer of all segments, product recommendations, offering through campaigns, Contact Centre integrations, etc. CRM has existing integration with a large number of systems including LOS, LLMS, OCAS, CBS, etc.</p>
17	85	Annexure-E : Broad scope of work	User management of the portal (User creation and other functionalities to be automated).	User management of the portal (User creation and other functionalities to be automated) by the Bidder.

				<p>User Management consists of,</p> <ul style="list-style-type: none"> <li>• User Creation,</li> <li>• User Disabling (In case of non-activity),</li> <li>• User Modification,</li> <li>• Forgot Password,</li> <li>• User Access control to specific modules,</li> <li>• User Authentication,</li> <li>• Sub-User/Admin Creation.</li> </ul> <p>The above list only indicative and not exhaustive.</p> <p><b><u>Note:</u></b></p> <ul style="list-style-type: none"> <li>• Wherever required, Bank concept of Maker and Checker/Authorizer should be built in the Admin Dashboard. Final work flow will be decided by the Bank.</li> <li>• Biller/Agent User Management, should also be handled separately in similar way.</li> </ul>
18	86	Annexure-E : Broad scope of work (General requirements and Security Compliance)	NA	<p>In terms of Biller Operating Unit: Simulated environment, one simulated environment to be provided for each Biller as per the configuration requested by the Biller.</p> <p>There will be no additional cost incurred by the Bank in this regard.</p> <p>For change requirements/ addition of new functionalities, Bank's Efforts estimates committee (EEC) will finalize the efforts based on the Man days submitted with Bidder. In case of disputes/disagreement between Bank and Bidder, Bank's EEC decision on efforts will be final and binding on the Bidder.</p> <p><b><u>Note:</u></b></p>

				<ul style="list-style-type: none"> <li>Man days Breakup (as per the Bank's desired format) should be submitted by the Bidder for all change requirements/ addition of new functionalities.</li> <li>Change requirements/ addition of new functionalities will be billed only when resources are not billed on fixed bid basis. In case of disputes, Bank decision in this regard is final.</li> </ul>
19	87	Annexure-E : Broad scope of work (General requirements and Security Compliance)	NA	<p>Bidder is expected to provide solution and support for</p> <ul style="list-style-type: none"> <li>SDK,</li> <li>APIs,</li> <li>Independent Mobile/ Kiosk Applications.</li> </ul> <p>Bidder has to support end to end for Mobile/Kiosk applications, Mobile/Kiosk applications integration without additional cost to the Bank.</p> <p><b><u>Note:</u></b></p> <ul style="list-style-type: none"> <li>Support for SDK, API based integration should be always available; wherever required customized SDK to be built by the Bidder without additional cost to the Bank.</li> <li>Initially, Independent applications may be developed for Agents, Billers, RRBs, Kiosk. The list of independent applications mentioned here is tentative and Bank may request the bidder to develop additional applications without additional cost to the Bank.</li> </ul>
20	89	Annexure-E : Broad scope of work [Complaint	<b><u>Note:</u></b> The functionalities mentioned here are only indicative and not exhaustive.	<ul style="list-style-type: none"> <li>Solution should have integrated view of complaints received from Customers,</li> </ul>

		Managem nt System (CMS)/Dis pute Managem nt System (DMS) Handling]		<p>Billers, Agents along with complaints tagged from NPCI.</p> <ul style="list-style-type: none"> <li>Complaint management team should be able to sort complaints based on multiple criteria like Channels, Billers, Customers, Agents, NPCI tagged, Turnaround time (TAT) expired, etc.,</li> <li>Segregated reports should also be made available in Dashboard and whenever deemed necessary by the Bank.</li> <li>Improvements made report (Based on complaints) should be published once in every 15 days and when deemed necessary by the Bank.</li> </ul> <p><b><u>For Customer Complaints:</u></b></p> <ul style="list-style-type: none"> <li>Existing Complaint Management System is available for Non-BBPS transaction related complaints.</li> <li>Bidder should provide a Complaint management solution flexible enough to be hosted in isolation or in an integrated way with the existing complaint management system of the Bank. In case, Bank opts to go for integrated platform, the bidder should expose or consume services required for implementation of the same without additional to the Bank.</li> </ul> <p><b><u>For Biller Complaints:</u></b></p> <ul style="list-style-type: none"> <li>Bidder should provide end to end solution to be hosted in isolation for management of Biller complaints.</li> </ul> <p><b><u>Note:</u></b></p>
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				The functionalities mentioned here are only indicative and not exhaustive.
21	90	Annexure-E : Broad scope of work: Multiple Channels Integration	<p>Bank is also exploring possibilities to expand the scope to Internet of things (IOT) devices and complete support for the same is also expected from the bidder. The channels are only indicative.</p> <p>Bank has the sole discretion to add/remove channels from the above mentioned list.</p>	<p>Bank is also exploring possibilities to expand the scope to Internet of things (IOT) devices and complete support for the same is also expected from the bidder.</p> <p>The channels are only indicative. Bank has the sole discretion to add/remove channels from the above mentioned list.</p> <p><b><u>Costs:</u></b></p> <ul style="list-style-type: none"> <li>• Wherever, IOT devices, Mobile, Tablet or any devices required as part of solution delivery/ testing, the same should be provided by the Bidder. If Bank has some devices provisioned already, the same will be provided to the Bidder without additional cost to the Bidder.</li> <li>• Bank will incur the cost of procurement for the devices, if prior permission is taken by the Bidder from the Bank. On reimbursement of costs, the devices will be property of the bank.</li> </ul>
22	92	Annexure-E : Broad scope of work (Infrastructure)	<ul style="list-style-type: none"> <li>• The Infrastructure for hosting all the functionalities will be provided by the Bank.</li> </ul>	<ul style="list-style-type: none"> <li>• The Infrastructure for hosting all the functionalities will be provided by the Bank. The Primary site and Disaster recovery sites should be running in Active-Active mode but traffic should be primarily handled at one site either Primary or Secondary. High availability should be maintained across tiers in all environments.</li> </ul>



				<ul style="list-style-type: none"> <li>• Infrastructure for the application will be provided by the Bank either in Bank's Private Cloud or as Physical servers. In case of Bank's Private cloud, Segregation will be taken care by Bank's cloud team but Virtual machine management will be the responsibility of the Bidder including troubleshooting in co-ordination with the respective stakeholders for any issues/activities. In case of Physical Infrastructure, Network level segregation will be done by the Bank's Network team and server level configuration/activities are responsibilities of the Bidder.</li> <li>• Bank is planning to go with Bank's private cloud (For Infrastructure) initially and based on the Bank's need the Infrastructure may be shifted to Physical Infrastructure when deemed necessary by the Bank. Bank will not incur any additional cost for reconfiguration of servers, setting up of assets during migration/shifting of servers in any case.</li> <li>• With prior approval from the Bank, Trunking is acceptable at Network layer on a case to case basis. Corresponding server level configuration will be the responsibility of the Bidder.</li> <li>• All Architectural changes/introduction should be approved by the Bank prior to Implementation on a case to case basis.</li> </ul>
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						<ul style="list-style-type: none"> <li>Active-Active Clustering at each layer is to be ensured by the Bidder.</li> <li>Support at DR will be required at emergency cases for Business continuity. All services quoted as part of this RFP will be required to be delivered by the Bidder.</li> <li>DevOps tools to be deployed by the Bidder as part of the solution and No additional cost will be incurred by the Bank in this regard, including cost of licenses.</li> <li>Solution should support integration with Backup solutions like Commvault and EMC Networker. The solution list is only indicative and Bank is free to choose any Backup solution for integration. Bank will not bear any additional cost for the same.</li> </ul>		
23	99	Annexure-E : Broad scope of work: Project Implementation Plan – Part- B	<b>S. No</b>	<b>Technology Stack to be Used</b>	<b>Tier/ Layer</b>	<b>S. No.</b>	<b>Technology Stack to be Used</b>	<b>Tier/ Layer</b>
			1	RHEL	OS	1	RHEL 7.6 and above/ Windows server 2016 and above	OS
			2	IBM/ Oracle Middleware	Web and Application Layer	2	Microsoft/ IBM/ Oracle Middleware	Web and Application Layer
			3	Oracle RAC	Database	3	Oracle RAC 12c and above	Database
24	99	Annexure-E : Broad scope of work: Project	<b><u>Note:</u></b> <ul style="list-style-type: none"> <li>Licenses for all the above Technology stack will be provided by the Bank.</li> </ul>			<b><u>Note:</u></b> <ul style="list-style-type: none"> <li>Licenses for all the above Technology stack will be provided by the Bank.</li> </ul>		

		<p>Implementation Plan – Part- B</p>	<ul style="list-style-type: none"> <li>It is mandatory to use the above mentioned Technology stack for implementation in Bank.</li> </ul>	<ul style="list-style-type: none"> <li>It is mandatory to use the above mentioned Technology stack for implementation in Bank.</li> <li>For Web and Application layer, there will be no License separately provided for Microsoft middleware. However, 'Internet Information services (IIS)' built in Windows server can be utilized.</li> <li>It is mandatory to use the above mentioned Technology stack for implementation in Bank.</li> <li>Technology stack going to be implemented by the Bidder should be clearly defined in 'Project Implementation plan'. The chosen technology stack along with its future versions (Until contract period) should be supported by the Bidder without additional cost to the Bank. The support mentioned includes but not limited to Security updates/ Patch management, Solution compatibility with future versions, Secure configuration implementation, etc.,</li> <li>Bidder is also responsible for upgrading the above technology stack from time to time without additional cost to the Bank.</li> </ul> <p><b><u>Costs:</u></b></p> <ul style="list-style-type: none"> <li>Licenses for all the above Technology stack will only be provided by the Bank.</li> <li>OEM Support for all the above technology stack will only be provided by the Bank but end-to-end responsibility to coordinate with OEM for activities/ issues will be of the Bidder.</li> </ul>
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				<ul style="list-style-type: none"> <li>• SSL, Digital signature cost will also be borne by the Bank for the solution.</li> <li>• All other software's/licenses which is required to be provided as part of the solution is to be borne by the Bidder.</li> </ul>
25	100	Annexure-E : Broad scope of work: Project Implementation Plan – Part- D	NA	<p><b><u>Hardware Security Module (HSM) requirements of the Bank:</u></b></p> <ul style="list-style-type: none"> <li>• <u>For Production: Primary, Production: Disaster Recovery, Production: Pre-Production,</u> Bidder should provide HSM to accommodate signing of 5000 signatures per second of RSA 2048 and its equivalent. This provisioning should be configured with only 2 Physical Boxes in High availability mode (Active and Active). Each site should accommodate the capacity mentioned above and there should be no sharing of hardware resources across the sites.</li> <li>• <u>For UAT,</u> Bidder should provide HSM to accommodate signing of 500 signatures per second of RSA 2048 and its equivalent. This provisioning should be configured with only 2 Physical Boxes in High availability mode (Active and Active). There should be no sharing of hardware resources across the sites.</li> <li>• The HSM models used for Production: Primary, Production: Disaster Recovery, Production: Pre-Production, UAT should be the same with only exception of difference in number of signatures being signed per second.</li> </ul>

				<ul style="list-style-type: none"> <li>• The HSM provided by the Bidder should be complying with FIPS 140-2 Level 3 for digital signature.</li> <li>• There should be no restrictions on number of keys to be protected by HSM.</li> <li>• HSM Should support all major operating systems like RHEL/CentOS/Linux/Ubuntu, Solaris, AIX, HP-UX, Windows, etc.,</li> <li>• Bank may at its discretion, may store keys for other applications, however end-to-end management of the HSM will still be the responsibility of the Bidder.</li> <li>• The cost of HSM should be factored in by the Bidder along with 'One Time implementation Cost' of the solution. The cost should also factor in Supply, Commissioning, Testing, Maintenance and Support during the contract period. Cost should also factor in 24*7*365 OEM Support.</li> <li>• The HSM will be a property of the Bank, once Purchase Order is issued for Solution implementation. Bank may at its discretion receive the Physical Boxes/ HSM at any time after issuance of purchase order and Bidder should ensure end-to-end support for the same.</li> <li>• Bank will not bear any additional cost for the movement of Hardware between Data centers of the bank.</li> <li>• However, Transport and insurance will be reimbursed by the Bank.</li> <li>• Any requirement of Additional HSM capacity will be provided by the Bank but the same</li> </ul>
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				should be intimated to the Bank at least 1 year in prior. Failing which, Bidder has to bear the cost for accommodating the additional load without disrupting Bank's services.
26	104	Annexure: F (Indicative Commercial Bid)	The below mentioned rate: 'Rates per day per person' will be considered as 'Base Rates' and this will be applicable throughout the engagement.	The below mentioned rate: 'Rates per day per person' will be considered as 'Base Rates' for all shifts and this will be applicable throughout the engagement.
27	40	SCHEDULE OF EVENTS	6. Last Date and Time of BID submission: 4:00 PM on 03.06.2019	6. Last Date and Time of BID submission: 4:00 PM on 07.06.2019
28	40	SCHEDULE OF EVENTS	Date and Time of opening of Technical Bids: 4:00 PM on 03.06.2019	Date and Time of opening of Technical Bids: 4:00 PM on 07.06.2019
29	41	SCHEDULE OF EVENTS	Tender Fee: Rs.20,000/-	Tender Fee: Rs.10,000/-
30	41	SCHEDULE OF EVENTS	Performance Bank Guarantee: 20% of the Project Cost	Performance Bank Guarantee: 15% of the Project Cost
31	41	Terms of Payment	<b>Implementation Cost:</b> <ol style="list-style-type: none"> <li>1. After successful completion of Phase-I (As defined below), 60 % of Implementation cost will be released within 30 days of receipt of invoice.</li> <li>2. After successful completion of Phase-II (As defined below), remaining 40 % of Implementation cost will be released within 30 days of receipt of invoice.</li> </ol>	<b>Implementation Cost:</b> <ol style="list-style-type: none"> <li>1. After Supply, Installation, Commissioning and successful Testing of Hardware Security Module (HSM), successful installation certificate to be obtained by the Bidder from the Bank. On submission of the successful installation certificate, 10 % of Implementation cost will be released within 30 days of receipt of invoice.</li> <li>2. After successful completion of Phase-I 50 % of Implementation cost will be released within 30 days of receipt of invoice.</li> </ol>

				3. After successful completion of Phase-II remaining 40 % of Implementation cost will be released within 30 days of receipt of invoice.
32	48	Annexure-B Bidders Eligibility Criteria	<b>S.No.3:</b> The Bidder must have an average turnover of minimum Rs.25 crore during last three financial year(s) 2015-16, 2016-17, 2017-18.	<b>S.No.3:</b> The Bidder must have an average turnover of minimum Rs.15 crore during any three out of the four financial years 2015-16, 2016-17, 2017-18 or 2018-19.
33	48	Annexure-B Bidders Eligibility Criteria	Bidders meeting the (bellow mention) criteria are eligible to submit their Bids along with supporting documents. If the Bid is not accompanied by all the required documents supporting eligibility criteria, the same would be rejected:	Bidders meeting the (bellow mention) criteria as on 31.03.2019 are eligible to submit their Bids along with supporting documents. For Sr. No. 11 to 14, Copy of the order and / or Certificate of completion of the work should be from Bidder's Client.  If the Bid is not accompanied by all the required documents supporting eligibility criteria, the same would be rejected:
34	49	Annexure-B Bidders Eligibility Criteria	Two Client references and contact details (email/ landline/ mobile) of customers for whom the Bidder has executed BBPS - COU Solution (Solution should be running in production). Start and End Date of the Project to be mentioned along with Certificate of completion and user acceptance report. (At least 2 client references are required)	Two Client references and contact details (email/ landline/ mobile) of customers for whom the Bidder has executed BBPS - COU Solution (Solution should be running in production). Start and End Date of the Project to be mentioned along with Certificate of completion and user acceptance report. (At least 2 client references are required)  <u>Note:</u>  The Bidder should have completed COU certification testing with NPCI for the mentioned client reference.  <u>Self-certification allowed only in below circumstance:</u>

				In case, the Bidder himself is certified as COU by NPCI; the Bidder can self-certify with supporting proof from NPCI.
35	50	Annexure-B Bidders Eligibility Criteria	<p>One Client reference and contact detail (email/ landline/ mobile) of customer for whom the Bidder has executed BBPS - BOU Solution (Solution should be running in production). Start and End Date of the Project to be mentioned. (At least 1 client reference are required)</p> <p><u>Note:</u></p> <p>a) BOU Client reference should stat number of Billers live (At least 1 Biller has to be Live).</p> <p>b) BOU Client reference should also certify that the bidder is handling more than 10,000 financial transactions per month for last 3 months (The period of 3 months should fall anytime in 2019).</p>	<p>One Client reference and contact detail (email/ landline/ mobile) of customer for whom the Bidder has executed BBPS - BOU Solution (Solution should be running in production). Start and End Date of the Project to be mentioned. (At least 1 client reference are required)</p> <p><u>Note:</u></p> <p>a) &amp; b) BOU Client reference should state number of Billers live (At least 1 Biller has to be Live) and financial transaction has been processing successfully.</p> <p><u>Self-certification allowed only in below circumstance:</u></p> <p>In case, the Bidder himself is certified as BOU by NPCI; the Bidder can self-certify with supporting proof from NPCI.</p>
36	123	Annexure-J Penalty for Non Compliance	NA	<p>The penalties under various categories shall be up to 20% of the project cost on each occurrence or clause. This excludes actual loss incurred by the Bank.</p> <p><u>Note:</u> Penalties for Non Compliance for Sr.14 and 15 mentioned in Annexure- J. will be either 20% of the project cost or penalties mention in the clauses, whichever will higher will be applicable.</p>
37	124	Annexure-J	g) Total Project Cost (Definition for the Purpose of Penalty) = Total	g) Total Project Cost (Definition for the Purpose of Penalty) = Total Implementation cost + Cost



		Penalty for Non Compliance	Implementation cost + Cost of Operational and Development Support for 5 years	<p>of Operational and Development Support for 5 years.</p> <p><b><u>Definition of Cost of Operational and Development Support for 5 years</u></b></p> <p>Here, Cost of Operational and Development support for 5 years is either as quoted by the Bidder (Based on the number of resources mentioned in Annexure: F – “Indicative Commercial Bid”) or actual engagement cost (Actual resources engaged by the Bank), whichever is higher.</p>
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