



**RESERVE BANK OF INDIA**  
**Department of External Investments and Operations**

**Invitation for Expression of Interest (EOI) for Implementation of Next Generation Treasury  
Application (NGTA) in Reserve Bank of India**

Department of External Investments and Operations, 22<sup>nd</sup> floor, Central Office Building, Reserve Bank of India, Shahid Bhagat Singh Marg, Fort, Mumbai – 400001 invites 'Expression of Interest' from eligible reputed vendors/solution providers for Implementation of Next Generation Treasury Application in the Reserve Bank of India.

Last date of submission of response for EOI is **November 19, 2020 by 1500 hours**. For details please visit the 'Tenders' section of our website ([www.rbi.org.in](http://www.rbi.org.in)).



## **Reserve Bank of India**

### **Department of External Investments and Operations**

**Invites**

**Expression of Interest**

**For Implementation of**

**Next Generation Treasury Application (NGTA)**

Date of Release: **October 01, 2020**

Reserve Bank of India

Department of External Investments and Operations

Central Office Building, 22<sup>nd</sup> Floor, Shahid Bhagat Singh Road, Mumbai-400001

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**ACRONYMS AND ABBREVIATIONS**

<b>Abbreviations</b>	<b>Full Form</b>
BCP	Business Continuity Plan
BFSI	Banking, Financial Services and Insurance
CGM	Chief General Manager
CGM-I-C	Chief General Manager-in-Charge
DAF	Developer's Authorization Form
EOI	Expression of Interest
FIS	Fixed Income Securities
FX	Forex
GAAP	Generally Accepted Accounting Principles
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
MAF	Manufacturer's Authorization Form
MM	Money Market
MTM	Mark to Market
NGTA	Next Generation Treasury Application
OEM	Original Equipment Manufacturer
POC	Proof of Concept
RBI	Reserve Bank of India
ReBIT	Reserve Bank Information Technology Private Limited
RFP	Request for Proposal
SAARC	South Asian Association for Regional Co-operations
SI	System Integrator
SRS	Software Requirement Specifications
SWIFT	Society for Worldwide Interbank Financial Telecommunication
TAG	Technical Advisory Group
WAP	Weighted Average Price



## DEFINITION

- 'Reserve Bank of India' or 'RBI' or 'The Bank' means Reserve Bank of India. Final legal contract will be signed between Reserve Bank of India and the selected Bidder.
- 'NGTA' refers to the Next Generation Treasury Application. The NGTA should support all the treasury operations including those of front office, risk management and back office. The proposed NGTA should be integrated in the true sense. The architecture, technology, etc. should be uniform across the entire solution.
- 'Bidder' or 'Vendor' refers to the respondent submitting response to EOI for NGTA. The bidder will be the entity responsible for the complete delivery of services as covered in this EOI.
- 'Contract Period' refers to the period of **7 years** for which the Bank will enter into contract with the successful bidder for supply, installation, implementation, customization, integration, migration, testing, training, tuning/optimization of application / database and post go-live support and maintenance of all necessary software and other utilities, etc. at primary site and also at disaster recovery (DR) site.
- 'EOI' means the Expression of Interest document, inclusive of any clarifications/corrigenda/addenda that may be issued by the Bank.
- 'Hardware' means the hardware components (server, computer, storage, etc.) required for optimal functioning of the NGTA during the contract period.
- 'DC' means Data Centre.
- 'DR' / 'DRC' means Disaster Recovery Site/Centre.
- 'DRDC' means Disaster Recovery Data Centre
- 'Bid' may be interchangeably used as 'Offer'.
- 'MIS' means Management Information System.
- 'TMS' means Treasury Management System/Software.
- 'Proposed TMS' means Treasury Management System which is proposed by the prime bidder for this EOI.



## 1. DISCLAIMER AND DISCLOSURES

Reserve Bank of India, Department of External Investments and Operations (DEIO), Central Office, Mumbai, has prepared this document to give background information on the project to interested parties. While Reserve Bank of India has taken due care in preparing the information contained herein and believe it to be accurate, neither Reserve Bank of India nor any of its authorities or agencies nor any of their respective officers, employees, agents or advisors give any warranty or make any representations, express or implied as to the completeness or accuracy of the information contained in this document or any information which may be provided in association with it.

The information is not intended to be exhaustive. Interested parties are required to make their own inquiries and respondents will be required to confirm in writing that they have done so, and that they do not rely solely on the information provided by RBI in submitting an EOI. The information is provided on the basis that it is non-binding on Reserve Bank of India or any of its authorities or agencies or any of their respective officers, employees, agents, or advisors.

Reserve Bank of India reserves the right not to proceed with the Project or to change the configuration of the Project, to alter the schedule reflected in this document or to change the process or procedure to be applied. It also reserves the right to decline to discuss the matter further with any party expressing interest. No reimbursement of cost of any type will be paid to persons or entities expressing interest.

The proposal in response to the EOI should be signed and submitted by a person duly authorized to bind the respondent company to the details submitted in the proposal in response to the EOI. The signatory should give a declaration and through authenticated documentary evidence establish that she is empowered by the competent authority to sign the necessary documents and bind the response. Any clarification sought can be mailed to [deioit@rbi.org.in](mailto:deioit@rbi.org.in). All clarifications sought shall be replied individually and posted on Bank's website. All clarifications sought should be before the last date of submission of queries specified in the SCHEDULE.



## 2. SCHEDULE

Issue of EOI documents	<b>October 01, 2020</b>
Last date of submission of queries	<b>October 08, 2020</b>
Pre-bid meeting	<b>1500 hours; October 15, 2020</b>
Last date of issue of addendum/corrigendum if any	<b>October 22, 2020</b>
Last date and time for submission of EOI	<b>1500 hours; November 19, 2020</b>
Opening of EOI	<b>1500 hours; November 19, 2020</b>

- \* The Bank reserves the right to modify/extend the timelines/dates mentioned above.
1. This document can also be downloaded from the 'Tenders' section of RBI's website (<https://rbi.org.in/>)
  2. Queries / clarifications can be sought by email till the date mentioned as per above Schedule. Emails in this regard should be sent to [deioit@rbi.org.in](mailto:deioit@rbi.org.in) and should have the subject "Expression of Interest for Implementation of Next Generation Treasury Application". Queries sent to any other email ID/through post may not be considered by the Bank.
  3. EOI and Bidder response will be valid for next **9 months** from the date of response submission.
  4. Hard copy of EOI response should be submitted in **sealed cover** (along with a flash drive / CD containing **password protected** soft copies of the response and all relevant documents; the password shall be required at the time of opening of the bid) into the **designated box kept in the reception area of the Bank's Central Office Building, Shahid Bhagat Singh Road, Mumbai-400 001 marked with the following:**  
  
**Chief General Manager-in-Charge,  
Reserve Bank of India,  
Department of External Investments and Operations  
Central Office Building, 22<sup>nd</sup> Floor,  
Shahid Bhagat Singh Road, Mumbai-400 001**
  5. The sealed envelope/cover should be super scribed with the title "**Expression of Interest for Implementation of Next Generation Treasury Application**". The response should be signed and submitted by a person duly authorized to bind the bidding company to the details submitted in the proposal in response to the EOI. The signatory should give a declaration and through authenticated documentary evidence establish that he/she is empowered by the competent authority to sign the necessary documents and bind the bidding. The due date for submission of EOI is **November 19, 2020 by 1500 hours.**



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6. Due to COVID-19 situation, EOI response can also be submitted via email to [deioit@rbi.org.in](mailto:deioit@rbi.org.in) through password protected files. The password shall be required at the time of opening of bids. Permitted attachment size for the email is 10 MB. In case if larger attachments are to be shared then multiple emails should be sent with subject containing part 1, part 2, etc.
7. Both physical and / or email EOI response will be valid.
8. If both physical and email responses are submitted and in case of any discrepancy between the two, the contents of the physical response will be considered.

Bidders interested in attending pre-bid meeting should send the request to the email id [deioit@rbi.org.in](mailto:deioit@rbi.org.in) two days prior to pre-bid meeting for necessary arrangement.





### **3. PURPOSE**

- 3.1 The Reserve Bank of India hereinafter also referred to as 'RBI' or 'The Bank' or 'the Reserve Bank', issues this 'Expression of Interest', hereinafter called 'EOI'.
- 3.2 RBI proposes to implement the Next Generation Treasury Application (NGTA) which would be used for managing the foreign exchange reserves in a more efficient way, mitigate risk, achieve operational efficiencies, dealing in various asset classes and reporting.
- 3.3 This EOI is issued for inviting responses from prospective bidders to express their interest in implementation of NGTA.
- 3.4 This EOI does a fair amount of detailing of the requirements to enable quality and detailed responses. However, these requirements are subject to modification/addition/deletion and the final specifications will only be prescribed in the Request for Proposal (RFP). Respondents are encouraged to give additional suggestions and alternative designs and approaches in their response.
- 3.5 A bidder submitting a response to EOI for implementation of NGTA shall herein after be referred to as 'respondent' or 'bidder' or 'vendor'.
- 3.6 This EOI document is neither an offer letter nor a legal contract, but an invitation for Expression of Interest.
- 3.7 No contractual obligation on behalf of the Bank whatsoever shall arise from this EOI.
- 3.8 RBI subsequently shall be floating a Request for Proposal (RFP) only to those bidders who are deemed to be qualified post the EOI process. The said RFP shall broadly cover the existing systems and processes, scope of work, deliverables, expectations etc. along with overview of the entire project.
- 3.9 EOI and RFP for NGTA will be treated under process unless and until a formal contract is signed and executed by duly authorized officers of the RBI and the selected respondent / bidder.



## 4. INTRODUCTION

The Reserve Bank of India (RBI) was established on April 1, 1935 in accordance with the provision of the Reserve Bank of India Act, 1934.

The Bank is entrusted, among others, with the responsibility of managing the foreign exchange reserves of the country. The essential legal framework for this function is provided by the Reserve Bank of India Act, 1934. Specifically, sub-sections 17(6A), 17(12), 17(12A), 17(13) and 33(1) of the said acts defines the scope of investment in this regard.

In brief, the law broadly permits the following investment categories: Deposits with Central Banks, Foreign Commercial Banks and Bank for International Settlements (BIS); Debt instruments representing sovereign/sovereign-guaranteed liability with residual maturity for debt papers not exceeding 10 years; Other Instruments/Institutions as approved by the Central Board of RBI. Also, the act permits dealing in derivatives, gold, etc., and, with the approval of the Central Board, in any other financial instrument.

Derivative means an instrument, to be settled at a future date, whose value is derived from change in one or a combination of more than one of the underlying, namely: interest rate, price of foreign securities, foreign exchange rate, index of rates or prices, credit rating or credit index, price of gold or silver coins, or gold or silver bullion, or any other variable of similar nature.

For carrying out the crucial function of reserves management as mentioned above, the Reserve Bank of India desires to get a Next Generation Treasury Application (NGTA) developed which should have the capability to support all the products as laid out in the RBI Act, 1934 and / or mentioned in this EOI.

Following are the functional modules which are envisaged to be managed through NGTA. In addition, NGTA should also provide the necessary flexibility to manage new products/ verticals that may be introduced by the bank from time to time.

1. Fixed Income Securities
2. Foreign Exchange
3. Money Market
4. Gold /Commodity
5. Asian Clearing Union
6. Aid Receipt
7. Bilateral Arrangements
8. International Monetary Fund (IMF)
9. SAARC and other Special Swaps
10. Credit Risk
11. External Asset Manager
12. Market Risk
13. Repo and Collateral Management
14. Reconciliation



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15. Concurrent Audit
16. Accounting
17. Rates
18. System Administration
19. Interfaces and Integration



## 5. OBJECTIVE

The Bank intends to implement Next Generation Treasury Application (NGTA) to manage the country's foreign exchange and gold reserves. NGTA should be a web-based application that should provide scalability, maneuverability and flexibility to introduce new products and securities. NGTA should also support multi-currency transaction/settlement. NGTA should be comprehensive, integrated, functionally rich and user friendly to cater to the entire range of functionalities required. End to end supply, installation, implementation, customization, migration, testing, training, go-live, post go-live support for the application shall be required.

The objectives of the proposed system are listed below:

1. Dealing in various asset classes (e.g. Fixed Income Securities (FIS), Forex, Money Market (MM), Gold etc.)
2. Portfolio Management
3. Workflow Management
4. Reserve Management
5. Integration with various third party and in-house systems
6. Dashboards, Reports, Widgets



## 6. BUSINESS REQUIREMENTS OF THE PROPOSED SOLUTION

### Module for basic transactions - FIS/FX/MM/Gold

1. The NGTA should support various transactions in asset classes like (a) Fixed Income (FI), (b) Forex (FX), (c) Money Market (MM) and (d) Gold.
  - (a) Typically, Fixed Income (and their derivatives) products would include sovereign bonds, treasury bills, when issued securities, discount notes, corporate bonds, mortgage backed securities (MBS), floating rate bonds, index bonds, interest rate futures (IRF), zero coupon bonds (ZCB), covered bonds, callable/puttable bonds, inflation linked bonds, option embedded securities, etc.
  - (b) Transactions in Forex would involve outright deals, options (including forex options), swaps, forwards, futures etc. in different currency pairs. Further, forex operations also include the market intervention function of the Reserve Bank where one currency would always be the domestic Rupee.
  - (c) Money Market products would imply foreign currency deposits placed with foreign central banks, foreign commercial banks and international/supranational institutions like the Bank for International Settlements (BIS).
  - (d) Transactions in Gold would be outright sale-purchase and gold deposits, etc. There may be deals in some derivative products like swaps also.
2. NGTA should have the option for a detailed Pre-Deal / What If analysis before each transaction. This analysis is intended to check parameters such as residual maturity of a security, limit validations/warnings (as maintained in NGTA), duration impact (breach and target duration), value at risk (VaR) impact, price impact i.e., impact on the weighted average price (WAP) of a security, repo/reverse repo pick up, nostro balances, position impact, impact on currency composition of the portfolio, penalty/notional loss in case of premature withdrawal of MM deposits, opportunity cost and pick-up in case of swaps, etc.
3. NGTA should automatically fetch all the relevant details of a security/contract from a trading platform. It should support all internationally accepted conventions pertaining to day count, interest computation, holiday logic, shut period-dividend, ex-dividend, cash flows, odd coupon, etc.
4. The NGTA should support multifarious activities with respect to MM deposits. There should be sufficient provision for selecting the type of deposit, duration, interest payment frequency (daily, weekly, monthly etc.), type of interest (compound, simple, or negative rate), benchmark in case of floating rate deposit, spread over benchmark, etc. The application should further support premature (full or partial) withdrawal and rollover (full or partial) of deposits.
5. With respect to transactions in Gold, the NGTA should support purchase, sale, deposit (including rollover and premature withdrawal). On maturity of a gold deposit, there can be exact, under or over delivery. The application should seamlessly support any such scenario. There must be a comprehensive inventory management for Gold that would store bar information like purity, weight, maker, custodian, etc and generate necessary MIS reports.
6. NGTA should support transfer of funds between various nostro accounts of the Reserve Bank.



## Expression of Interest – Next Generation Treasury Application

7. The application should be able to handle all accounting-related aspects including, *inter alia*, accrual computation, coupon receipt, amortisation of premium/discount, security maturity/redemption, WAP computation, custodian accounting, handling of buffer accounting for IRF, etc. NGTA must support revaluation of the entire foreign currency assets (FCA) and gold portfolio based on the rates/prices (auto-fetched from market data provider or manually entered) and computes the impact on portfolio/balance sheets at configurable pre-defined periodicity.
8. NGTA should be fully integrated with the SWIFT messaging platform being used by the Reserve Bank. The application should generate and parse SWIFT messages that are of the current standards on preconfigured events like trade date, before cut off time on value date etc. NGTA should auto match confirmation messages received from counterparty with corresponding messages generated by it pertaining to a particular transaction, and on its basis auto initiate payment messages accordingly. Further, NGTA should be easily scalable to any new message or security standard that SWIFT prescribes from time to time. NGTA should also send emails to designated officials/counterparties as configured.

### **Modules for management of market and credit risk**

1. NGTA should have comprehensive modules for managing market and credit risk of the entire portfolio.
2. Counterparty and standard settlement instruction (SSI) management should be an integral part of the credit risk module. In this regard, NGTA should be able to fetch relevant counterparty and SSI details from the market data providers as well as allow manual creation of records. Further, the application should also capture and updating SSI details automatically when they are received via SWIFT messages.
3. NGTA should have provisions for setting/configuring various types of limits like counterparty risk limit, pre-settlement limit, default risk limit, etc. Such limits can be defined for individual entity, group of entities etc. in percentages or in absolute numbers.
4. NGTA should fetch data on counterparties like their credit ratings, stock prices, CDS prices, etc. from various market data providers, and also have provision for manual entry/upload of the same. The application should support configuration of qualitative and quantitative parameters for evaluating/measuring eligibility of counterparty and fixing their asset class wise limits. Review of counterparty limits at pre-defined frequency should be supported.
5. NGTA should calculate credit risk Value at Risk (VaR) for all asset classes/products and generate economic capital framework (ECF) report in the format desired by the Reserve Bank.
6. Market analysis in terms of VaR, performance analysis of the Reserve Bank's Foreign Currency Assets (FCA), liquidity at risk (LaR), yield spread analysis, etc should be supported by the NGTA.
7. VaR shall be computable for the entire portfolio, specific portfolio, specific asset class or specific deal/instrument. Drilldown functionality must also be available at each level. VaR computation



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(parametric, historical and Monte Carlo simulation), CVaR (conditional VaR), incremental VaR and marginal VaR should be a part of NGTA.

8. Scenario analysis/stress testing of the portfolio as desired by the Reserve Bank should be feasible.
9. NGTA as part of the performance analysis should compute returns including both realized as well as unrealized gains / losses for the Reserve Bank as well as benchmark portfolios. NGTA should calculate returns in line with the inputs (weights, currency wise benchmarks etc.) given by the users. It should also auto capture the benchmarks from various market data providers like Refinitiv (Thomson Reuters), Bloomberg, JPMorgan etc.
10. NGTA should be capable of return attribution as part of performance analysis. It should calculate various performance ratios like Sharpe Ratio, Sortino Ratio, Tracking Error, Information ratio etc.
11. Liquidity analysis for various durations like overnight, weekly, monthly, quarterly, annually etc. should be a feature in the NGTA.
12. The application should also support sensitivity analysis by underlying and Tenor- PV01, DV01, Delta etc.
13. Difference of the Supranational bonds with the government bonds (spread) should be monitored by NGTA.
14. There should be a functionality to monitor duration movement and currency composition of FCA and various portfolios to ensure that they are within prescribed limits.
15. NGTA should have a dashboard accessible to the users, which would display the currency composition, duration and VaR of the portfolios as on date in real time.

### **Module for Repo and Collateral Management**

1. NGTA should have a comprehensive Repo and Collateral Management Module.
2. NGTA should allow input of static details like haircut / margin rate, minimum transfer amount (MTA), timelines (regarding mark to market (MTM) and margin call), residual maturity accepted, pricing source, interest payments on cash margin, list of securities accepted, etc. as mentioned in a general master repurchase agreement (GMRA). It should use these details to trigger events like margin calls, check for eligible securities, valuation based on pricing source etc.
3. Functionalities like intimating process agent of GMRA agreement, defining base currency, computing gross/net exposure across counterparties, provision for settling forward repos, cancellation/rebooking/roll-over of repos, separate SSI details for repo and margin etc should be supported.
4. NGTA should keep a check on the securities, currencies, issuers which can be accepted as margin collateral. The application should have provision for value free transfer (VFT) of securities for efficient margin management.



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5. Provision for identifying equivalent securities, substitution of securities, entering margin related timelines, entering haircut rules and its calculation, entering interest rate applicable on cash margin and its calculation, identifying cheapest to deliver (CTD) security to be posted as margin should be available.
6. A fully functional dispute management system is expected. It should track the entire lifecycle of the dispute with requisite calculations (like penal interest).
7. Transfer of manufactured payments received should happen on a real time basis to the counterparty.
8. Potential margin call predictor based on interest rate movement is expected.
9. Third party repo and sponsor repo should be supported.

### **Module for Reconciliation**

1. NGTA should be able to parse various types of SWIFT messages and statements and on its basis, it should reconcile transactions, cash balances held in multiple accounts and securities kept with multiple custodians.
2. NGTA should auto match entries based on rules specified in the application. Manual matching should also be available for any unmatched entries.
3. The application should provide an option to forward any transaction that remains unmatched to the appropriate work area. This workflow of directing an unmatched transaction to any particular work area and then completing reconciliation activity should have audit trail with time stamps and relevant user comments/action details.
4. NGTA should be able to accurately compute interest on nostro balances by multiplying the relevant rates (positive, negative or zero) with the end of day (EOD) balances or other appropriate balances in the account parsed from the relevant SWIFT message. As different central banks send messages of interest/charge on different frequencies (weekly, monthly, etc.), the application should smartly reconcile them with the figures generated by it.

### **Module for Accounting**

1. NGTA should provide a robust and flexible accounting module. It should have the ability to produce trial balance and generate tree view of accounting rules for user views.
2. Accounting based on primary conventions such as First in first out (FIFO), Last in first out (LIFO) and weighted average cost method should be supported.
3. NGTA should be flexible enough for configuring automatic generation of accounting entries as per operational requirement for all the configured asset/product classes.
4. Manual configuration of accounting entries for asset classes should be allowed with maker-checker functionality. It should support General Ledger (GL) account creation with user defined fields for Management Information System (MIS) and reporting purpose.





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5. Batch accounting, mirror accounting, trade/value date wise accounting, amortization/accrual, deposit, withdrawal, revaluation etc. should be supported.
6. Amortization of swap premium should happen using Internal Rate of Return (IRR) method. NGTA should support other methods as required by the Reserve Bank in future. Frequency of accounting should be user defined like daily, weekly, monthly, half yearly, yearly etc.
7. All global accounting standards like International Financial Reporting Standards (IFRS), US Generally Accepted Accounting Principles (GAAP), Indian GAAP, International Accounting Standards, Indian Accounting Standards, etc. should be supported.
8. NGTA should auto compile Securities held as Foreign Exchange Reserves (SEFER), Instruments composition of transaction in Foreign Exchange Reserves (INFER) and Currency Composition of Official Foreign Exchange Reserves (COFER) data for submission to IMF. It should auto perform currency and gold revaluation and its analysis.
9. Creation of various types of chart of accounts- asset, liability, expense, revenue, payable, receivable, contingent, settlement etc. should be supported.
10. NGTA should support processing a chart of accounts with granular segregation of accruals, premium amortizations, discount amortizations, mark to market, etc by asset class.

### **Module for supporting concurrent audit (CA) functionality**

1. NGTA should be designed in a manner that to the greatest extent possible, the system automatically matches and validates various transactions and only exceptions are flagged for a manual but concurrent audit. Hence, concurrent audit should largely be an automatic and a paperless process while allowing the concurrent auditor to check the deal status on a trade date. Nonetheless, there should be other standard functionalities in the application for assisting concurrent audit operations.
2. The application should have a rate scan functionality that would review FIS and FX deals which are not done within the day's high and low rates/off-market rates. Rates should be fetched from market data providers.
3. There should be module to tally/monitor the number of deals done on trading terminals with the deals actually flown/entered in the NGTA.
4. NGTA should have enabling functionality/module to monitor various limits and other parameters like exposure limits, trading limits, open position limit, monthly/annual loss limit, modified duration, residual maturity, deal size, country limits, portfolio duration, currency composition, liquidity position etc. In the event of any breach, the application must trigger email notification to designated CA officials.
5. NGTA should have the capability to calculate opportunity cost. For instance, in case of swaps, net gain should be calculated keeping the opportunity cost of alternate risk-free investment as specified.
6. NGTA should facilitate CA officials to monitor deals done under overnight dealing arrangement and to check whether all the specified guidelines were followed or not.



**Module for External Asset Managers (EAM)**

1. Maintenance of EAM and custodians should be supported by the NGTA. It should allow monitoring of EAMs using specified quantitative and qualitative parameters.
2. Payment to and from global custodian (GC) with the generation of relevant SWIFT messages should be processed.
3. NGTA should allow users to process fees, based on a defined policy and SWIFT messages/email correspondences received from EAM.
4. Screen to capture (manually and via upload) net asset values (NAVs) of funds managed by EAM should be provided.
5. NGTA should have capability wherein performance of EAM can be monitored on various parameters like adherence to guidelines, comparison with benchmarks, other EAMs etc. based on reports submitted by EAMs and GC.
6. NGTA should allow processing/scrutiny of reports submitted by EAM, match transaction in NGTA with reports received from EAM/GC, maintain duration and currency composition, store reports sent by EAMs/GC, perform rate scan for the portfolio.
7. Revaluation of assets on marked to market basis should be allowed.
8. NGTA should have the facility to upload and process asset-wise, currency-wise, EAM-wise asset/liability / income and expenditure posting reported by GC.

**Module for capturing various rates and prices**

1. NGTA should fetch and store various rates and prices used by the Reserve Bank from different market data providers as well as allow manual input upload of the same. It should also have a provision that would allow users to easily change the rate / pricing source. Frequency/time etc. for capturing the rates should be configurable by users. It should also allow user to re-initiate the process to fetch the rates from market data provider. The rates recorded and maintained in NGTA should be available for view/download by users, performing of computations, etc.
2. NGTA should allow users to send the calculated rate sheet to various entities. It should allow user to configure the Email id/Fax details of the entities, to which the computed rate sheets can be sent directly.

**Dashboard requirements**

1. NGTA should provide generic/ personalized dashboard and widgets for users.
2. Dashboards should contain graphical depictions that would reveal, for instance, number of deals and values in last three days with drill down facility up to dealer levels, cash-flow across various asset



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classes, portfolio/asset class wise holding of assets and variations week-over-week, etc. It should also contain other crucial information such as number of deals with manual interventions/ risk control breached over time, portfolio wise accrued income, income comparison, dealer performance like P/L for certain duration, etc.

3. There should also be a dedicated portfolio level dashboard for showing real-time positions, risk and limits of the portfolio. Further, a dashboard should also allow a 'Group By' feature to let users view the portfolio according to currency, country, asset class, etc.

### **Miscellaneous**

1. NGTA should have the capability to support all the products as envisaged in RBI Act, 1934 for foreign exchange reserve management, specially included in the sub-sections 17(12), 17(12A), 17(13) and 33(1) of the Reserve Bank of India Act, 1934. Even if some of the products included in the Reserve Bank of India Act, 1934 are not being used currently, the same should be available in a generic form, which would make customisation easier at a later date.
2. There should be facility of real time updation of portfolio as well as provision for creation and maintenance of tranches within the portfolio.
3. NGTA should facilitate easy monitoring of various limits as defined, and in case of any breach/exceptions, there should be suitable alerts. There must also be a dashboard providing dynamic view of various limits configured by users.
4. Reports pertaining to all the modules in user readable formats (pdf, xlsx, csv, txt, etc) should be available in the NGTA. While there should be some standardised/canned reports, the application should also support a fully user configurable/query-based report generation system.
5. NGTA should have a blotter for previewing SWIFT messages generated by it. In case there are some variations in the generated message, NGTA should have a functionality to modify the message in this blotter.
6. Capability to concurrently view deal details from deal slip generated by NGTA, deal ticket from trading terminal and counterparty confirmation is expected.
7. NGTA should be capable of generating/posting relevant accounting at pre-configured events.
8. Maker-Checker functionality should be supported.
9. NGTA should have a functionality to store historical performance analysis for reporting purpose and also a facility to compute profit/loss on a daily, weekly, monthly, yearly or any periodicity defined by users.
10. A functionality to define various indices, benchmarks along with their constituents should be available in the NGTA.
11. Bidder should submit details regarding the comprehensive list of products supported, parameters on which what if analysis can be performed, various limits which can be monitored. Handling of failed settlements with penalties as applicable should be supported.



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12. Bidder must provide details of scalability matrix and testing.
13. Bidder should provide hardware footprint for NGTA implementation.
14. Bidder should specify all the connectors that are available with the product along with version details. Bidder should also specify details of integration carried out with third party systems that are available with the product. Bidder should also specify roadmaps for any planned integrations.
15. The features / functionalities expected from the application as mentioned in [Annexure IV](#) of this document (Use Case Evaluation) should also be treated as a part of Business Requirements of the Proposed Solution, if not specified above.



## **7. OTHER BUSINESS REQUIREMENTS OF THE PROPOSED SOLUTION**

### **Module for transactions related to the International Monetary Fund (IMF)**

1. NGTA should support creation and maintenance of IMF vostro account details like INR balances, Gov securities details etc.
2. Transactions like quota subscription, special drawing rights (SDR) allocation and management, revaluation of reserve tranche position (RTP), financial transaction plan, new arrangement to borrow (NAB), computation of different types of charges/interest amount should be supported by NGTA. It should also support of maintenance of value of IMF vostro accounts. Investment in fractional security should also be allowed.
3. NGTA should allow user to enter future dated transaction but it should not be processed without authorization on value date.

### **Module for Aid Receipt Management**

1. There should be a comprehensive module in NGTA for management of aid received by the Government in different currencies from various international institutions and sovereigns. The basic transaction would involve receiving aid (revolving/non-revolving) in a particular foreign currency to be credited to the appropriate nostro account and thereafter transferring its Rupee equivalent converted in specified exchange rates, to the Union/State government or any government agency. The application should also support repatriation of aid, funding (cash/securities) and institutional funding i.e. exchange facility for foreign financial institutions (FFIs).
2. NGTA should allow creation, accounting and maintenance of project specific accounts.
3. NGTA should allow creation of aid in the form of securities and their full or partial redemption.
4. NGTA should support buy and sell of foreign exchange on behalf of foreign institutions/government and corresponding transaction processing including generation of appropriate SWIFT messages.
5. Aid Receipt Management module shall support generation of MIS, notifications of various events to pre-configured mailing list, maintenance of holiday calendars, managing rates etc.

### **Module for Asian Clearing Union (ACU)**

1. NGTA should support operations pertaining to ACU through execution and accounting of transactions such as, funding nostro, funding vostro, surrender vostro, surrender nostro, bi-monthly settlements and swaps.
2. NGTA should be able to receive application from Indian banks over a portal or manually for transfer of money. NGTA shall be capable of integration with ACUMER portal in future to receive requests from banks.



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3. Reconciliation of transactions with bi-monthly settlement statement received from ACU secretariat and passing of necessary reconciliation transactions should be available.
4. Processing of SWAP transaction where amount, due date, rate of interest could be entered should be supported. NGTA should calculate the interest for the duration.

### **Module for processing bilateral deals/agreements**

1. NGTA should have a functionality to account for receipt, restructuring and repayment of debt under any bilateral agreements.
2. NGTA should have the capability to maintain daily value of SDR and other specified currencies, monitor the same and generate alerts to pre-configured mailing list in case of change beyond a specified tolerance limit. It should allow manual rate modification.

### **Module for handling / processing various kind of swaps**

1. NGTA should be able to handle and process various kind of swaps including central bank swap lines.
2. Special swap transaction (SAARC swap) as approved by the Reserve Bank should be supported by the NGTA. This would include, among others, creation of nostro/vostro account details.
3. NGTA should support advance swap deal booking which will be enriched with more details on value date.
4. On value dates of both legs, transaction should be available for settlement. Also, NGTA should support functionalities like marking default, interest rollover, moratorium period etc.



## 8. TECHNICAL REQUIREMENTS OF THE PROPOSED SOLUTION

### Module for carrying out system administration (admin) functionalities

1. NGTA should have an exclusive module for system admin that will help in managing users, workflow, products, holiday calendars, audit trail etc.
2. The user management functionality in the application should aid in creation, modification, and deletion of users. NGTA should support creation and assigning roles based on different work area/operational domain. It should allow role based and privilege-based access control and facility to provide read, write, view rights to users.
3. It should be possible to configure the Reserve Bank's extant password management policy. NGTA admin should be able to reset the user password. The application should support a two-factor authentication system for login.
4. Functionality to configure different products and product variants based on the Reserve Bank's needs is desired. Admin based on the Reserve Bank's extant policy should be able to create and modify the products. Admin should also be able to select the products that the Bank will transact in. Transactions shall be only permitted in selected products.
5. Admin should be able to configure the complete workflow of the transactions. Flow shall include but not limited to front office, back office, concurrent audit, generation of payment messages, verification and auto-matching of SWIFT messages, passing relevant accounting entries, etc. Workflow management should be graphical user interface (GUI) based and should support standard transactions that admin can modify based on the requirements.
6. NGTA should keep audit trail of all transactions and admin activities based on date and timestamps. Back-end interventions, if any, should be with proper authorisation and audit trail. It must be possible to search the audit trail based on different criteria and filters like modules accessed, date, time, user, activity type, etc. Audit trail for all activities shall be captured including but not limited to login/logout, access to database (DB), changes in configuration parameters, deals, server reboots etc. Audit trail shall be integrated with the Reserve Bank's extant Security Information and Event Management System (SIEM).
7. NGTA admin shall be able to mark End of Day (EOD) based on marking of end of business by individual modules. It shall support EOD processes like passing of accounting entries, generation of reports, portfolio rebalancing, backup etc. Start of Day (SOD) activities like checking of interfaces, starting of processes shall also be supported.

### Integration / Interfaces

1. NGTA should be flexible enough to integrate with other system/ applications as required/ deployed /updated by the Reserve Bank. It should also be flexible to support any additional third-party integration based on the Reserve Bank's needs and deployment.



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2. Integration should be based on APIs and should not be hardcoded. Standard technology like SOAP, REST shall be used for interfacing with other systems/ modules.
3. NGTA should always maintain the interface and connectivity status and send alerts/ alarms when the connectivity fails.
4. In the event of connectivity failure and restoration, the data that was lost between the two systems during the time shall be sent on connectivity restoration.
5. The Bank data should be maintained locally at all the time, as per its requirements.
6. NGTA should be integrated with the following systems, including their update version, if any:
  - Trading platforms (Bloomberg, Refinitiv (Thomson Reuters), Tradeweb, etc.)
  - Market Data Providers
  - SWIFT messaging system
  - Core Banking System of the Reserve Bank
  - Centralized Information Management System (CIMS)
  - Active Directory
  - Notification Channels – Fax, Mail and SMS channels
  - Security Information and Event Management (SIEM)
  - Business Intelligence (BI)
  - ACUMER Portal
  - External Holiday Calendar
  - Operation Support System
7. NGTA should support current (MT) as well as proposed (MX) message standard of SWIFT. System should be backward compatible and should support operation on both standards concurrently.
8. Straight-through-processing (STP) processing for all the required interfaces should be supported.
9. There should be built in support for BI layer and should be able to run python and R scripts on the data. All market standard Risk Analytics library for each asset class (e.g. convexity, options Greek etc.) should be supported.

### **Technical Requirements**

#### Application Architecture:

1. NGTA should support multi-tier architecture (web-app-database) allowing components to be distributed across multiple servers with each component being multi-threaded ensuring full utilization of cores.
2. Both horizontal and vertical scaling with each layer in the architecture being able to scale independently should be supported.





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3. NGTA should be scalable, secure and resilient. It should be scalable in terms of number of users, volume of transactions and computational tasks Bidder must provide details of scalability matrix and load testing.
4. NGTA should have the capability to be deployed both in Active-Active and Active-Standby modes.
5. NGTA should have on premise deployment capability. It should have necessary platform tools such as development operations for deployment, monitoring of multiple instances of NGTA such as Production, Pre-Production, UAT, Development, Migration, DR etc.
6. Option for deployment on bare metal and virtualized environment should be possible.
7. NGTA should have a centralised architecture and should not require any components on the end user's PC except for thin client / browser required for access the application.
8. NGTA should have capability where application code can be hot swapped at runtime with no need to restart the application.
9. Network standard protocol such as TCP/IP, SSL, virtualization platforms etc. should be supported.

### Security:

1. The proposed solution architecture should adhere to RBI Information Technology (IT) Security guidelines/policies and need to update with latest security rules. Bidder who will be shortlisted during RFP stage needs to sign an undertaking stating that their proposed solution will comply with all RBI related IT policy/guidelines as applicable from time to time.
2. The bidder shall be liable to comply with all the legal requirements defined by RBI and Indian Government.
3. Bidder should submit security certificate for compliance purpose.
4. The solution should have strong built in security features.
5. The servers should be hardened to the highest level by removing all vulnerabilities.
6. Encryption of passwords and sensitive data during transmission as well as storage of passwords & sensitive data in the database should be supported.
7. Strict password policy/mechanism of the Bank should be supported.

### Data Recovery Requirements:

1. High Availability (HA) and Disaster Recovery (DR) should be supported.
2. In case of disaster the application should be accessible from the DR site.

### File Import:

1. Bulk import and export of content/data should be supported.
2. NGTA should check relevant file type, upload size while uploading File. NGTA should perform antivirus scan on the file for identifying any malicious data and only clean file should be uploaded.

### Data Migration:

1. Migration of data between different environments using standard tools, archival and purging of data based on user specified policies should be supported.



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### Hosting of an Application at Data Centre of the Bank – Prerequisites:

It may be ensured that the architecture of the proposed application is in conformity with '3-Tier architecture' i.e. Web Tier →App Tier →DB Tier. Presently, the Bank has following application hosting environment.

Hosting Platform	System Software
Virtualization and Private Cloud platform VMware ESXi, vCentre and vRealize automation as Centralized Management and orchestration.  Alternate platform other than Private cloud are <ul style="list-style-type: none"> <li>• AIX on IBM Power 9</li> <li>• RHEL Linux on IBM Mainframe z14</li> </ul>	Supported OS-Red Hat Linux / Microsoft Windows, Oracle WebLogic as Application Server and Oracle Database is preferred database platform.

### Requirements for the hosting of the application may be ensured:

1. Usage of licensed software only.
2. Application shall be platform independent with respect to Operating System / Oracle version and compatible even if the version of the OS / Oracle DB of the application is upgraded to the higher level.
3. Ensure that the application is compatible with latest (N) or at most N-1 version of Operating System / Middleware / Messaging / Database) which are under support by respective OEM's.
4. Ensure that the application supports the Bank's virtualization platforms and IPV6.
5. Changes / Updates to be tested in the test environment provided by the Bank before deploying on the production environment.
6. Vendor to avoid request for any sort of remote access to the application / database for development / testing / support requirement.
7. Vendor shall depute right sized and skilled application support team at the Bank's premises during the deployment and testing / migration of the application.
8. Vendor shall deploy its support team at the Bank's premises for day-to-day maintenance of the application post Go live.
9. Vendor shall prepare and submit a complete BCP and Blueprint document before the application goes live. The Bank will provide necessary information with respect to Systems / Network / Database in the preparation of the documents.
10. Before Go Live, application will be subjected to VAPT and post implementation audit by Third Party Vendor. Compliance to the audit observation need to be ensured by the vendor before Go live of the application.



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11. Vendor shall set up the DR site of the application to ensure Business Continuity.

The Bank will provide following infrastructure and support:

1. The Pre-requisites document for hosting the application.
2. Required Hardware i.e. servers and storage to host the application.
3. Operating System (Windows / Linux) and necessary support.
4. Oracle Web, Application, and Database infrastructure and necessary support.
5. Infrastructure for helpdesk support.
6. Backup and Restoration solution of database.
7. Management of IT infrastructure i.e. network, security, systems etc.
8. Any other infrastructure level support.



## 9. PROCUREMENT PROCESS

Proposed process for procurement of the project is detailed below, it may undergo change as per the Bank's discretion: -

1. Issue of document inviting EOI
2. Receipt of EOI from bidders
3. Evaluation of bids post fulfilment of the minimum eligibility criteria including demo
4. Short listing of eligible EOI bidders based on demo and approach paper
5. Issue of RFP to short listed bidders on submission of non-disclosure agreement
6. Receipt of proposals from short listed bidders
7. Evaluation of proposals based on decided parameters
8. Opening of commercial bids for the qualified bidders
9. Selecting final bidder based on the technical and commercial scores

RFP shall be issued only to bidders who will be shortlisted based on their EOI responses and evaluation as per the details given in Section 12.



## 10. MINIMUM ELIGIBILITY CRITERIA OR PRE-QUALIFICATION CRITERIA

An original equipment manufacturer (OEM) and a system integrator (SI) are permitted to jointly bid for this EOI as a single Bidder represented via a Prime Bidder. The product bidder (OEM) if in case ties up with a different SI, then the proposal should clearly indicate who the prime bidder is.

The name of the Prime Bidder (SI and/or OEM) needs to be in sync with the credential letters / contract copies, exceptions will be made in case of divesture, M&A.

If OEM is bidding by its own, then they need to fulfil both Criteria 1 and Criteria 2 to become eligible for further proceeding.

If OEM is jointly bidding with SI as the Prime bidder, then SI must satisfy Criteria 1 and OEM must satisfy Criteria 2.

### Criteria 1: Minimum Eligibility Criteria for Prime Bidder

Sr No	Broad Category	Minimum Eligibility Criteria	Documentation Required
1.	Registered Indian entity	The Prime Bidder should be a Registered Indian entity under the respective Acts of India and can be an OEM or System Integrator. The registration should be at least three years prior to the date of EOI publication.	Attested copy of the Certificate of Incorporation/Registration of the Bidder.
2.	Minimum Annual Turnover	The Prime Bidder should have a minimum annual turnover of at least Rs. <b>475</b> crores, in each of the last three applicable financial years. (i.e. 2017-18, 2018-19 & 2019-20).	Audited financial statements indicating the annual turnover as set forth in the minimum eligibility criteria.  OR Auditor / Chartered Accountant Certificate.
3.	Experience in implementation of financial application and Treasury Management Solution in the Banking, Financial	Prime Bidder should have at least 10 financial application implementations in BFSI sector, out of which minimum 3 should be treasury management solution of which minimum one should be	A. Satisfaction/ credential letter from the client clearly stating the scope of work and user base of the solution.  AND B. Completion letter from the



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	services and Insurance (BFSI) sector	proposed TMS. Out of the above 10 implementations, 1) at least 1 implementations should have the project cost of more than Rs. 75 crores. OR 2) at least 2 implementations should have the project cost of more than Rs. 50 crores each. OR 3) at least 3 implementations should have the project cost of more than Rs. 25 crores each.  Note: These installations should be currently live and should have been live at least on or before January 1, 2020.	client indicating the scope of work and user base of the solution executed.  OR C. Copy of purchase order and completion certificate between the Bidder and its client and documentary evidence.  AND D. Satisfaction / credential letter from the client.
4.	Industry Certifications	The Prime Bidder should be having CMM level 3 and above and / or ISO 9001 / 27001 valid certificate.	A Valid Certificate Copy with Authorized Signatory from Bidder.
5.	SI and OEM Partnership	The SI should be direct channel partner of the OEM and should be the one-point contact for the entire project.	Self-attested copy of the relevant partnership certificate / document



**Criteria 2: Minimum Eligibility Criteria for OEM**

Sr No	Broad Category	Minimum Eligibility Criteria	Documentation Required
1.	Minimum Annual Turnover	The OEM should have a minimum annual turnover of at least Rs. <b>475</b> crores in each of the last three applicable financial years. (i.e. 2017-18, 2018-19 & 2019-20).	Audited financial statements indicating the annual turnover as set forth in the minimum eligibility criteria.  OR  Auditor / Chartered Accountant Certificate.
2.	Proposed treasury management software deployment details in the Banking, Financial services and Insurance sectors	The proposed Treasury Management Solution should have been deployed: I. In at least 3 central banks worldwide. Or II. In at least 10 Banking, Financial services and Insurance sectors worldwide.  Note: These deployments should be currently live and should have been live at least on or before January 1, 2020.	A. Satisfaction / credential letter from the client clearly stating the scope of work, modules implemented, coverage, value of work and user base of the solution.  AND B. Completion letter from the client indicating the scope of work and user base of the solution executed.  OR C. Copy of purchase order and completion certificate between the Bidder and its client and documentary evidence.  AND D. Satisfaction / credential letter from the client.
3.	Industry Research Report	The proposed solution should appear in the latest Gartner's Magic Quadrant or Forrester wave or other similar credible report of Treasury Management solutions.	Latest Gartner Report or Forrester Report or other similar credible report for Treasury Management solutions.



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*(Note: Photocopies of relevant documents / certificates should be submitted as proof in support of the claims made with respect to minimum eligible criteria. RBI reserves the right to verify /evaluate the claims made by the bidder independently. Non-compliance of any of the criteria will lead to disqualification.)*





## 11. OTHER CONDITIONS AND SUBMISSION OF EOI

1. Only those Bidders who meet Minimum Eligibility Criteria given in the Section 10 may submit their EOI.
2. Either the SI on behalf of the OEM or the OEM itself can bid, but both cannot bid simultaneously for the same product.
3. One OEM can bid with maximum two different SI's (provided OEM is not bidding on its own).
4. One SI can bid only with a single OEM for the EOI. Bids from the same SI proposing multiple OEMs will not be considered.
5. The Bank will interface / communicate only with the prime bidder for all requirements and other project management activities.
6. Bidders to clearly state the products/services they can support and integrate with other digital platforms.
7. Bidder to submit documentary evidence such as:
  - Satisfaction/ credential letter from the client clearly stating the scope of work and project value.  
OR
  - Completion letter from the client indicating the scope of work executed by the Bidder and the project value.  
OR
  - Contract copy between the Bidder and its client and documentary evidence proving project value.

The onus of proving the credentials via documentary evidence will fall on the Prime Bidder. In case, the Prime Bidder is unable to provide any of the above, it will be the Bank's discretion to evaluate the claim in this regard. Only completed assignments will be evaluated. Projects under implementation or not completed for any reason will not be evaluated.

8. The bidder should provide proper authentication from the manufacturer/OEM as per the format given in [Annexure VI](#) of the EOI. Bids without proper authentication from the manufacturer/OEM shall be treated as incomplete and shall be rejected.
9. The Bidder should submit its Organizational / Financial profile in the format given in [Annexure VII](#).
10. Following list of documents along with the documents mentioned in [Annexure X](#) should be submitted as part of the EOI (through hard copy and / or online mode as advised by the Bank):
  - a) Letter of Application of EOI for NGTA – [Annexure I](#)
  - b) Respondent Information – [Annexure II](#)
  - c) Approach paper for NGTA – [Annexure III](#)
  - d) Letter of self-declaration for responding EOI process of NGTA project – [Annexure V](#)
  - e) MAF – [Annexure VI](#)
  - f) Organizational Profile – [Annexure VII](#)
  - g) Declaration that company is not in Blacklist – [Annexure VIII](#)
  - h) Information Requested – [Annexure IX](#)
  - i) Submission Check list – [Annexure X](#)



## 12. EVALUATION OF EOI

1. Bidders should comply with all the terms and conditions mentioned in this document.
2. Bidders should be capable of supplying, deploying, configuring, integrating, implementing and supporting all the requirements mentioned in the EOI document.
3. Bidders meeting the Minimum Eligibility Criteria given in Section 10 shall be invited to give Use Case based demonstration (demo) and presentation on Approach Paper and / or further clarification to the RBI Committee for evaluation. The bidders are advised to be ready to present their demo and Approach Paper on a notice of one day.
4. The bidders satisfying the minimum eligibility criteria will have to arrange for the Product / Use Case demonstration at RBI's Mumbai location and / or through online mode. The travel and lodging arrangements and expenses, in any in this regard shall be borne by the bidder themselves.
5. The bidder is also expected to make presentation and to address any additional questions by the Bank's Officials / Committee / Technical Advisory Group (TAG).
6. All the specifications related to the NGTA solution given in this document will need to be demonstrated.
7. Bidders may also demonstrate additional features, if any, available in the products. They may also suggest changes/modifications required to be undertaken in the Bank's processes to enhance the existing processes (if any).
8. Bidders have to declare to the Bank a single point of contact for the EOI process.
9. RBI / its Officials / Committee of RBI / TAG can have multiple rounds of discussion with the bidders during the evaluation process. The decisions taken by RBI / TAG, in this regard, shall be final and binding on all the bidders.

Bidders will be shortlisted based on their EOI response and demonstration of the capabilities of the proposed solution to RBI. The total score for evaluating the Bidder would be of 100 marks. The breakup of evaluation parameters is given below:

### EOI Evaluation Table:

Evaluation Category	Max Marks	Sectional Cut-off	Remarks
<b>Consolidated Score</b>	<b>100 marks</b>		
<b>1) Credentials:</b>	10	6	
Prime Bidder's experience of implementing Treasury Management Solutions across Central Banks or BFSI: <ul style="list-style-type: none"> <li>• More than 8 Implementations – 5 Marks</li> </ul>	5		- Please share: <ul style="list-style-type: none"> <li>• Number of total implementations</li> <li>• Relevant PO's/Invoices to be submitted.</li> </ul>



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<ul style="list-style-type: none"> <li>• 6 - 8 Implementations – 4 Marks</li> <li>• 3 - 5 Implementations – 3 Mark</li> </ul> <p><b>Note:</b> These installations should be currently live and should have been live at least on or before January 1, 2020.</p>			
<p>OEM's proposed Treasury Management Solutions deployment across Central Banks or BFSI:</p> <ul style="list-style-type: none"> <li>• More than 15 Deployments – 5 Marks</li> <li>• 13 - 15 Deployments – 4 Marks</li> <li>• 10 - 12 Deployments – 3 Mark</li> </ul> <p><b>Note:</b> These deployments should be currently live and should have been live at least on or before January 1, 2020.</p>	5		<p>Please share:</p> <ul style="list-style-type: none"> <li>• Number of total implementations</li> <li>• Relevant PO's/Invoices</li> </ul>
<p><b>2) SI &amp; OEM Collaboration Capability:</b></p> <p><b>Note:</b>            2 (a) will be considered if OEM and SI are bidding together (SI is the prime bidder)            2 (b) will be considered if OEM is the prime bidder</p>	10	6	
<p>2 (a) i: SI &amp; OEM worked together in implementing proposed TMS:</p> <ul style="list-style-type: none"> <li>• More than 6 Implementations – 5 Marks</li> <li>• 4 - 6 Implementations – 4 Marks</li> <li>• 1 - 3 Implementations – 3 Mark</li> </ul>	5		<p>Please share:</p> <ul style="list-style-type: none"> <li>• Number of total implementations</li> <li>• Relevant PO's/Invoices</li> </ul>



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<p><b>Note:</b> These implementations should be currently live and should have been live at least on or before January 1, 2020.</p>			
<p>2 (a) ii: Partnership Level: - Highest – 5 marks - Second Highest – 4 marks - Third Highest – 3 mark</p>	5		Agreement between SI and OEM confirming their partnership.
<p>2 (b) OEM's proposed Treasury Management Solutions deployment across Central Banks or BFSI:</p> <ul style="list-style-type: none"> <li>• More than 15 Deployments – 10 Marks</li> <li>• 13 - 15 Deployments – 8 Marks</li> <li>• 10 - 12 Deployments – 6 Marks</li> </ul> <p><b>Note:</b> These Deployments should be currently live and should have been live at least on or before January 1, 2020.</p>	10		<p>Please share:</p> <ul style="list-style-type: none"> <li>• Number of total implementations</li> <li>• Relevant PO's/Invoices</li> </ul>
<p><b>3) Product Competence</b></p>	80		
<p><b>Proposed TMS fitment with requirements:</b></p>	20	12	<p>Coverage of Business Requirements mentioned in Section 6 and 8. Point by point compliance with bifurcation if the functionality is 'Out-of-the-Box / Configurable / Customizable / Not Available'.</p> <p>The fitment of the proposed TMS with the existing infrastructure of the Bank (as per the details given under the head '<u>Hosting of an Application at Data Centre of the Bank – Prerequisites</u>' in Section 8) will also be evaluated.</p> <p>Bidder should also specify how they are complying with the requirements.</p>



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<p><b>Approach paper Evaluation:</b></p> <ul style="list-style-type: none"><li>- Understanding of the objectives of the assignment: The extent to which the bidder's approach and work plan respond to the objectives.</li><li>- Completeness and responsiveness: The extent to which the proposal responds exhaustively to all the requirements.</li></ul>	10	6	Refer <a href="#">Annexure III</a> of this document.
<p><b>Presentation / Demonstration of Case Studies to the Bank's Committee:</b></p> <p>Case Study demonstration covering the cases published as part of EOI, key attributes, features, ease of use etc. to be presented to the Bank's Committee(s). While making the presentation, the Prime bidder should also be able to respond to queries raised, if any, by the Bank's Committee on the requirements mentioned in parts 6, 7 and 8 of this document.</p>	30	18	Based on evaluation of the Use Cases as defined in <a href="#">Annexure IV</a>
<p><b>Presentation and Capability Demonstration to the TAG:</b></p> <p>Presentation on proposed EOI solution covering Technology, Scale of Implementation, experience of implementation in India, Learning, Challenges, Product Roadmap for next 5 years etc.</p> <p>TAG may ask bidder to demonstrate on any number of case study (chosen randomly from the list published as part of EOI) on the presentation day.</p>	20	12	



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- In case bidder is not fulfilling any 'Evaluation Category' row item/s then '0' mark will be awarded for that record / row item.
- While the overall minimum eligibility cut-off shall be 70 per cent, the sectional cut-off shall be 60 per cent.
- The Bank may disqualify any bidder from the bidding process in case they do not achieve minimum cut-off score mentioned above.
- However, it is the Bank's discretion to ask for any additional documents, inputs or proof of concepts at later point of time for the purpose of bidder evaluation.
- The Bank reserves the right to relax any of the evaluation parameter if the need arises.

**Note:** Bidder who qualifies the sectional and overall cut off in the above evaluation criteria shall be considered as qualified. **RBI reserves the right to select top 5 vendors (arranged as per technical score obtained by vendors) as qualified for this EOI in case required.** RBI subsequently shall be floating a Request for Proposal (RFP) to those bidders who qualify in EOI process for selection of bidder for its development and implementation after signing a Non-Disclosure Agreement with the RBI in a specific format.

### 13. TERMS AND CONDITIONS

1. This document is neither an offer letter nor a legal contract, but an invitation for EOI.
2. By participating in this EOI process, the respondent agrees to be bound by each of the terms and conditions set forth under this EOI.
3. This EOI is a description of RBI's objectives and requirements articulated in a structured manner to enable RBI to evaluate all the responses received and make an informed decision.
4. No contractual obligation, whatsoever, on behalf of RBI shall arise from this EOI unless and until a formal contract is signed and executed by duly authorised officials of RBI and the respondent.
5. RBI may modify any / all the terms of this EOI giving due notification through RBI's website (<https://www.rbi.org.in>) and shall be entitled, to invite 'Request for Proposal' (RFP) only from selected eligible respondents based upon transparently laid out norms set out in this document.
6. RBI will not be liable for any costs incurred by the respondent in preparation of response to this EOI.
7. The preparation of respondent's proposal will be made without obligation by RBI to acquire any of the items included in the respondent's product, or to select any respondent's proposal, or to discuss the reasons why the respondent's proposal is accepted or rejected.
8. All information included by the respondents in their proposal will be treated as strictly confidential.
9. Decision taken by the Bank/TAG on evaluation, evaluation criteria, short listing of vendors will be binding on all bidders.
10. The Bidder shall indicate the authorized signatories who can discuss and correspond with the Bank, with regard to the obligations under the contract. The authorized signatory should give a declaration and through authenticated documentary evidence establish that he/she is empowered to sign the bid documents and bind the bidder. The Bidder shall furnish proof of signature identification for above purposes as required by the Bank.
11. RBI will interface / communicate only with the prime respondent for all requirements and other project management activities.
12. Multiple responses / solutions from the respondent will not be considered.
13. RBI makes no commitments, implied or otherwise, that the issuance of this EOI, the respondent's preparation and submission of a response and subsequent evaluation of the respondent's response can result in a business transaction with the respondent or any other participant, even if all the requirements in the EOI are met.
14. RBI reserves the right to accept or reject any responses, in whole or in part, and to enter into discussions and/or negotiations with any one or more prospective bidders at the same time and/or at any time, and to terminate negotiations at any time without incurring any liability.
15. In no event can RBI and its affiliates have any liability for any direct, indirect, special, punitive, consequential or any other damages (including, without limitation, lost profits) relating to the subject matter of this EOI or to awarding (or not awarding) any contract to any entity.
16. RBI will not be responsible for verbal clarification.



## Expression of Interest – Next Generation Treasury Application

17. Commercials should not be quoted/indicated at any place and in any form in the EOI response. The response of any respondent quoting/indicating commercials, whether directly or indirectly, will be liable to be summarily rejected and may be debarred from future responses to the Bank.
18. If any information provided by the respondent is found to be inaccurate at any stage of the selection process, RBI may, at its discretion, disqualify and blacklist the respondent and no correspondence will be entertained in this regard.
19. EOI response received after the scheduled time specified in SCHEDULE will not be accepted under any circumstance. RBI will not be responsible for any delay due to postal service or any other means.
20. EOI response once submitted cannot be modified.
21. All pages submitted as part of the EOI response should be sequentially numbered.
22. A soft copy of the EOI response including all supporting documents must also be submitted in a flash drive/CD along with the hard copy.
23. The Bank needs to adhere with all relevant laws of land, rules, regulations, economic use of resources and of fairness in its relations with the Bidder. In order to achieve these goals, the Bank may appoint an Independent External Monitor (IEM), who will monitor the bidding process and the execution of the contract for compliance with the principles mentioned in EOI. Name of the IEM will be highlighted later.
24. Bidders shortlisted after EOI process shall be required to sign an Integrity Pact and confidentiality undertaking with the Bank at the time of RFP process.
25. The prime bidder should be capable of on-premise deployment of the solution. A self-declaration from the prime bidder on the company letterhead stating that the solution shall be deployed on RBI premises.
26. The financial parameters like turnover, cost of implemented projects, etc. shall be quantified in Indian Rupees only.
27. The Prime bidder shall be required to fulfil the stipulated eligibility and evaluation criteria.
28. The Prime bidder will be free to offer third party niche components/solutions as part of Treasury application. However, the entire responsibility of supply, integration, support, deployment and testing of third party any such niche components/solutions throughout the project lifecycle shall rest on the prime bidder. Prime bidder shall be the single point of contact for all support issues, queries, requirements, bugs etc. and shall have the complete responsibility of resolving these queries / issues.
29. The evaluation team of the RBI under the guidance of TAG will require all the inputs as a part of the response as well as during the clarification stage and technical presentations to check and evaluation the competence, capability and track record of the bidder.
30. Queries / clarifications should be submitted in the following format:

<b>Serial No.</b>	<b>Page No.</b>	<b>Point No.</b>	<b>Description given in this document</b>	<b>as in this</b>	<b>Clarification sought</b>	<b>Additional remarks (if any)</b>





## 14. ANNEXURE I – FORMAT FOR LETTER OF APPLICATION OF EOI FOR NGTA

[On the letter head of the Respondent]

Date:

Chief General Manager-in-Charge  
Reserve Bank of India  
Department of External Investment and Operations  
22<sup>nd</sup> Floor, Central Office Building,  
Shahid Bhagat Singh Road, Mumbai-400 001

### Expression of Interest for Next Generation Treasury Application

Sir/Madam,

Being duly authorized to represent and act on behalf of .....  
(Hereinafter referred to as “the Respondent”) and having reviewed and fully understood all the minimum eligibility criteria / qualification requirements and information provided, the undersigned hereby expresses interest for implementing the NGTA.

The following documents as per the requirements of EOI are enclosed for your consideration.

- i. [Annexure I](#)- Letter of Application for EOI for NGTA
- ii. [Annexure II](#)- Respondent information with supporting documents
- iii. [Annexure III](#)- Approach Paper for NGTA
- iv. [Annexure IV](#)- Use Cases for Evaluation
- v. [Annexure V](#)- Letter of self-declaration
- vi. [Annexure VI](#)- MAF
- vii. [Annexure VII](#)- Organizational Profile
- viii. [Annexure VIII](#)- Blacklist
- ix. [Annexure IX](#)- Information Requested
- x. [Annexure X](#)- Submission Checklist

Submitted for your consideration.

Yours faithfully,  
(Signature of Authorized Signatory)  
<NAME, TITLE AND ADDRESS>

FOR AND ON BEHALF OF  
<NAME OF THE RESPONDENT ORGANISATION>



## 15. ANNEXURE II – FORMAT FOR FURNISHING RESPONDENT INFORMATION

[On the Letter head of the Bidder with approved signature and stamp]

To be filled (separately) by both OEM as well as Prime Bidder.

<b>BIDDER DETAILS</b>		
1	The registered name of the bidding company	
2	Business address for correspondence	
3	Name of the Bidder's Contact Person	
4	Designation of contact person	
5	Contact addresses if different from above	
6	Business structure	
7	Bid Company's registered address	
8	Details of company registration	
9	Names of Directors	Chairman/President/Managing Director/Directors
10	Include a structure chart reflecting the organization	
11	Details of experience / knowledge possessed in the areas of Project Planning and management review, Resource Planning, Role and Responsibility definition, Coordination across multiple teams	
12	Details of the similar assignments on hand as on date (Time projected	



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	for execution of the assignment and documentary proofs from the Clients are to be furnished)	
13	Please furnish details related to Indian implementation experience of proposed TMS either with SI + OEM or OEM itself.	
14	<b>Experience in Treasury Management Solution Projects implementation / deployment:</b> (Details of maximum three projects to be submitted; additional papers may be added)	
14.1	Project Name:	
14.2	Project Location:	
14.3	Client Name:	
14.4	Client address:	
14.5	Client contact / reference person(s):	Name
		Address – if different from above
		Telephone & Facsimile
		Mobile Phone
		Email address
14.6	Project started (month/year):	
14.7	Project elapsed time – months- vis-à-vis Project schedule:	
14.8	Man-months effort:	
14.9	Project Cost	
14.10	Role of the company, whether complete end-to-end involvement or for a particular module or sub-contractor	
14.11	Project Detail (Broad details)	Hardware installed – make/model
		Operating system
		System Software



## Expression of Interest - Next Generation Treasury Application

		Application software	
		Network Topology	
		Programming languages	
		Disaster recovery technology	
		Middleware	
		Security features	
		Support/maintenance obligations	

Profit and Loss			
Item	FY 2017-2018	FY 2018-2019	FY 2019-2020
Profit before tax			
Profit after tax			

Annual turnover			
Item	FY 2017-2018	FY 2018-2019	FY 2019-2020
(a) Income from software services and products			
(b) Other income			
Total income [(a) + (b)]			

Net worth at the end of financial year			
Item	FY 2017-2018	FY 2018-2019	FY 2019-2020
(a) Share capital			
(b) Reserves and Surplus			
(c) Accumulated losses, if any			
Total net worth [(a)+(b)-(c)]			

\*All relevant proofs should be submitted by the bidder



## 16. ANNEXURE III – APPROACH PAPER FOR NGTA

The approach paper of NGTA as proposed by our organization <NAME OF THE APPLICANT ORGANISATION> is attached herewith containing details of following:

**Approach Paper** - The bidder has to submit an approach paper on setting up NGTA for RBI and share their vision consisting:

- a) Proposed suitable technology stack framework with pros and cons including software, hardware, databases, Risk mitigation plan (based on past experiences), scalability requirements etc. (scalability to be listed separately). **(3 marks)**
- b) Proposed architecture of the complete solution showing all the components of on-premises deployment including application architecture, data architecture, infrastructure architecture and security architecture. **(2 marks)**
- c) Proposed TMS product road map. **(2 marks)**
- d) Past implementation experiences with Central Banks, Indian implementation experience and proposed implementation plan for NGTA. **(2 marks)**
- e) Explain adherence to security standards and measures adopted by the bidder. **(1 mark)**

Bidders are encouraged to make the Approach Paper descriptive, detailed and self-explanatory. Use of screenshots is encouraged to corroborate the text, wherever necessary.



## 17. ANNEXURE IV – USE CASE EVALUATION

Following use cases to be demonstrated to the Bank's Committee.

### **Case Study 1: Demonstration on General Features**

The bidder is expected to demonstrate features of a Treasury application having capabilities to support all the products as envisaged in the RBI Act, 1934 including but not limited to the provisions of on-boarding counterparties depending on specific eligibility criteria including parameters coming out of Global Master Repurchase Agreement (GMRA) and International Swaps and Derivatives Association (ISDA), incorporating various products / asset classes including fixed income, deposits, gold derivatives, etc., defining exposure limits for counterparties and asset classes, work flow designing, interfaces with trading platforms, SWIFT application, other relevant market platforms, etc. The demonstration should also cover, end to end features of defining a product: creation of product, selection of default portfolio, configuration of workflow (Front Office (FO), Back Office (BO), Settlement, Accounting, SWIFT etc.), setting and monitoring of limits, valuation, reporting, accounts configuration (GL/ sub-GL), deal capture, market data capture etc. Products like fixed income, deposits, gold (including inventory management) should be covered in the demonstration. The deal input screens for FX, FI and deposit transactions may be shown and details of extent of auto-capture of deal parameters from dealing systems and options for customization available may be demonstrated. The essential legal framework provided in the, Reserve Bank of India Act, 1934, specifically, sub-sections 17(12), 17(12A), 17(13) and 33(1) of the Reserve Bank of India Act, 1934 should be kept in mind at the time of demonstration.

### **Case Study 2: Back Office Authorization, Accounting and MIS**

The feature of automating the BO authorization process of the treasury operations should be demonstrated wherein the application auto matches the confirmation messages received from counterparty and the one generated by the application. In case of auto matching, the payment message should also be generated automatically by the application at the requisite time. The auto validation by the application as well as auto reconciliation with the help of SWIFT messages should be demonstrated. The feature of exception viewing / listing and thereafter its manual authorization should be covered in the demonstration. The auto validation and manual authorization process should cover products like fixed income, forex and interest rate derivatives transactions etc. The bidder should also demonstrate flexibility of accounting configuration (including multi accounting compliance), generation of accounting entries post deal authorization, post deal compliance check and reporting. The bidder should demonstrate a dynamic, self-service, on demand reporting tool, widgets, dashboards for internal/external reporting and compliances. Demonstration of various blotters and dashboards should be given which will facilitate FO in having real-time information for various decision making.

### **Case Study 3: What-If Analysis, Portfolio Simulation and Cash Management**

The bidder is expected to demonstrate 'what-if' functionality of the application in the form of pre-deal and post deal checks and also by simulating a deal (before entering the deal on trading terminal) and checking limits breach, if any (deal size limit, pre-settlement / settlement exposure limit, open position, Value at Risk (VaR), expected profit / loss, duration movement, impact on currency composition, etc.). This case study demonstration should also cover the facility of entering the target duration / profit / currency composition in the system, with the application suggesting the value / type of deals that can be carried out. Demonstrations should be conducted with the help of one deal each for various asset classes (like fixed income, forex, money market, commodities, a derivative etc.). The Bidder is expected to demonstrate capabilities to run simulation on various portfolios and should allow transfer of assets between various portfolios/departments. The bidder should demonstrate the ability of the system to project balances in Nostro accounts in various currencies for t+0 and for any date in the future, by considering all transactions entered into till date.

### **Case Study 4: Market, Credit, Operational Risk and Counterparty Management**

The bidder is expected to demonstrate the features of portfolio analytics, risk analysis, scenario analysis, performance attribution, benchmark creation by the application. The demonstration should cover monitoring and measuring the impact of market movements in the form of interest rates and exchange rates on the foreign currency assets (FCA) via parameters like VaR (historic, parametric, Montecarlo, CVaR, incremental VaR, etc.). In addition, features in the form of, quantification of liquidity needs in stressful situations and its comparison with available liquidity in FCA, Liquidity at Risk (LaR), performance measurement of the FCA portfolio vis-à-vis benchmarks, return analysis, attribution analysis of the return, spread analysis, calculation and monitoring duration and currency composition, etc. Market risk parameters from external asset manager's perspective should also be covered. The bidder is also expected to showcase the capabilities in terms of credit risk (Relevant Limits, Credit VaR etc.) and operational risk. Economic capital framework and reporting capabilities should also be demonstrated. Simulation on strategic and tactical asset allocation as well as benchmark creation (flexible benchmarking) should also be demonstrated. The application should have an elaborate and flexible counterparty management feature and static data management. It should be able to incorporate the user defined criteria of counterparty selection having both quantitative (CET1 capital, Credit ratings etc.) as well as qualitative criteria. The application is expected to perform pre-qualification eligibility checks (based on qualitative, quantitative parameters) for a counterparty, assign relevant exposure limits and monitor it. It is also expected to alert the users in case of adverse credit ratings, equity prices and CDS price movements based on rules set by the users and fetched from market data platforms (market feeds).

### **Case Study 5: Collateral and Repo Management**

The bidder is expected to demonstrate the handling of multiple repo / reverse repo transactions (including third party and sponsor repo) in USD / non-USD currencies with various counterparties in line with GMRA, where the application should capture the operational fields like minimum transfer amount (MTA), margin transfer deadlines, interest payment dates, interest on cash margin etc. as agreed to in the GMRA. A comprehensive demonstration on collateral management for various kinds of products should be given. This case study demonstration should also cover application's ability to manage cash and/or security as collateral, initial margin and variable margin calculation, net exposure based computation on outstanding transactions, trigger margin call based on MTA, allow selection of and keep a check on securities / issuer / currencies accepted as collateral, apply rule-based haircuts (based on parameters such as tenor, credit ratings, issuer type etc.) on collateral securities as well margin securities, calculate margin payable / receivable, transfer manufactured payments in real time and shall have dispute management facility. It also needs to inform process agent on entering a new GMRA. The bidder should demonstrate accounting configuration with respect to repo transactions. The bidder should also demonstrate the capability of collateral management with respect to various derivative products and sub asset classes.





## 18. ANNEXURE V – FORMAT FOR LETTER OF SELF DECLARATION

[On the letter head of the Respondent]

Date:

Chief General Manager-in-Charge  
Reserve Bank of India  
Department of External Investment and Operations  
22<sup>nd</sup> Floor, Central Office Building  
Shahid Bhagat Singh Road, Mumbai-400 001

Sub: Self declaration for responding to EOI for NGTA

Sir/Madam,

Being duly authorized to represent and act on behalf of .....

..... (Hereinafter referred to as “the Respondent”), and having reviewed and fully understood all the eligibility criteria / qualification requirements and information provided, I hereby declare the following statements:

1. I hereby declare that my organisation has not been debarred / blacklisted by any Government / Semi-Government organizations in India. I further certify that I am competent officer in my organization to make this declaration.
2. The respondent does not rely solely on the information provided in the invitation of EOI for submitting response to the EOI document. Further the respondent has approached authenticated sources in RBI regarding all its queries and has received desired information.
3. Commercials have not been quoted by the respondent at any place in the response of EOI document.
4. The respondent has submitted the response of EOI as per the desired format of RBI with all supporting documents which are true and accurate. Each page of the EOI response is signed by authorised representative of the respondent.
5. The respondent will provide demonstration of products, arrange lab visit, site visit or POC if required by RBI during technical evaluation of the product to cross check functionalities. The respondent will ensure the availability of necessary environment in all aspects for RBI’s verification process.
6. The respondent understands that RBI retains the right to ask to demonstrate certain scenarios, details of which will not be provided in advance, the right to reject the offer at any stage of the process without assigning any reasons and RBI will not be liable to pay any costs incurred by the respondent during technical verification process.



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7. The respondent understands that the Intellectual Property Rights for all modules/products developed specifically for RBI and integrated with the RBI's proposed NGTA project will rest solely with RBI and no claims will be made in this regard by the respondent.
8. The respondent has not been involved in any legal case that may affect the solvency/existence of the applicant or in any other way affect the respondent's capability to provide/continue services to RBI, if RBI selects the respondent for NGTA.
9. If shortlisted after EOI process, the respondent undertakes to sign an Integrity Pact and confidentiality undertaking with the Bank at the time of RFP process.
10. The respondent accepts to follow all the clauses, terms, and conditions as set in the EOI document.
11. The respondent undertakes that all the information and/or documents submitted in response to the Expression of Interest are true and accurate to the best of my knowledge. It is also understood that in case any of the information and/or documents submitted in response to the Expression of Interest are found to be false/inaccurate, the response is liable to be summarily rejected and the responsibility for the same shall lie with the respondent.

Yours faithfully,

(Signature of Authorized Signatory)

<NAME, TITLE AND ADDRESS>



### 19. ANNEXURE VI – MAF

#### Manufacturer’s/Developer’s Authorization Form (MAF/DAF)

*(To be filled for software application/ hardware/ system software/ RDBMS/ any other suites, whatsoever applicable separately)*

To  
Chief General Manager  
Reserve Bank of India  
Department of External Investment & Operations  
22<sup>nd</sup> Floor, Central Office Building,  
Shahid Bhagat Singh Road, Mumbai-400 001

Dear Sir,

We \_\_\_\_\_ who are established and reputed manufacturer / developer of \_\_\_\_\_ having organization at \_\_\_\_\_ and do hereby authorize M/s \_\_\_\_\_ (Name and address of Agent/Dealer) to offer their quotation, negotiate and conclude the contract with you against the above tender. We hereby extend our full guarantee and warranty for the following software / products offered by the above firm in response to RBI’s tender and contract for supply, installation, commissioning, services and support for the Next Generation Treasury Application as per the terms and conditions set out in the EOI document for the purpose. In case of any default in execution of this tender by the SI, then we will take all necessary steps for successful execution of this tender.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

*(Please mention above the names of the Software’s, Servers, System Software’s, RDBMS, and/or any other suites, as applicable).*

Yours faithfully,  
(Name)

for and on behalf of  
M/s \_\_\_\_\_ (Name of Manufacturer/Developer)

*Note: This letter of authority should be on the letterhead of the manufacturer(s) / developer(s) and should be signed by a competent person representing the manufacturer / developer.*



## 20. ANNEXURE VII – ORGANIZATIONAL PROFILE

Organizational / Financial Profiles of the Prime Bidder & OEM (To be separately filled)

Constitution (Tick one)	<ul style="list-style-type: none"> <li>• Proprietary</li> <li>• Partnership</li> <li>• Private Ltd.</li> <li>• Public Ltd.</li> </ul>	
Established since (MM/YY)		
Address of Registered Office		
Classification (Tick one)	<ul style="list-style-type: none"> <li>• Solution Provider</li> <li>• System Integrator</li> <li>• Hardware Bidder/Bidder</li> <li>• Software Developer</li> <li>• Service Support Co.</li> <li>• Others (please specify)</li> </ul>	
If Joint Venture, then specify names of Partners in the JV		
<b>Name(s) of Proprietor(s) / Partner(s) / Directors</b>	<b>Name</b>	<b>Position/Designation</b>
1		
2		
Details of Hardware/System Software Engineers familiar with the Product offered		
<b>Name(s) of Product specialist</b>	<b>Name</b>	<b>Position/Designation</b>
1		
2		
N		
Total Number of Employees		
Number of locations where Service Support Centres are available for catering to the Product /Services being supplied		
<b>Products deployed/serviced</b>	<b>TMS Application Name</b>	<b>Number of Successful Installation</b>
1		



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2		
N		
<b>Business Figures for last three years (copies of supporting documents to be enclosed)</b>	<b>Sales turnover</b>	<b>Net Profit</b>
Financial Year 2019-20		
Financial Year 2018-19		
Financial Year 2017-18		

Signature of Bidder: \_\_\_\_\_

Name: \_\_\_\_\_



## 21. ANNEXURE VIII – BLACKLIST

To be filled (separately) by OEM as well as Prime Bidder.

Declaration that the Bidder is not blacklisted by any organization in India or Abroad.

### **Part A) In the case of a Proprietary Concern:**

I hereby declare that neither I in my personal name or in the name of my Proprietary concern M/s. \_\_\_\_\_ which is submitting the accompanying Bid/Tender nor any other concern in which I am proprietor nor any partnership firm in which I am involved as a Managing Partner have been placed on black list declared by any Bank , Financial Institution , Govt's Bidder Black List in India or abroad, except as indicated below:

(Here give particulars of blacklisting and in absence thereof state "NIL")

**Part B) In the case of a Partnership Firm:** We hereby declare that neither we, M/s. \_\_\_\_\_, submitting the accompanying Bid/Tender nor any partner involved in the management of the said firm either in his individual capacity or as proprietor or managing partner of any firm or concern have or has been placed on blacklist declared by any Bank, Financial Institution, Govt's Bidder Black List in India or abroad, except as indicated below:

(Here give particulars of blacklisting and in absence thereof state "NIL")

**Part C) In the case of Company:** We hereby declare that we have not been placed on any blacklist declared by any Bank, Financial Institution, Government's Bidder Blacklist in India or abroad, except as indicated below:

(Here give particulars of blacklisting and in absence thereof state "NIL")

It is also understood that if this declaration is found to be false in any, RBI shall have the right to reject my/our bid, and if the bid has resulted in a contract, the contract is liable to be terminated.

Place: \_\_\_\_\_ Signature of Bidder: \_\_\_\_\_

Date: \_\_\_\_\_ Name of Signatory: \_\_\_\_\_

## 22. ANNEXURE IX – INFORMATION REQUESTED

Additional information requested for NGTA of RBI as proposed by our organization **<NAME OF THE APPLICANT ORGANISATION>** is attached herewith. Following are the details:

- i. Framework: Provide insights on the NGTA framework including the technology stack.
- ii. Application Architecture: Proposed architecture of the solution showing all the components of on-premises implementation. The process flow between various software/components proposed and how the bidder envisages integrating them for providing NGTA services to RBI.
- iii. Data Architecture: proposed data architecture and data migration strategy.
- iv. Infrastructure Architecture: Proposed Hardware and Infrastructure components required for NGTA including storage and load-balancing. Bidder to mention how NGTA can enable BCP and DR mechanism in case of any disaster/back up required along with network topology. Bidder to provide switchover time between DC to DR.
- v. Security Architecture: Highlight the security aspects of NGTA.
- vi. Functionality: State different functionalities envisaged to be carried out by NGTA
- vii. Features: The list of features proposed for NGTA. Bidders are encouraged to give additional suggestions and alternative designs, features, and approaches in their response.
- viii. MIS: Proposed Out of Box MIS reports along with standard reports.
- ix. Centralized Dashboard: Details for reporting and metrics envisaged in the solution.
- x. Compliance: Adhering to IT Act, ISO 27001, COBIT, ITIL standards and other Information Security guidelines / standards.
- xi. Integration: List of out of the box integration available.
- xii. Hardware: Proposed Hardware and Infrastructure components required for achieving performance under peak loads of approximately 120 concurrent users along with sizing details.
- xiii. Third Party Components: List of all third-party components required for completion of solution and deployment as mentioned in [Annexure VI](#).
- xiv. License: Proposed software licencing model. This should include details like sharing of software code pertaining to customisation, proprietary OS/Database/hardware, if any, etc.
- xv. Product Roadmap & Version Upgrade: Product roadmap along with frequency of version upgrades. Support structure for previously rolled out versions.
- xvi. Automation / Analytics: Any product functionality readily available related to analytics / automation i.e. Artificial Intelligence, Machine Language, Business Intelligence Analytics etc.
- xvii. Product Benchmark: Product benchmarking details in comparison with similar products.
- xviii. Treasury Management Expert: How many treasury management experts are currently working with bidder and how many of them can be made available for NGTA.
- xix. Service Level Agreement: Bidder to submit proposed service level agreements.
- xx. Training Modules: Bidder to suggest training modules and methodology.
- xxi. Support: Bidder to provide post implementation support mechanism.
- xxii. Project Management Methodology: Proposed Project Governance Mechanism.



## Expression of Interest – Next Generation Treasury Application

- xxiii. Customer References: Share at least three existing customer references. Bank team can visit the site for interaction with referenced customer.
- xxiv. Business Case: Bidder to provide different business cases.
- xxv. Proposed financials punitive measures in case product fails in expected performance.
- xxvi. Recovery Point Objective / Recovery Time Objective: Bidder to provide information on recovery point objective (RPO) as well as recovery time objective (RTO).





## 23. ANNEXURE X – SUBMISSION CHECKLIST

The Bidder must ensure that the following have been submitted as a part of the EOI submission process.

Failure to provide any of the documents as detailed below could lead to the disqualification of the Bidder from the bid.

The following documents/items need to be submitted:

Items	Submitted (Bidder)	Verified (RBI)
Bidder's Application Form	<input type="checkbox"/>	<input type="checkbox"/>
Bidder's Details	<input type="checkbox"/>	<input type="checkbox"/>
Approach Paper (Necessary documents in support of this)	<input type="checkbox"/>	<input type="checkbox"/>
Self-declaration for responding to EOI	<input type="checkbox"/>	<input type="checkbox"/>
Organizational Profile Form	<input type="checkbox"/>	<input type="checkbox"/>
Manufacturer Authorization Format (MAF)	<input type="checkbox"/>	<input type="checkbox"/>
Letter of acceptance to all Terms and conditions as mentioned in the EOI	<input type="checkbox"/>	<input type="checkbox"/>
Audited Financial Statement	<input type="checkbox"/>	<input type="checkbox"/>
Attested copy of the Certificate of Incorporation/Registration of the Bidder components	<input type="checkbox"/>	<input type="checkbox"/>
Purchase Order/ Reference Letter with letter of satisfaction from client in support of experience claimed (Each Component with size, level and duration of engagement)	<input type="checkbox"/>	<input type="checkbox"/>
Latest Gartner/Forrester Report for Treasury Management Software	<input type="checkbox"/>	<input type="checkbox"/>
Self-attested copy of the document stating partnership level between SI and OEM	<input type="checkbox"/>	<input type="checkbox"/>
Declaration that company is not Blacklisted	<input type="checkbox"/>	<input type="checkbox"/>
Signed copy of all other Annexures as part of EOI	<input type="checkbox"/>	<input type="checkbox"/>
Self-Declaration for on-premise deployment	<input type="checkbox"/>	<input type="checkbox"/>
Information Requested	<input type="checkbox"/>	<input type="checkbox"/>
EOI Document sealed and signed	<input type="checkbox"/>	<input type="checkbox"/>