

LMS EOI

NDB Loan Management System (LMS) Selection – Expression of Interest (EOI)

NEW DEVELOPMENT BANK

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1 Introduction

The New Development Bank (hereinafter referred to as "NDB" or "the Bank") is headquartered in Shanghai, China. The Bank was established in 2015 by the governments of Brazil, Russia, India, China and South Africa (hereinafter referred to as "BRICS") to mobilize resources for infrastructure and sustainable development projects in these countries and other emerging economies.

NDB is initiating the selection process to implement a suitable solution for its loan management through this EOI. NDB is seeking potential vendors (hereinafter referred to as "Vendors") to respond to this EOI as per the instructions. This EOI is open to any solution provider to respond and NDB will evaluate the responses in a fair manner as per the Bank's internal processes. NDB will evaluate EOI response and shortlist providers for participation in the next round of Request for Proposal (hereinafter referred to as "RFP") evaluation. The shortlisted vendors can only participate in the RFP process as per their own interest.

All the participating vendors are urged to provide accurate information. An EOI submitted after the stipulated due date will not be included in the consideration set for shortlisting. NDB reserves the right to accept or reject an EOI based on NDB's Policies.

This EOI is a non-binding requirement between NDB possible vendors for the RFP process and in no way, should be understood as an offer from NDB to purchase any service or product from any service provider. NDB assumes no responsibility for any cost, whether present or future, arising from such EOI.

The response to this EOI should be forwarded to:

Ms. Analice Erthal
Finance, Budget and Accounting Division – FBA
New Development Bank

33rd Floor - 333 Lujiazui Ring Road

Pudong, Shanghai, 200120 Email: erthal.analice@ndb.int Mobile: +86 156 1820-7121 Office: +86 021 8021-9561

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1.1 EOI Timetable

| SL | Event | Date/Duration |
|----|--|--|
| 1 | EOI Release Date | November 26 rd 2018 |
| 2 | EOI Related Questions and Clarifications Submission by Vendors | From November 27 th to 28 th |
| 3 | EOI Related Clarification by the Bank | By November 29 th |
| 4 | EOI Response Submission | By December 5 th |
| 5 | Finalization of EOI Evaluation | By December 10 th |
| 6 | Successfully Shortlisted Vendors Invited to Participate in RFP | By December 14 th |

1.2 Response Format

Vendors need to respond to this EOI in a Microsoft Word document. The following are the recommended headings and order the EOI should follow. Reponses that don't follow this guideline is at risk of being disqualified, unless NDB finds the Vendor's own format of acceptable for evaluation purposes.

- o Title Page;
- Table of Contents;
- Section 1 Executive Summary (Not more than 2 pages. Kindly make it focused to NDB);
- Section 2 Copy exact format of this document and populate response in the column provided;
- o Section 3 Commercial Considerations. Prepare a separate document and send a sealed envelope to address mentioned on page 3; and
- o Appendices Supplementary information. Kindly number the appendix

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1.3 About the Current Loan Management Function

NDB is seeking a solution that is simple to adapt to its business which <u>requires minimal customization</u>. NDB currently does not have any existing system for LMS. All tasks are managed in Microsoft Excel or Word documents and there is a basic document storage function. Hence the complexity of migration of data and processes from existing systems would not be a hindrance for the fast deployment of a solution. NDB has defined in its target architecture model to pursue a high level of straight through processing (STP) for the main tasks performed by the Bank. In the new architecture, a business process management/document management solution that will house all the documents related to the loan. The Bank expects Vendor's solution to have Application Programming Interface (hereinafter referred to as "API") based capabilities for the consumer and as well as allow the provider an API to invoke necessary functionalities.

NDB is a multilateral development bank. Thus, the nature of the Bank's loans are different from commercial loans. Some key, high-level differences are:

| Туре | Commercial Bank | NDB |
|------------------------------|----------------------------------|---|
| Loan Value | Medium value loan | High value Loans |
| Loan Life | Medium term | Very long duration of repayment schedules |
| Loan Disbursement | Standard regular disbursement | Milestone, project life cycle and expenditure based disbursement |
| Interest Calculation | Generally standard across loan | Interest may differ at tranche level and may have different spreads (fixed or |
| | but may be variable | variable) |
| Collateral Management | Complex, collateral based limits | Sovereign loans - the limit structures are simple |
| | | Non-sovereign loans - similar to commercial banks |
| Transaction Volume | High transaction volume | Low volume but high value in each disbursement |

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1.4 High Level Requirements for LMS

The Bank is seeking an LMS solution which addresses the following major modules outlined in the below table. A detailed evaluation of functional fitment will be conducted during the RFP phase. The following should be considered only a summary and indicative information.

| | High Level Module | Summary |
|---|---|--|
| 1 | Borrower and Supplier Management | This module should have the ability to manage the borrower and related suppliers' information, including, but not limited to, names, contact information, agency ratings, financial information, and authorized signatories |
| 2 | Loan Account Management | This module should have the ability to manage the entire life cycle of the loan including, but not limited to, loan creation, approval, date loan becomes effective, amendment, closure and other life cycle characteristics associated with the loan |
| 3 | Drawdown and Disbursement Management | This module should have the capability to manage the workflow of receiving drawdown requests from borrowers, validation, automatic disbursement request generation, approval work management and payment request generation including integration with SWIFT and other payment systems |
| 4 | Limits Management | This module should have the ability to establish and manage the overall, expense and contract based limits (eg. contracts signed by the borrower with their suppliers). This module should also provide flexibility for the Bank to have workflow for any exception management in limits |
| 5 | Interest and Fee Calculation | This module should have the ability to compute interest for a period (regardless of whether the base rate and/or spread is fixed or variable), applicable fees based on the calendar schedule for the loan and generate statements and notifications |
| 6 | Accounting | This module should be able to generate the appropriate accounting entries for the life cycle of a loan including, but not limited to, loan creation, loan disbursement, impairments and repayments |
| 7 | Pre-payment, Delinquency, Provisioning Management | This module should have the ability to compute and generate necessary obligations for pre-payment and delinquency related to charges and payments and any related provisioning based on the same |
| 8 | Loan Servicing | This module should have the ability to generate all necessary periodic statements required for the borrower including loan statement, interests, fees and other period communication with the borrower. This module should also have the ability to run scenario simulation for any special requests, such as early repayment. |

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| 9 | System Interface Management | This module should have the ability to integrate with the Bank's systems including, but not limited to, the enterprise and resource planning system and the treasury management system. This module should support Single Sign-On via SAML2.0 with accounting, treasury and other systems of the Bank. |
|----|--------------------------------|--|
| 10 | API | This module should provide API for the integration with NDB's business process management/document management system for the following tasks, including but not limited to: Loan lifecycle management; Limit lifecycle management; Drawdown Request validation & lifecycle management; and Communications with Borrowers (loan statement, interest, fees etc.). |

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2 Vendor Company Information

2.1 About the Company - General Information

Please provide general information about the company. In order to make the evaluation process easier, please use clear, plain text. If visual references such as pictures are required, add them as appendices with your EOI Response and make reference to them as necessary.

| | Company Information | Response/Details |
|----|---|------------------|
| 1 | Company name | |
| 2 | Incorporation location and jurisdiction law | |
| 3 | Headquarter location | |
| 4 | Company type | |
| 5 | If listed, provide most recent credit rating and indicate the rating agency | |
| 6 | Provide break up of ownership structure with details | |
| 7 | Number of years in operation | |
| 8 | Annual revenue for previous three years and copy of audited financial | |
| | statements for previous three years | |
| 9 | Number of employees | |
| 10 | Number of office locations | |
| 11 | Executive management information | |
| 12 | Provide brief write-up on Vendor's mission statement | |
| 13 | Does Vendor have a code of conduct/compliance policy? If Yes, please | |
| | provide a copy of the same | |
| 14 | Number of patents filed and approved by Vendor | |
| 15 | Provide details about Vendor's presence in BRICS | |
| 16 | Has Vendor been in any blacklist of development banks or any other | |
| | financial institutions? If yes, please provide details | |

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2.2 About the Product - General Information

| | Company Information | Response/Details |
|----|--|------------------|
| 1 | Software product name | |
| 2 | Number of years this product has been in existence | |
| 3 | Book value of loans under management | |
| 4 | Is this an acquired product for Vendor? If yes, provide details of when it was acquired and any relevant information about the acquisition | |
| 5 | If this product was designed in-house by Vendor, provide the year in which the product was launched | |
| 6 | Is LMS an independent product or is it a module part of larger solution? | |
| 7 | Installed client base for LMS | |
| 8 | % of annual revenue spent on product's R&D (if LMS is part of the product suite, please provide an overall figure) | |
| 9 | Number of people involved product's R&D (includes product development) | |
| 10 | % of revenue of LMS compared to company overall revenue | |
| 11 | % of implementation revenue of LMS | |
| 12 | Ratio of Implementation Revenue Vs License revenue of LMS (If this information is difficult to provide at an LMS product level, provide at the overall product that Vendor sells as a licensed solution) | |
| 13 | In which countries, the product IP has been registered? | |
| 14 | Is the IP exclusively owned by Vendor? | |
| 15 | Does Vendor use any other third-party software in the LMS solution? | |
| 16 | Provide details of third party software to be procured by NDB | |
| 17 | What kind of documentation Vendor will deliver along with the product and as part of implementation? List all the deliverables with some description | |

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| 18 | Can Vendor provide any document detailing a three-year road map for the LMS product? |
|----|---|
| 19 | Provide three references of clients, who meet the following criteria: Oldest client that has implemented LMS and that has gone through multiple release cycles; A client in BRICS country that has implemented LMS; Any client that is a development bank; and Client that has implemented LMS recently (In subsequent phase of evaluation, NDB would like to schedule a call with these client representatives) |
| 20 | If any, provide example of failure in LMS implementation. What were the lesson(s) learnt from the same. |

2.3 About the Product - Technical information

| | Company Information | Response/Details |
|---|--|------------------|
| 1 | Describe product development and/or release methodology. This should explain, but not limited to, major, minor and client specific releases, agile methodology | |
| 2 | How does Vendor prioritize client specific requirements to go into product releases? | |
| 3 | What is Vendor's major and minor release cycle timing? | |
| 4 | What has been average effort for clients for major version upgrade (time wise and cost wise)? | |
| 5 | Does Vendor follow any certified methodologies for product development? | |
| 6 | Does Vendor perform regression testing for previous versions? Does Vendor provide to clients evidence of conducting such tests? | |

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| 7 | What are the special design considerations in the product for security especially for preventive, audit and rapid response in case of any abnormal action on the Bank's system? | |
|----|---|--|
| 8 | What tests does Vendor perform periodically for security considerations? Kindly provide evidence of application and network security test conducted recently | |
| 9 | If Vendor has any certification that it complies with for security standards, kindly share the same information | |
| 10 | Did Vendor encounter any incidents of compromise in security reported by clients in the past? Provide details of how this was handled and how it was rectified in the new versions of the product | |
| 11 | How does Vendor test the product for performance? What are the key performance limitations of your solution? | |
| 12 | Does Vendor have any certification evidence for its performance testing? | |
| 13 | Describe the technology platform used for product development | |
| 14 | Share product API documentation | |
| 15 | Share technical architecture diagram of the product. | |
| 16 | Describe Vendor's solution for disaster recovery/business continuity plan implementation | |
| 17 | Does Vendor's product integrate with single Sign-on systems via SAML2.0? Provide details | |

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2.4 About the Product - Functional information

Please provide a brief summary of the product for the high level modules. The answer should include whether this is included in LMS and a brief description of the feature in the product.

| | High Level Module | Response/Details |
|----|---|------------------|
| 1 | Borrower and supplier management | |
| 2 | Loan account management | |
| 3 | Drawdown and disbursement management | |
| 4 | Limits management | |
| 5 | Interest and Fee Calculation | |
| 6 | Accounting | |
| 7 | Pre-payment, Delinquency, Provisioning Management | |
| 8 | Loan Servicing | |
| 9 | System Interface Management | |
| 10 | API | |

2.5 Product Implementation Information

| | Product Support Model | Response/Details |
|---|---|------------------|
| 1 | Does Vendor have its own implementation team for the product? If yes, provide details of the team and their location | |
| 2 | Does Vendor have implementation partners for the solution? If yes, provide top three implementation partners Vendor would recommend to NDB for implementation consideration | |
| 3 | What methodology does Vendor use for implementation? | |
| 4 | What is the average timeline for implementing an out-of-the-box LMS solution? | |

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| 5 | What post-implementation training and support does Vendor provide? | |
|---|---|--|
| 6 | Provide some of the key risks that Bank should be aware of during implementation of LMS | |
| 7 | Provide an example when implementation timeline and costs were overrun and explain how Vendor rectified the situation | |

2.6 Product Software and Hardware Infrastructure Requirements

| | Product Software/Hardware Requirements | Response/Details |
|---|--|------------------|
| 1 | Can Vendor's product be hosted on cloud infrastructure? | |
| 2 | Does Vendor provide public/private cloud options? Explain each of the options | |
| 3 | Which cloud platforms are your preferred platforms? Does Vendor support Alibaba Cloud or Azure (China)? | |
| 4 | Can you host cloud centers in any of the BRICS locations? | |
| 5 | Provide details of software that need to be procured for implementation in case of private cloud | |
| 6 | Provide approximate cloud infrastructure sizing for 15 users for LMS system with transaction volume of 50 loans addition per year with about 150 draw down requests per year | |
| 7 | Provider infrastructure architecture diagram for such implementation | |
| 8 | Provide a description of your system interaction with other systems which are hosted on cloud (such as with an enterprise resource planning system) | |
| 9 | Provide a summary of a recent example of LMS implementation. Please include a detailed description as an appendix | |

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2.7 Product Support - Information

| | Product support Model | Response/Details |
|---|--|------------------|
| 1 | Does Vendor provide annual maintenance support for the product? | |
| 2 | What are the pricing options for annual maintenance support? | |
| 3 | Does Vendor have different service options for annual maintenance? | |
| | Elaborate with details inclusion/exclusion in scope/time/SLAs etc. | |
| 4 | Where is your annual maintenance support team located? | |
| 5 | What is the process for raising such maintenance requests by the Bank? | |
| 6 | Provide reference of one of Vendor's oldest annual maintenance support | |
| | client | |
| 7 | What is the size of Vendor's support team? | |
| 8 | Where is Vendor's support team located? | |
| 9 | Does Vendor use third parties to provide annual maintenance support? If | |
| | yes, can Vendor provide details of partners it uses for providing annual | |
| | maintenance | |

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3 Estimated Total Cost of LMS – Prepare a separate document and send a sealed envelope to the address mentioned on page 3

| | Product Pricing Model | Details |
|---|--|--------------------|
| 1 | Provide package and pricing options? Explain various options in detail using | |
| | the templates found in sections 3.1 and 3.2 | |
| 2 | Provide estimate for cost estimate for implementation of LMS in the Bank. | Use template below |
| | The scope must cover at minimum the modules listed in section 1.2 | |
| 3 | License cost (one time) for 20 users for perpetual license | Use template below |
| 4 | Annual maintenance cost for Product as a percentage of license cost | Use template below |
| 5 | Describe inclusion and exclusions in license cost | |
| 6 | Describe inclusion and exclusion in annual maintenance cost | |
| 7 | Initial of out-of-the-box implementation cost (Please provide a range %) | Use template below |
| 8 | Rate for additional customization in man days (number of days multiplied | Use template below |
| | by number of workers required) | |
| 9 | Bill of material of software and their estimated cost | Use template below |

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3.1 Estimated Total Cost of LMS (OPTION 1 – perpetual licencing)

| | Product Pricing Model (All in USD) | Minimum | Maximum |
|----|--|---------|---------|
| 1 | License cost (one time) for 20 users for perpetual license | | |
| 2 | Annual maintenance cost for product as a percentage of license cost (Y1) | | |
| 3 | Annual maintenance cost for product as a percentage of license cost (Y2) | | |
| 4 | Annual maintenance cost for product as a percentage of license cost (Y2) | | |
| 5 | Base out of the box Implementation cost (Vendor can provide a range) | | |
| 6 | Bill of Material of software (provide software details) | | |
| 6A | Software A (estimated cost) | | |
| 6B | Software B | | |
| | | | |
| | | | |
| 7 | Cloud infrastructure cost | | |
| 7A | Cloud implementation cost | | |
| 7B | Cloud subscription cost | | |
| 7C | Annual support cost for cloud | | |
| | Other costs | | |
| | Total | | |
| | | | |
| | Rate for additional customization for man days | | |
| | | | |

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3.2 Estimate Total Cost of LMS (OPTION 2 – annual licencing)

| | Product Pricing Model (All in USD) | Minimum | Maximum |
|----|--|---------|---------|
| 1 | Annual subscription cost for software in the cloud (3 year cost) | | |
| 2 | Any other annual cost (3 year cost) | | |
| 3 | Base out of the box implementation cost (Vendor can provide a range %) | | |
| 4 | Cloud Infrastructure cost | | |
| 4A | Cloud implementation cost | | |
| 4B | Cloud subscription cost | | |
| 4C | Annual support cost for cloud | | |
| | Other costs | | |
| | | | |
| | Total | | |
| | | | |
| | Rate for additional customization for man days | | |
| | | | |

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