#### **New Development Bank**

### **Request for Proposal**

### (This is not a Purchase Order)

#### 1. Introduction

**New Development Bank (NDB)** is issuing a Request for Proposal (RFP) to invite qualified suppliers to provide proposals for NDB's <u>consultancy for development of internal risk models</u>. Please refer to the following information and attachments for detailed requirements.

Each interested party must submit their proposal in response to this RFP to the contact person listed below by **Oct. 24, 2022, 5:15pm CST.** NDB will appoint the service provider in accordance with internal policies and guidelines. NDB at its sole discretion reserves the right to reject proposals in accordance with its internal policies and guidelines.

#### 2. RFP Schedule

Please note that the following activities would take place in the RFP process. NDB will inform the specific arrangements in advance and the suppliers are requested to respond timely.

| Activity                      | Date                     |
|-------------------------------|--------------------------|
| Distribution of RFP           | Sep. 30, 2022            |
| Deadline for questions if any | Oct. 14, 2022            |
| Proposal Response Due         | 5:15pm CST Oct. 24, 2022 |
| Signing Contract              | TBD                      |
| Project Kick Off              | TBD                      |

#### 3. Instruction to bidders

#### 3.1 Contact Information

Please use the following contact information for all correspondence with NDB concerning this RFP. Suppliers who solicit information about this RFP either directly or indirectly from other sources will be disqualified.

Contact Person: Ms. Holly Yao Address: NDB Headquarter, 1600 Guozhan Road, Pudong New District, Shanghai, China 上海市浦东新区国展路 1600 号,新开发银行总部大楼 Email: <u>yao.holly@ndb.int</u> Tel: +86-21-80214489

#### **3.2** Submission of Proposals

Proposals shall be in English. Both hard copy and electronic version is acceptable. Hard copy (6 copies at least) shall be sent in sealed covers and addressed to the contact person. Electronic version shall be sent with protection (at least with a password).

The mentioned deadline, due time, closing date, etc. herein means Beijing time (CST) and during NDB's business hours from 9:00AM to 5:15PM on weekdays.

#### 3.3 Questions

Questions should be submitted in writing by e-mail. Prospective vendors should refer to the specific RFP paragraph number and page and should quote the questioned passage. NDB will be prompt in responding to communicated questions.

### **3.4 Ownership of Materials**

All materials submitted in response to this RFP become the property of NDB. Proposals and supporting materials will not be returned to prospective vendors.

#### 3.5 Proposal Costs

NDB is not liable for any costs incurred by the prospective vendors in the preparation and/or submission of the proposal.

#### 3.6 Proposal Format (Suggested)

NDB recommends that the proposal should contain the following (at minimum):

Volume 1 – Main Proposal

| Section 1 | Executive Summary          |
|-----------|----------------------------|
| Section 2 | Functional Section         |
| Section 3 | Technical Section          |
| Section 4 | Project Management Section |
| Section 5 | Support Section            |

Volume 2 – Price Proposal – Should be separate but integral part of the proposal. The currency is USD; if quoting in other currencies, the exchange rate should be clearly defined. **The price shall be inclusive of applicable taxes (if not, please specify)**; and other charges shall also be clearly defined.

## 3.7 Validity Period

The proposal including pricing quotation shall be valid for a period of at least <u>90</u> days.

#### 3.8 RFP Amendments

New Development Bank reserves the right to amend this RFP any time prior to the closing date. In the case of such an event, prospective bidders will be notified, and amendments will be issued only to those prospective vendors with intent to complete a proposal for submission to NDB.

#### 3.10 Award Notification

NDB may negotiate with all shortlisted prospective vendors before deciding on the winning vendor. NDB reserves the right to negotiate further with the winning vendor before and in the contracting process. The remaining vendors will be notified in writing of their application status.

#### 4. Evaluation Criteria

The proposals will be reviewed and evaluated by NDB's team in accordance with the related policies and guidelines on the six principles of Economy, Efficiency, Competition, Transparency, Value for Money, fit for Purpose as contained in NDB's corporate procurement policy. NDB is interested in obtaining a complete solution for the requirements contained in this RFP. Subcontracting is not permitted. Proposals that meet the proposal instructions and requirements will be given a thorough and objective review. Proposals that are late, or do not comply with proposal instructions, or take exceptions to mandatory requirements will be eliminated without further consideration. The following are the key factors that would be taken into consideration for evaluating the proposals.

#### i. Technical Approach and Methodology or Software Solution

Primary consideration will be given to meet the mandatory requirements as listed in this RFP.

The following are factors in the evaluation.

- 1. Meeting the requirements as stated in this RFP.
- 2. Understanding of the work to be performed.
- 3. Technical approach and methodology to accomplish the work.
- 4. Completeness and competence in addressing the scope of work.

#### ii. Project Management

NDB also believes that effective project management is essential for a successful implementation. Prospective Vendors will be evaluated on the completeness and responsiveness of their project management plans and the project team assigned.

As part of the project management plan, prospective vendors must demonstrate adequate experience in developing and implementing the requested project. NDB's confidence in the vendors' ability to meet deadlines and successfully manage similar projects will be a primary consideration.

Special consideration would be given to vendors who propose a detailed project plan with sufficient breakdown of tasks and steps to demonstrate a complete understanding of the project.

## iii. Pricing

NDB will consider pricing as part of the evaluation criteria. **Lowest price is not essential to win**; however, large pricing differentials between vendors will be carefully examined. Price will be used as a final indicator for determining the vendor finalists when all other criteria have been normalized.

### iv. Presentation and Demonstration

Presentations and Demo's provided by prospective vendors will be considered and evaluated.

#### v. Support and Maintenance

NDB believes the ability to perform timely support is also an important factor for the success of this project. Therefore, vendors should provide adequate information to demonstrate their capabilities to fulfill this task.

# **Terms of Reference:**

# **Consultancy for Development of Internal Risk Models**

## 1. Introduction and Background

The New Development Bank ("Bank") is considering to procure the services of an external consultancy for the development of the following models:

- a) Loss-Given-Default (LGD) for non-sovereign transactions
- b) Internal Credit Ratings for sovereign borrowers

The aim of this exercise is to allow further sophistication of NDB's credit risk assessment process in line with global best practices.

# 2. Scope and Timelines

The Risk Management Department ("RMD") of the Bank currently relies on risk analytics solutions provided by leading international credit rating agencies (CRAs).

The RMD uses credit rating scorecards for non-sovereign transactions, provided by one of the CRAs, and widely adopted in the MDB community. These include scorecards for internal credit ratings, Probability-of-Default (PD) and Loss-Given-Default (LGD).

However, the LGD models produce estimates for Point-in-Time (PIT) LGDs, the values of which vary with economic cycles. Such estimates are useful to assess recovery rates for counterparties in distress. RMD now seeks to develop internal models for estimating Through-The-Cycle (TTC) LGDs that represents a long-term average across economic cycles. The TTC LGDs would serve as an input into the calculation of other risk metrics such as capital adequacy, risk-based pricing, etc.

Additionally, RMD now seeks to develop internal models to be able to estimate the internal credit rating of the Bank's sovereign exposures with or without international credit ratings.

| SI. No. | Details of Risk Model                          | Scope and Details   | Timeline for |
|---------|--|---|--------------|
|         | (to be developed)                              |   | delivery     |
| 1.      | Loss-Given-Default<br>(TTC)                    | LGD models compliant with BASEL and IRB requirements.   | 30-Nov-2022  |
|         |  | LGDs are required to be developed<br>for the various portfolio and sub<br>portfolios of the Bank. These<br>include, but may not be limited to:<br>a) Sub-sovereigns<br>b) Financial Institutions<br>c) Corporates<br>d) Project Finance   |              |
|         |  | The preference is for a rules-based<br>method that takes into account<br>different types of collateral,<br>seniority, transaction life-cycle (e.g. if<br>Project Finance, differentiate<br>between construction and<br>operational period) and jurisdiction.<br>Other parameters may be proposed<br>by the consulting firm. |              |
|         |  | Compatibility with NDB's internal risk<br>management framework, including<br>IFRS9 ECL computation<br>methodologies.  |              |
| 2.      | Credit rating model for<br>sovereign borrowers | Internal Rating Model Development<br>as per industry best practices to<br>perform credit risk assessment of<br>sovereigns. The model should be<br>independent of availability or<br>unavailability of external ratings by<br>Credit Rating Agencies and their<br>rating methodologies.                                      | 30-Nov-2022  |
|         |  | The model should integrate with<br>existing data systems of NDB for<br>macroeconomic variables (and other<br>variables) e.g. CapitalIQ, S&P Market<br>Intelligence, Moody's Analytics and<br>Moody's DataBuffet.  |              |

| SI. No. | Details of Risk Model<br>(to be developed) | Scope and Details  | Timeline for delivery |
|---------|--|--|-----------------------|
|         |  | The model should integrate with external data systems, if required.  |                       |
|         |  | The model must be in-line with models/methodologies followed by international MDBs as well as Basel norms / commercial banking practice.   |                       |
|         |  | The model must include elements of forward-looking projections/forecasts while working out ratings and other outputs.  |                       |
|         |  | Designing the key credit risk rating<br>factors and weights as would be<br>appropriate and acceptable to the<br>leading rating agencies, auditing<br>companies and financial analysts.   |                       |
|         |  | Run, test and calibrate the model to<br>achieve the result, which is clearly<br>measurable and comparable on the<br>internationally accepted credit rating<br>scales and attributable factors such<br>as Probability of Default and Loss<br>Given Default Rates (LGD).       |                       |
|         |  | Compatibility with the NDB's risk<br>management framework, including<br>ECL computation methodologies.<br>The underlying model<br>documentation delivered to NDB<br>shall be subject to the satisfaction of<br>the Bank's auditing and financial<br>disclosure requirements. |                       |
|         |  | The preference is for a model that relies primarily on quantitative metrics and factual evidence.  |                       |

# 3. Requirements

The Bank intends to engage an external consultancy with global experience in risk models for Multilateral Development Banks or similar Financial Institutions. The global consulting service provider is expected to fulfil the following requirements (indicative, nonexhaustive):

- Assist the Bank in achievement of the scope detailed above;
- Availability of qualified and experienced personnel to undertake the specified activities;
- Undertake model development exercise for the scope specified above;
- The service provider is expected to submit 'Model development report' at the conclusion of the exercise for each model, which may include the following at a minimum:
  - Assumptions
  - Data inputs and outputs
  - Methodology
  - o Limitations
  - Validation results
  - Model performance
- Integrate the models and/or model results into the Bank's existing systems;
- Provide user guides and prototypes for model development, detailing the various statistical techniques of model development;
- Provide model documentation up to the satisfaction of the Bank's auditing and financial disclosures requirements.
- Detailed training should be provided to RMD staff, regarding each of the deliverables, up to the satisfaction of DG Risk and CRO, till successful implementation of model;
- Answering questions by other NDB departments/management/board on the models, their comparison with other MDBs/global best practices
- Provide training to enable the risk management personnel to perform model maintenance and enhancements;
- Timely reporting of project progress;
- The expected project conclusion timeline is 2 months from inception