

## Request for Proposal (RFP) for

### Supply, Implementation, and Support of an Exchange-Hosted Order Management System (OMS)

For



**Dhaka Stock Exchange PLC.**

**[Service Fee Model]**

---

*MS*

*A Ms. Saha*  
*B*



## Table of Contents

A.	Introduction and General Terms .....	4
1	General Information .....	4
2	Objective.....	4
3	Scope .....	5
4	DSE Trading Platform Overview .....	7
5	Tender Notice .....	9
6	Tender Events .....	10
7	Pre-bid meeting .....	11
8	Bidder's eligibility and prequalification.....	11
9	Standard Terms and Conditions .....	12
10	Proposal Submission and Opening .....	18
11	Proposal Evaluation Method .....	19
12	Financial Proposals .....	19
13	Invoices' criteria .....	20
B.	Financial Offer Format.....	21
14	Service Fee Model .....	21
15	Payment Terms.....	24
16	Service Level Agreement (SLA).....	24
C.	DSE System Metrics .....	27
17	Trading System or Matching Engine (ME):.....	27
18	New Order Management System:.....	27
D.	Company's Basic Information.....	29
E.	High-Level Requirement of Exchange Hosted OMS for DSE.....	30
F.	Functional and Technical Requirement.....	35
19	Proposed Application/Software Description.....	35
20	Proposed OMS System Architecture .....	36
21	Capacity and Performance .....	37
22	Network Details .....	38
23	Security Features .....	39
24	System Scalability .....	41
25	Monitoring and Manageability .....	42
26	User Acceptance Test .....	43
27	Training and Documentation.....	44



28 System Infrastructure Specification for Proposed OMS.....46

G. Acronyms.....48

*[Handwritten signature]*

*[Handwritten signature]*

*Ms. Sohla*  
*[Handwritten mark]*



## A. Introduction and General Terms

---

### 1 General Information

- 1.1 This Request for Proposal (RFP) invites qualified vendors to submit proposals demonstrating their capability and readiness to design, supply, implement, test, and provide ongoing support for an Exchange-Hosted Order Management System (OMS) for Dhaka Stock Exchange PLC (DSE), to be utilized by its broker community.
- 1.2 Since 2014, DSE has been operating a centralized OMS platform, DSE-FlexTP, to support the trading activities of its brokers, along with a mobile application for investors. The platform enables brokers to centrally manage client orders and ensures smooth trading operations. Currently, the system is capable of handling approximately 1,100,000 orders per day within a 4.5-hour trading session. System capacity can be further enhanced through infrastructure scaling.
- 1.3 As part of its strategic technology transformation initiative, DSE intends to replace the existing OMS with a next-generation solution, targeting Go-Live by June 2027.  
The proposed OMS is expected to support multiple asset classes—including equities, derivatives, and fixed income instruments—while adhering to global standards of efficiency, transparency, fairness, and cost-effectiveness. The system will provide real-time market data and advanced functionality to meet evolving market needs.
- 1.4 With larger brokerage firms increasingly adopting independent OMS solutions, the centralized OMS will primarily cater to mid-sized and smaller brokerage firms, ensuring inclusive and efficient market participation.

### 2 Objective

- 2.1 The objective of this Project is to establish a modern, scalable, and efficient Exchange-Hosted Order Management System (OMS) that supports the evolving needs of Dhaka Stock Exchange PLC (DSE) and its stakeholders:
- 2.2 To design, deliver, and implement an Exchange-Hosted OMS with global-standard capabilities, supporting equities, fixed income, derivatives, and other asset classes, enabling efficient order management, execution, and post-trade processing at an optimized cost.
- 2.3 To support future business expansion by aligning with international trading practices, providing advanced trading capabilities to meet the growing demands of market participants, supporting diverse asset classes, and attracting new participants to the DSE capital market.
- 2.4 To establish a highly scalable, modular, and configurable system architecture capable of adapting to evolving business rules, regulatory requirements, and technological advancements with minimal disruption.



- 2.5 To strengthen market integrity and risk management through robust pre-trade controls, real-time validations, and configurable risk parameters at broker, dealer, and client levels.
- 2.6 To provide brokers and investors with real-time information, analytics, and user-friendly interfaces, enabling informed decision-making and an enhanced trading experience.
- 2.7 To ensure high availability, performance, and resilience of the OMS through fault-tolerant architecture, disaster recovery readiness, and adherence to defined RTO and RPO objectives.
- 2.8 To enable seamless integration with the Trading (Matching) Engine, clearing and settlement systems, depository, banks, and other ecosystem participants through standardized APIs and interfaces.
- 2.9 To adopt a cost-efficient and sustainable operating model, including transaction-based or service-oriented commercial structures, aligning system costs with market activity and optimizing long-term financial impact for DSE.
- 2.10 To ensure vendor independence and long-term sustainability through open architecture, standard interfaces, and avoidance of vendor lock-in.

### 3 Scope

- 3.1 Dhaka Stock Exchange PLC (DSE) intends to implement an Exchange-Hosted Order Management System (OMS) to support the day-to-day trading operations of brokers and align its business objectives with ongoing technological transformation and market development initiatives.
- 3.2 **Exchange-Hosted Order Management System (OMS):** DSE invites proposals for the design, development, supply, implementation, and support of an Exchange-Hosted OMS. This web-based platform will be centrally managed and maintained by the Exchange for TREC Holders (brokers).

The OMS shall support the complete order lifecycle, including submission, validation, routing, modification, and tracking of client buy/sell orders, with seamless connectivity to the Trading (Matching) Engine via industry-standard and/or proprietary APIs.

The system shall, at a minimum, include:

- Real-time order processing and routing
- Pre-trade risk management controls
- Support for multiple order types and trading windows
- Comprehensive audit trails and logging
- Mobile App (Android & IOS), and web-based user access
- Timely onboarding of new brokers and removal of existing brokers.
- Scalability to support more than 220 TREC Holders and future growth



- 3.3 The OMS shall support multi-asset class products, potential multi-exchange connectivity, and adaptability to evolving business rules and regulatory requirements. Implementation shall be completed within the shortest feasible timeframe, aligned with DSE's target Go-Live schedule.

Detailed functional and technical requirements are provided in subsequent sections of this RFP.

- 3.4 **Workload migration:** The Supplier shall ensure seamless migration of production workloads from the existing OMS to the new system, including historical data, system configurations, and integrations. The migration shall include full integration with the Matching Engine and interoperability with TREC Holders' back-office systems, with minimal or no disruption to live trading operations.

All data, including historical, transactional, and derived data, shall remain the exclusive property of DSE.

- 3.5 **Site Synchronization and Disaster Recovery:** The solution shall support synchronization between the Primary Data Center (DC) and Disaster Recovery (DR) site. The Supplier shall ensure compliance with defined Recovery Time Objective (RTO) and Recovery Point Objective (RPO) and conduct periodic DR drills and failover testing.

- 3.6 **Knowledge Transfer and Training:** The Supplier shall provide comprehensive training and knowledge transfer to DSE personnel covering system operation, administration, monitoring, troubleshooting, maintenance and operational training for end- users. Complete documentation shall be provided, including system architecture, configuration manuals, and standard operating procedures (SOPs). The training duration should be minimum 100 hours for system administration and maintenance. Training should be conducted at DSE site.

- 3.7 **Support Agreement:** The Supplier shall provide professional/enterprise-level support services for a period of five (5) years and extendable based on satisfactory performance, including defined service levels, escalation procedures, and support coverage, to be finalized during contract execution.

- 3.8 **Maintenance and Scalability:** DSE may enter into a maintenance agreement with the Supplier covering both DC and DR environments. The system shall support scalable capacity aligned with the number of on-boarded brokers and trading volume. Pricing under the maintenance arrangement shall be proportionately adjustable based on system scale and usage. The system shall be designed to avoid vendor lock-in, ensuring portability, open standards, and ease of transition.

- 3.9 **Cyber Security:** The system shall comply with industry-standard cybersecurity practices, including authentication, encryption, and audit controls.

- 3.10 **Compliance with Requirements:** Bidders shall provide comprehensive responses addressing all functional and technical requirements specified in this RFP.

*[Handwritten signatures and initials]*



- 3.11 **Value-Added Recommendations:** DSE welcomes value-added recommendations from bidders that enhance system capability, operational efficiency, or strategic alignment with DSE's objectives.
- 3.12 **Eligible Participants:** This RFP invites qualified application developers, solution providers, system integrators, or consortiums to supply the products and services described herein.
- 3.13 **Definition of Bidder:** "Bidder" means any eligible firm, company, organization, or consortium that submits a proposal in response to this RFP.
- 3.14 **Definition of Supplier and Responsibility:** The successful Bidder, hereinafter referred to as the "Supplier", shall be responsible for delivering the goods and services in accordance with the Scope of Work and all specifications set forth in this RFP.

#### 4 DSE Trading Platform Overview

- 4.1 The automation of trading at Dhaka Stock Exchange PLC (DSE), initiated in 1998, marked a significant milestone in enhancing the efficiency, transparency, and accessibility of the capital market. Through the adoption of advanced ICT solutions, DSE has continuously expanded its capabilities, enabling faster information dissemination and supporting the introduction of new financial products and instruments.

As part of its ongoing modernization and capacity enhancement initiatives, DSE has progressively upgraded its trading infrastructure, including the expansion of trading server capacity. A secure and well-structured LAN and WAN network connects broker offices nationwide to the DSE Trading System, ensuring reliable and high-performance connectivity.

At present, approximately 6,000 trader workstations across around 280 active brokerage houses are connected to the Exchange, operating from nearly 1,200 locations across the country. This extensive network provides broad market access, with coverage extending to almost all regions of Bangladesh.

- 4.2 In 2009, DSE introduced a web-based Market Data Server (MDS) to facilitate real-time dissemination of market data. This platform supports a wide range of stakeholders, including print and electronic media, telecommunications providers, research institutions, and international data vendors such as Bloomberg, SIX Financial Information, and ICE. The MDS plays a critical role in enhancing market transparency and enabling data-driven decision-making.
- 4.3 In December 2014, DSE implemented the X-Stream INET trading platform, developed by NASDAQ, along with the DSE-FlexTP Order Management System, developed by FlexTrade. These systems significantly enhanced trading performance, supporting throughput of up to 4,000 orders per second and 2,000 trades per second under stable operating conditions.
- 4.4 As part of its strategic technology transformation, DSE is now transitioning to a next-generation trading ecosystem, including the replacement of the existing Matching Engine with a modern, high-performance solution aligned with global standards. The proposed OMS

*[Handwritten signatures and initials]*



Dhaka Stock Exchange PLC

Plot # 46, Road # 21, Nikunja -2, Dhaka-1229

---

is expected to integrate seamlessly within this evolving trading ecosystem and support future scalability and interoperability requirements.

*[Handwritten signatures]*



## 5 Tender Notice

Ref: DSE/CSD/APP/2026/630-1

Date: June 3, 2026

**Subject: Request for Proposal (RFP) for Supply, Implementation, and Support of an Exchange-Hosted Order Management System (OMS) - Service Fee Model.**

Dhaka Stock Exchange PLC (DSE) hereby invites proposals from qualified and experienced bidders for the design, supply, implementation, testing, and ongoing support of an Exchange-Hosted Order Management System (OMS) for use by its broker community.

Interested bidders are requested to submit separate Technical and Financial Proposals in accordance with the instructions, formats, and requirements outlined in this Request for Proposal (RFP) document.

This RFP provides detailed information regarding the scope, specifications, deliverables, and services to be provided by the successful bidder (hereinafter referred to as the "Supplier"). Bidders may contact the designated representatives of DSE, as specified in this document, for any clarification or additional information.

DSE has issued two distinct RFPs for the supply and installation of an Order Management System (OMS), title under (1) "Proposal for Supply, Implementation, and Support of an Exchange Hosted Order Management System (OMS) - Service Fee Model" and (2) "Proposal for Supply, Implementation, and Support of an Exchange Hosted Order Management System (OMS) - License and Annual Maintenance Contract (AMC) Model". Bidders must submit proposals on both models.

Each submission will be evaluated independently based on its specific merits and alignment with DSE's requirements. DSE will select the model deemed most cost-effective and suitable for implementation. DSE reserves the right, at its sole discretion, to accept or reject any or all proposals, in whole or in part, without assigning any reason whatsoever. DSE may also cancel or modify the RFP process at any stage, in accordance with applicable rules and internal policies.

Any attempt to influence the evaluation process, directly or indirectly, shall result in immediate disqualification of the bidder.

Thank you.

Md. Bazlur Rahman  
Head of Common Services Dept.  
Dhaka Stock Exchange PLC.



## 6 Tender Events

#	Information	Details
6.1	Name of the Purchaser	Dhaka Stock Exchange PLC.
6.2	RFP Publish and distribution date	June 3, 2026
6.3	Place of proposal collection	<b>Bidder can download from the following web link:</b> <a href="https://www.dsebd.org/RFP.php">https://www.dsebd.org/RFP.php</a>
6.4	Pre-Bid Meeting for Technical Briefing	The pre-bid meeting will be held on Wednesday, June 10, 2026 at 02:00 PM (Dhaka Time)  Interested bidders are requested to submit a Letter of Intent (LOI) to email <a href="mailto:dse.proc@dse.com.bd">dse.proc@dse.com.bd</a> by Tuesday, June 9, 2026, Upon receipt of the LOI, DSE will provide a virtual meeting invitation for discussion and clarification of the RFP requirements.
6.5	Last date & Time of proposal submission	Tuesday, June 23 , 2026 at on or before 02:00 PM (Dhaka Time)
6.6	Offer submission	Bidders must submit separate, password-protected Technical and Financial Proposals via email to <a href="mailto:dse.proc@dse.com.bd">dse.proc@dse.com.bd</a> , using their official company domain email address.
6.7	Offer validity	The offer must be valid for at least 6 (six) months from the close of the submission period of RFPs.
6.8	Contact Person for technical information, queries, explanation, etc.	<b>Md. Mahmudul Hasan</b> DGM, Application Support Dept. E-Mail: <a href="mailto:mahmudul.hasan@dse.com.bd">mahmudul.hasan@dse.com.bd</a> Phone: +880 2-41040189-200, Ext. 2122 Mobile: +880 1713425840 (WhatsApp)  <b>Kamrun Nahar</b> Assistant General Manager Product and Market Development E-Mail: <a href="mailto:kamrun.nahar@dse.com.bd">kamrun.nahar@dse.com.bd</a> Phone: +880 2-41040189-200, Ext. 1523 Mobile: +880 1730032373 (WhatsApp)
6.9	Contact person for procurement related information	<b>Md. Humayan Kabir</b> Manager, Common Services Dept. Email: <a href="mailto:humayan.kabir@dse.com.bd">humayan.kabir@dse.com.bd</a> Phone: +880 2-41040189-200, Ext. 1302 Mobile: +880 1730032374 (WhatsApp)



## 7 Pre-bid meeting

- 7.1 Bidders shall ensure that their representatives attending the pre-bid meeting have a clear understanding of the technical, business, and support requirements outlined in this RFP. The meeting is intended to enable bidders to prepare their proposals in full compliance with the requirements of this RFP.
- 7.2 The pre-bid meeting aims to provide prospective bidders with a comprehensive overview of the project and an opportunity to seek clarification on any aspect of the RFP. The agenda will include:
- Overview of DSE's objectives and project context
  - Discussion on the proposed Order Management System (OMS)
  - Explanation of scope, deliverables, and key requirements
- 7.3 Bidders are encouraged to ensure the participation of relevant technical, functional, and business representatives, including solution architects and business analysts, in the pre-bid meeting.
- 7.4 Interested bidders shall submit a Letter of Intent (LOI) to DSE within the specified timeline. Upon receipt of the LOI, DSE will provide the virtual meeting invitation link and necessary access details.
- 7.5 Bidders may submit queries in writing prior to or during the pre-bid meeting. Responses may be shared with all participating bidders. Any clarification provided during the pre-bid meeting shall be considered valid only if subsequently issued in writing by DSE as an addendum.

## 8 Bidder's eligibility and prequalification

- 8.1 The following prequalification requirements must be met by bidders in order to participate in this RFP. Bidders are required to submit supporting documents as evidence of compliance.
- 8.2 To be considered eligible for the selection process, bidders must satisfy all the criteria specified in this section.
- 8.3 Bidders must comply with all eligibility criteria designated as "must" requirements. Failure to comply with any such requirement will result in the bidder being deemed non-responsive.

*Amr A* *Ms. Saha*  
♡



#### 8.4 Eligibility Criteria:

Section	Requirement	Proof required
8.4.1	Participants <b>must</b> have been engaged in the relevant area of IT business for a minimum of two (2) years.	Please refer to Section D "Company's Basic Information".
8.4.2	Participants <b>must</b> submit the Company's Basic Information, along with all required supporting documents, as outlined in Section D "Company's Basic Information".	Please refer to Section D "Company's Basic Information".
8.4.3	The bidder <b>must</b> have successfully completed at least one (1) OMS implementation.	The bidder shall provide an implementation or completion certificate issued by the client, clearly indicating the Exchange name, Matching Engine name, and connectivity protocols used.
8.4.4	The Bidder <b>must</b> complete the project, including Go-Live, within six (6) months from the date of signing the agreement.	The Bidder shall submit a detailed project implementation plan demonstrating that Go-Live will be achieved within six (6) months from the date of signing the agreement.

### 9 Standard Terms and Conditions

- 9.1 Proposal Submission Format: Bidders shall submit their proposals strictly in the format prescribed in this RFP and in full compliance with the requirements set forth herein.
- 9.2 Language and Documentation: All proposals, including designs, documents, information, correspondence, and test reports (where applicable), shall:
- be submitted in the English language; and
  - comply with the formatting and nomenclature requirements specified in this RFP
- 9.3 Bidding terms and conditions
- 9.3.1 Proposals shall remain valid for a minimum period of six (6) months from the proposal submission deadline. DSE reserves the right to extend this validity period with prior written notification to bidders.
- 9.3.2 Bidders shall ensure that their proposed solutions comply with all applicable laws and regulations of the People's Republic of Bangladesh.
- 9.3.3 DSE reserves the right, at its sole discretion, to accept or reject any or all proposals, in whole or in part, without assigning any reason whatsoever. DSE may also invite one or more bidders for clarification, negotiation, or consortium formation, in a manner consistent with transparency, fairness, and the applicable laws of Bangladesh.



9.3.4 Both the Bidder and DSE shall comply with all applicable laws, rules, and regulations of the People's Republic of Bangladesh in connection with the bidding process and the performance of the Contract.

#### 9.4 Communications

9.4.1 From the time the proposals are submitted until the contract is awarded, if any Bidder wishes to contact DSE on any matter related to its proposal, it should do so in writing or email at the address mentioned in this proposal.

9.4.2 All communications relating to this Contract shall be in writing or email and may be delivered:

- by authorized contact person officially, received through the letter or email receiving process of DSE
- All such communications shall be deemed effective only upon formal acknowledgment of receipt by DSE.

#### 9.5 Amendments to RFP

9.5.1 DSE reserves the right to amend this RFP at any time prior to the submission deadline. Changes will be circulated over e-mail for those who already have the submitted Letter of Interest (LOI).

9.5.2 At any time prior to the submission deadline, DSE may, for any reason—whether on its own initiative or in response to a clarification requested by a bidder—amend this RFP. Any such amendment shall be issued in writing and communicated via email to all bidders who have submitted a Letter of Intent (LOI). Such amendments shall form an integral part of the RFP and shall be binding on all bidders.

#### 9.6 Clarification

9.6.1 DSE reserves the right to request clarifications or additional information from any bidder. Failure to provide such information within the specified timeframe may result in the proposal being deemed non-responsive

#### 9.7 Technical and financial information

9.7.1 Bidders must demonstrate their technical capability, financial stability, and long-term viability to deliver and support the proposed solution. DSE reserves the right to independently verify such information.

#### 9.8 Contract Execution

9.8.1 Upon acceptance of a proposal, the selected bidder (the "Supplier") shall enter into a formal contract with DSE within the timeframe specified in the Notification of Award (NOA).

9.8.2 Also, must sign a Non-Discloser Agreement (NDA) with DSE

9.8.3 Any modification to the contract shall be valid only if made in writing and duly executed by both parties.

Handwritten signatures and initials in black ink, including a large signature, the letter 'A', and another signature.



## 9.9 References Checks

9.9.1 As part of the proposal evaluation process, DSE may, at its sole discretion, request additional information from the Bidder regarding past projects and experience referenced in the proposal, including contact details of client references. DSE reserves the right to contact such references for verification purposes.

## 9.10 Bidders' acknowledgement

9.10.1 By submitting a proposal, the bidder confirms that it has:

- reviewed and understood the entire RFP;
- accepted all terms and conditions; and
- clearly identified any deviations in its proposal.

## 9.11 Due Diligence

The bidder confirms that it has:

- examined all relevant documents and information provided by DSE; and
- conducted necessary due diligence to assess risks, contingencies, and obligations related to this proposal.

## 9.12 Parties

9.12.1 The Parties to the contract shall be the DSE and the Supplier (selected vendor).

## 9.13 Invoicing and Payment

9.13.1 The Supplier shall submit duly certified invoices, endorsed by an authorized representative, to DSE for payment of approved milestone deliverables and reimbursable cost items. Invoices may be submitted in original or electronic form and must be accompanied by all supporting documentation as specified in this RFP, the Financial Proposal, and the prescribed invoice format.

9.13.2 DSE reserves the right to withhold payment in case of incomplete, incorrect, or unsupported invoices.

## 9.14 Audit and Examination of Records

9.14.1 Upon request, the Bidder shall provide the DSE or its designated entities/persons with access to any materials relevant to the Contract, including the following:

- electronic documents.
- financial books.
- printed documents.
- papers / literatures / brochure; and
- other records which document transactions related to the Contract.
- Such access shall be subject to reasonable prior notice and confidentiality obligations.

## 9.15 Confidentiality

9.15.1 The Bidder shall not, during the performance of the Services, the term of the Contract, or at any time thereafter, disclose to any third party any information obtained in connection with



the Contract relating to the Services, the Contract, or the operations of DSE, without the prior written consent of DSE.

9.15.2 The confidentiality obligations shall not apply to information that:

- is publicly available or becomes publicly available other than by reason of the Supplier's default.
- the Supplier is required to disclose by order of a court of competent jurisdiction.

9.15.3 The supplier shall sign the Non-Disclosure Agreement (NDA) before contract signing.

9.16 Arbitration

9.16.1 Any dispute arising out of or in connection with this Tender or the Contract shall, in the first instance, be resolved amicably through mutual negotiations between the parties. If the dispute is not resolved through such negotiations, it shall be finally settled by arbitration in accordance with the Arbitration Act, 2001 of Bangladesh.

9.16.2 The seat of arbitration shall be Dhaka, Bangladesh. The arbitral tribunal shall consist of three (3) arbitrators, with each party appointing one arbitrator, and the two appointed arbitrators jointly appointing the presiding arbitrator. The language of the arbitration proceedings shall be English.

9.17 Law & Jurisdiction

9.17.1 This RFP and any resulting Contract shall be governed by the laws of the People's Republic of Bangladesh. The parties agree to submit to the non-exclusive jurisdiction of the courts of the People's Republic of Bangladesh, unless otherwise mutually agreed in writing in the Contract.

9.18 Force majeure

9.18.1 A Force Majeure Event means any event beyond the reasonable control of the Bidder/Supplier or DSE that prevents or renders impossible the performance of any obligation under the Contract, including but not limited to:

- acts of God, including lightning, earthquakes, floods, storms, explosions, fires, and other natural disasters;
- acts of war (whether declared or not), invasion, acts of foreign enemies, mobilization, requisition, or embargo; or
- acts of public enemies, terrorism, riots, civil commotion, malicious damage, sabotage, rebellion, insurrection, revolution, or military usurpation of power.

9.18.2 Nothing in this clause shall limit DSE's right to suspend or terminate the Contract in accordance with its terms.

9.18.3 The affected party shall notify the other party in writing within seven (7) days of the occurrence of a Force Majeure Event and shall use all reasonable efforts to mitigate its impact.

If the Force Majeure Event continues for a period exceeding ninety (90) days, either party may terminate the Contract by providing written notice to the other party



#### 9.19 Costs and Expenses

- 9.19.1 Except as otherwise expressly provided in this RFP or the Contract, each party shall bear its own costs and expenses incurred in connection with the preparation, submission, and execution of documents related to this RFP and the Contract.
- 9.19.2 All costs associated with the preparation and submission of proposals shall be borne solely by the bidders. DSE shall not be liable for any such costs under any circumstances, regardless of the outcome of the bidding process.

#### 9.20 No Binding Commitment

- 9.20.1 Nothing in this RFP shall be construed as creating any binding contract or obligation (whether express or implied) between DSE and any bidder, unless and until a formal written Contract is duly executed by the parties.

#### 9.21 Intellectual Property Rights

- 9.21.1 Where the use of intellectual property or confidential information is required for the preparation of the proposal or the performance of the Services, the Bidder shall be solely responsible for obtaining all necessary rights, licenses, and approvals for the use of such intellectual property and/or confidential information owned by third parties.
- 9.21.2 The Bidder shall not use any intellectual property or confidential information of DSE for purposes other than the submission of the proposal or the performance of the Services, without the prior written consent of DSE.
- 9.21.3 The Bidder shall protect all intellectual property and confidential information belonging to DSE with due care and in accordance with applicable laws and best industry practices.
- 9.21.4 All deliverables, including but not limited to software, documentation, designs, and related materials, produced under the Contract shall become the exclusive property of DSE, unless otherwise expressly agreed in writing.

#### 9.22 Conflict of Interest

- 9.22.1 The Bidder represents, warrants, and undertakes on a continuing basis that neither it nor its employees, agents, affiliates, or subcontractors has or shall have any arrangement, interest, activity, or relationship—whether direct or indirect, financial or otherwise—that could give rise to an actual, potential, or perceived conflict of interest, or otherwise impair the Bidder's ability to act independently, objectively, and in the best interests of DSE in the performance of the Services.

The Bidder shall promptly disclose in writing to DSE any such actual or potential conflict of interest upon becoming aware of it.

Without limitation, a conflict of interest shall be deemed to exist where the Bidder or its related parties:

- (a) has any direct or indirect ownership, financial interest, or control in any TREC Holder, broker, vendor, or service provider participating in or affected by the proposed OMS;





- (b) is engaged in design, development, implementation, operation, or maintenance of any competing trading system, order management system, or matching engine directly or indirectly interfacing with DSE systems, where such engagement may compromise independence or neutrality;
- (c) provides advisory, consultancy, audit, integration, or technical services to any entity whose interests may conflict with DSE's interests under this RFP;
- (d) has access to confidential, privileged, or non-public information obtained through any prior engagement with DSE or its ecosystem participants that may provide an unfair advantage in the bidding process or implementation; or
- 9.22.2 The Bidder shall promptly disclose to DSE, in writing, any actual, potential, or perceived conflict of interest immediately upon becoming aware of such conflict, whether arising before or during the bidding process or during execution of the Contract. Such disclosure shall contain reasonable details of the nature of the conflict and the proposed measures for its mitigation or resolution.
- 9.22.3 Where any actual, potential, or perceived conflict of interest is identified, reasonably suspected, or disclosed, DSE may, at its sole discretion, require the Bidder to implement appropriate corrective and mitigation measures, including establishment of information barriers, segregation of teams and resources, withdrawal from conflicting engagements, replacement of concerned personnel, or adoption of a conflict management plan acceptable to DSE. Failure to adequately disclose, resolve, or mitigate such conflict within the timeframe specified by DSE may result in rejection of the proposal, disqualification of the Bidder, or termination of the Contract, as applicable.
- 9.22.4 The purpose of this clause is to ensure independence, neutrality, transparency, fairness, and integrity in the procurement process and to protect the integrity, security, and operational reliability of the capital market infrastructure and systems of Dhaka Stock Exchange PLC.
- 9.22.5 DSE shall have the absolute right, at its sole discretion and without incurring any liability, to reject any proposal, disqualify any Bidder, suspend or terminate the procurement process, terminate any resulting Contract, or take any other appropriate action, if any actual, potential, or perceived conflict of interest exists, arises, remains unresolved, or is not properly disclosed. The obligations and undertakings under this clause shall remain valid and binding throughout the bidding process, during the term of the Contract, and thereafter to the extent applicable.
- 9.22.6 DSE shall have the absolute and unfettered right, at its sole discretion and without incurring any liability, to suspend the RFP/procurement process, reject any bid, disqualify the Bidder, terminate the RFP, or terminate any resulting Contract, or take any other action it deems appropriate, if any actual, potential, or perceived conflict of interest arises or is suspected. Failure to disclose such conflict shall constitute a material breach of the Contract. Where DSE directs the Bidder to take corrective action to eliminate or mitigate such conflict, the Bidder shall promptly comply at its own cost. In the event of non-compliance, DSE may take appropriate remedial actions, including termination and/or blacklisting of the Bidder,



without prejudice to any other rights or remedies available under applicable law or the Contract.

9.23 All terms and conditions set forth in this RFP are subject to final review, modification, and approval by DSE, and shall become binding only upon the execution of a formal written Agreement by the parties.

DSE reserves the absolute right, at its sole discretion, to amend, vary, or withdraw any terms at any stage prior to the execution of such Agreement, without incurring any liability.

No rights, obligations, or legal relationship shall arise between DSE and any bidder unless and until the Agreement is duly executed by both parties.

## 10 Proposal Submission and Opening

### 10.1 Basic steps:

10.1.1 Bidders shall submit their proposals in the prescribed format specified in this Request for Proposal (RFP) document.

10.1.2 There shall be no public opening of proposals.

10.1.3 DSE reserves the right, at its sole discretion, to accept or reject any or all proposals, in whole or in part, without assigning any reason whatsoever.

10.1.4 DSE may, at its discretion, invite only responsive bidders for technical and/or financial clarifications and negotiations.

### 10.2 Submission of proposals

10.2.1 The Bidder must submit two separate emails for Technical Proposals and Financial Proposal to the email [dse.proc@dse.com.bd](mailto:dse.proc@dse.com.bd) in pdf format.

10.2.2 All communications related to this tender shall be conducted through the above-mentioned email address.

10.2.3 The subject lines of the emails shall be as follows:

- **Technical Proposal:** "Technical Proposal for DSE Exchange-Hosted Order Management System (OMS) – for Service fee model"
- **Financial Proposal:** "Financial Proposal for DSE Exchange-Hosted Order Management System (OMS) – for Service fee model"

10.2.4 Both Technical and Financial Proposal files shall be password-protected. The passwords shall be shared only upon request by DSE, through the same email address ([dse.proc@dse.com.bd](mailto:dse.proc@dse.com.bd)) and in accordance with DSE's instructions.

10.2.5 Bidders shall submit proposals using their official company domain email addresses. Proposals submitted from personal or non-official email accounts may be rejected.

10.2.6 If the email size exceeds DSE's acceptable limit (i.e., 15 MB), bidders may submit the documents via a secure cloud-sharing platform (e.g., Google Drive or the bidder's own cloud service), ensuring that appropriate access permissions are granted to DSE.



## 11 Proposal Evaluation Method

- 11.1 The purpose of the evaluation process is to ensure that DSE awards the Contract to the most qualified and responsive bidder, offering the best value in terms of technical capability, service quality, and overall commercial viability.
- 11.2 Evaluation shall be conducted in accordance with the criteria and methodology defined in this RFP. All proposals will undergo a detailed and comprehensive assessment by the designated Evaluation Committee.
- 11.3 Evaluation Process:
- 11.3.1 **Step 1:** "Eligibility and Prequalification Compliance" assesses bidders' compliance with all eligibility and prequalification requirements specified in this RFP.
- 11.3.2 **Step 2:** "Technical and Service Evaluation" evaluates bidders' technical proposals, solution architecture, service approach, and overall compliance with the functional and technical requirements.
- 11.3.3 **Step 3:** "Financial Evaluation" opens and evaluates financial proposals of only those bidders who are deemed technically responsive.
- 11.3.4 DSE may, at its sole discretion, conduct technical and/or financial negotiations with one or more responsive bidders.
- 11.4 Compliance of the proposed solution shall be assessed strictly against the specifications, requirements, and terms and conditions set out in this RFP.
- 11.5 Technical evaluation shall be conducted based on compliance and responsiveness to administrative, eligibility, and technical requirements, as detailed in the Scope of Work and related sections.
- 11.6 Bidders shall be required to deliver a presentation and/or demonstration of their proposed solution to the Evaluation Committee. This presentation shall form part of the Technical and Service Evaluation. The schedule and format of the presentation will be communicated by DSE.
- 11.7 Only the financial proposals of bidders who meet all mandatory ("must") eligibility and technical requirements shall be opened and evaluated. Financial proposals of non-responsive bidders may remain unopened and will not be considered
- 11.8 Cancellation of RFP
- 11.8.1 DSE reserves the right, at its sole discretion, to cancel the RFP process at any stage, where justified. Bidders will be notified accordingly. DSE shall not be obligated to provide reasons for such cancellation.

## 12 Financial Proposals

- 12.1 Instructions to Bidders



- 12.1.1 The Financial Proposal shall be prepared using the standard forms provided in section B "Financial Offer Format". It shall include all cost components associated with the proposed services, along with a detailed breakdown of such costs. Bidders shall provide itemized pricing wherever applicable.
- 12.1.2 Prices shall be quoted in either Bangladesh Taka (BDT) or United States Dollars (USD) and the exchange rate of the tender closing day will apply for currency conversion.
- 12.1.2.1 **For Local Bidder:** The quoted price should be including all taxes excluding VAT and VAT will be added as a separate line item with applicable rate. Respective VAT and Tax etc. will be applicable as per Bangladesh Government rules and regulation.
- 12.1.2.2 **For Foreign Bidder:** The quoted price should be excluding VAT, Tax, etc. Respective VAT and Tax etc. will be applicable as per Bangladesh Government rules and regulation which will be borne by DSE. If the DTAA (Double Taxation Avoidance Agreement) applies, vendor will comply with that and exchange all the necessary documentations for mutual benefit of WHT (withholding tax).
- 12.1.3 Once submitted, the Financial Proposal shall not be amended, modified, or withdrawn by the bidder.
- 12.1.4 Bidders shall ensure that all financial figures are accurate, complete, and consistent. Arithmetic errors, inconsistencies, or omissions may lead to the proposal being deemed non-responsive.
- 12.2 Important Notes for Pricing:
- A price indicated as "0" or left blank shall be interpreted as included at no additional cost as part of the overall solution.
  - The term "N/A" (Not Applicable) shall indicate that the bidder does not offer or agree to deliver the specified item or service.
  - Bidders must clearly identify any non-deliverable items within the prescribed format.

### 13 Invoices' criteria

Invoices shall be issued to Dhaka Stock Exchange PLC (DSE) and must include the following information:

- Project title and reference number
- Name of the Supplier
- Invoice number and date
- Description of services rendered, including relevant service period/dates
- Charges for the applicable billing period, clearly indicating the currency
- Complete banking details, including bank name, branch name, account holder's name, and account number
- Job completion certificate, as per the payment schedule, duly issued/approved by DSE (ICT)



Invoices shall be processed for payment subject to verification and approval of all required supporting documents by DSE.

## B. Financial Offer Format

- Bidders shall provide service charge in accordance with the guidelines set out in section 12 , and following format:

### 14 Service Fee Model

#### 14.1 Considerable Investment Area (for DC and DR):

#	Area	Description	Responsible	Remark
1.	<b>One-time costs (non-recurring) of OMS Application</b>	Design & Feasibility Study	Supplier	
2.		Development & Customization	Supplier	
3.		Implementation & Deployment	Supplier	
4.		Software License of OMS (Perpetual / one time)	Supplier	
5.		Testing and benchmarking (quality assurance)	Supplier	
6.		Data migration and integration	Supplier	
7.		Training & Knowledge Transfer	Supplier	
8.	<b>Maintenance costs for OMS Application</b>	Annual Maintenance Contract (AMC)	Supplier	
9.		OMS Software License Renewal	Supplier	
10.		Included man days with AMC at least 50 man days per year	Supplier	
11.	<b>System Hardware (includes</b>	Server components with standard warranty. Servers should be brand new.	Supplier	

*[Handwritten signatures and initials]*



#	Area	Description	Responsible	Remark
12.	Production and UAT)	Software and platform licenses for OS, DB, virtualization, containerization and third-party tools or applications, monitoring (infrastructure, system, application, etc.) tools, etc.	Supplier	
13.		Support service and subscription for platform licenses for OS, DB, virtualization, containerization and third-party tools or applications etc.	Supplier	
14.		Server-farm switches and SAN & storage devices and accessories (SFP, Cables etc.) Devices should be brand new.	Supplier	
15.	Co-location at DSE DC and DR	Rack space with power and cooling	DSE	
16.		Network & security devices	DSE	
17.		Internet connection & Required Bandwidth	DSE	
18.		NSP connection & Required Bandwidth	DSE	
19.		Network communication between DC & DR and Required Bandwidth	DSE	
20.		Data backup management	DSE	
21.	System Administration	System Administration, Management and Monitoring	DSE	

*[Handwritten signatures and initials]*



#	Area	Description	Responsible	Remark
22.	and Support-Service	System hardware troubleshooting, problem fixing, replacement, upgrade etc. as and when required, ensuring uninterrupted service and performance standards.	Supplier	
23.		Level-1 support to End-users	DSE	
24.		Level-2 & 3 support services and bug fixing	Supplier	

**Note:** The supplier may use system and software of DSE, if available. However, supplier shall bare the applicable cost.

#### 14.2 Service Fee

14.2.1 The Bidder shall consider all relevant cost components in determining the service fee, based on trade turnover (buy + sell) made by on-boarded users. For estimation purposes, DSE may be assumed to have approximately 240 trading days per year. The proposed fee shall cover usage across all user platforms, including HTML5 compatible browser for desktop (windows, Linux & MAC), Mobile App (Android & IOS), and web applications.

14.2.2 The commission shall be applied based on the single slab within which the total Trade Turnover falls. The applicable slab structure is defined in the table below:

SL	Trade turnover (Buy + Sell) Slab (BDT) Per Trading Day	Service Fee in %	Remarks
1.	up to 3000,000,000		
2.	3000,000,000+ to 5000,000,000		
3.	5000,000,000+ to 8000,000,000		
4.	8000,000,000+ to 12000,000,000		
5.	12000,000,000 and above *		

\* Notwithstanding anything to the contrary, the supplier's fee under the OMS shall not exceed the maximum cap prescribed in BDT, irrespective of the trade value executed.





**Maximum cap in BDT:**

- The above service fee is without applicable VAT & Tax.
- The bidder will mention applicable VAT & Tax in percentage

**14.2.3 Others fee (if any):**

- Additional fees for special functions/features (like dual exchange connectivity)

**15 Payment Terms**

**15.1 Service Fee Model**

Payments will be made as per the table below:

Event	Remarks
15.1.1 Bidders must sign a contract within the schedule mentioned in the Notification of Award (NOA).	
15.1.2 Payment will be made quarterly based on service fee	
15.1.3 The payment term is negotiable and will be finalized before the agreement is signed.	
15.1.4 DSE will deduct applicable VAT and TAX	

**16 Service Level Agreement (SLA)**

16.1 Service Level Agreement (SLA) must be signed with DSE for Software as a Service for Exchange Hosted Order Management System (OMS)

16.2 High level terms and condition of the Service Level Agreement (SLA) are as follows:

#	Section	Description
16.2.1	Purpose and Scope	<ul style="list-style-type: none"> <li>• This SLA defines the service expectations, roles, responsibilities, and performance standards for the Exchange-Hosted Order Management System (OMS) of Dhaka Stock Exchange PLC (DSE).</li> <li>• The system shall maintain a minimum 99.9% annual uptime. The scope includes all infrastructure and services required for OMS operation, including hardware, software, licenses, implementation, configuration, and support, as defined in the <b>section F: "Functional and Technical Requirement" Page # 35.</b></li> </ul>
16.2.2	Definitions and Terminology	<ul style="list-style-type: none"> <li>• <b>Uptime:</b> Percentage of time the system is fully operational and accessible to users.</li> <li>• <b>Downtime:</b> Any period during which the system is unavailable or non-functional.</li> </ul>



#	Section	Description
		<ul style="list-style-type: none"> <li>• <b>Incident:</b> Any event that disrupts or degrades normal service performance.</li> <li>• <b>Resolution Time:</b> Time taken to restore normal service.</li> <li>• <b>Response Time:</b> Time taken to acknowledge and begin addressing an incident.</li> </ul>
16.2.3	Service Objectives	<ul style="list-style-type: none"> <li>• Ensure 99.9% system availability on an annual basis.</li> <li>• Maintain high performance, reliability, and resilience through proactive monitoring and preventive maintenance.</li> <li>• Minimize service disruption through rapid incident response and resolution.</li> </ul>
16.2.4	Roles and Responsibilities	<ul style="list-style-type: none"> <li>• <b>Service Provider (Supplier):</b> Responsible for end-to-end system availability, including infrastructure, software, configuration, monitoring, incident management, and support.</li> <li>• <b>Client (DSE):</b> Responsible for monitoring service performance, reporting issues, and supporting coordination during incident resolution.</li> </ul>
16.2.5	Service Availability and Monitoring	<ul style="list-style-type: none"> <li>• Continuous monitoring of system availability, performance, and health using industry-standard tools.</li> <li>• Availability shall be calculated on a quarterly and annual basis.</li> <li>• Scheduled maintenance shall be communicated at least 48 hours in advance and conducted during low-impact periods.</li> </ul>
16.2.6	Incident Management and Reporting	<ul style="list-style-type: none"> <li>• All incidents shall be logged, tracked, and managed through a formal ticketing system.</li> <li>• Incidents shall be classified based on severity levels: Critical, Major, Minor.</li> <li>• Response and resolution timelines shall be defined and adhered to based-on severity levels.</li> </ul>
16.2.7	Maintenance and Downtime Management	<ul style="list-style-type: none"> <li>• Planned maintenance shall be conducted during non-trading or low-impact hours.</li> <li>• Emergency maintenance shall be communicated promptly with proper justification and impact assessment.</li> </ul>
16.2.8	Performance Reporting	<ul style="list-style-type: none"> <li>• The Supplier shall provide monthly reports covering system uptime, incidents, response/resolution times, and root cause analysis (RCA) for major incidents.</li> </ul>
16.2.9	Penalties and Compensation	<ul style="list-style-type: none"> <li>• Failure to meet SLA commitments, including uptime requirements, shall result in service credits and/or financial penalties, as defined in the Contract.</li> </ul>
16.2.10	Updates & Upgrades	<ul style="list-style-type: none"> <li>• The Supplier shall perform necessary updates and upgrades, including bug fixes, security patches, and compatibility updates, without additional cost to DSE.</li> <li>• Such updates shall be implemented with minimal disruption to services.</li> </ul>

*[Handwritten signatures and initials]*



#	Section	Description
16.2.11	Review of SLA	<ul style="list-style-type: none"> <li>The SLA shall be reviewed annually or as required, based on operational needs, system changes, or regulatory requirements.</li> </ul>

16.3 Support Escalation process:

#	Service	Process
16.3.1	Premier Account Service	The Supplier shall establish a dedicated Premier Account Service team to provide enhanced account management and coordination with DSE. This team shall possess strong domain expertise in capital markets and the Supplier's products, and shall maintain a deep understanding of DSE's systems, processes, and operational requirements.
16.3.2	Level-1 Support Services	DSE shall provide first-level (Tier I) support, including handling basic system and application queries. Issues that cannot be resolved at this level shall be escalated to the Supplier's support team.
16.3.3	Level -2 Support Services	The Supplier shall maintain a dedicated Level II support team to address issues escalated by DSE or Tier I support. This team shall provide technical troubleshooting and resolution for system and application-related issues.
16.3.4	Level -3 Support Services	The Supplier shall designate a Level III support team comprising experts with in-depth knowledge of the system architecture and application. This team shall handle complex issues, perform root cause analysis (RCA), and provide permanent resolutions. RCA reports shall be shared with DSE for all critical and major incidents.

16.4 Response and Resolution Times

Incident Severity	Response Time	Resolution Time	Remarks
<b>Critical</b>	15 minutes	4 hours	If resolution is not achieved within the specified timeframe due to unavoidable circumstances (e.g., complexity, force majeure, or external dependencies), the Supplier shall document the reasons and obtain DSE's approval for any extension.
<b>Major</b>	1 hour	8 hours	Where delays arise due to external dependencies, the Supplier shall provide a temporary workaround to minimize operational impact.
<b>Minor</b>	4 hours	24 hours	For non-critical issues, extended resolution timelines may be agreed upon with DSE, where appropriate.

*[Handwritten signatures and initials]*



- 16.5 The Supplier shall enter into a formal Service Level Agreement (SLA) with DSE and shall comply with its terms throughout the entire service lifecycle. The SLA shall define the expected service levels, performance metrics, monitoring and reporting requirements, as well as applicable remedies, service credits, or penalties in the event that the agreed service levels are not achieved.
- 16.6 The detailed terms and conditions of the SLA shall be finalized and mutually agreed upon at the time of contract execution.

### C. DSE System Metrics

#### 17 Trading System or Matching Engine (ME):

The following figures represent the high-level system volumetric of the Trading System or Matching Engine (ME) of DSE. These parameters shall be considered when designing the capacity and performance of the proposed Order Management System (OMS). It is expected that the OMS vendor will support approximately 50 to 220 brokers and handle up to 30% of the total market orders.

#	Area	Future
		1 to 10 years
1	Maximum Trades per day	1,000,000
2	Maximum Orders per day	2,000,000
3	Peak Order transactions per Second at the Trading Engine	8,000
4	Peak Trades per Second at the Trading Engine	4,000

#### 18 New Order Management System:

The proposed system shall be designed to accommodate projected growth over the next five (5) years, as outlined in the table below:

System Benchmark		
Sl.	Item	Requirement for New OMS
1	Number of Brokers available in the system at present	220
2	Number of user terminals (TWS)	3,000 (Concurrent 80% to 90%)
3	Number of admin terminals to manage users	440 (minimum 2 each broker)
4	Number of RMS terminals	440 (minimum 2 each broker) (Concurrent 50%)

*[Handwritten signatures and initials]*



Dhaka Stock Exchange PLC

Plot # 46, Road # 21, Nikunja -2, Dhaka-1229

System Benchmark		
Sl.	Item	Requirement for New OMS
5	API Connection with Broker Back Office (TREC's)	220
6	Number of Mobile users	100,000 (Concurrent 60% to 70%)
7	Number of investors	1,000,000
8	Investors' Holdings of Securities	20,000,000
9	Maximum number of Orders supported per day	600,000
10	Maximum number of Trades supported per day.	300,000
11	Peak Orders transaction a second supported at peak period	4,000
12	Peak Trades transaction a second supported at the trading engine at peak period	4,000
13	Trading hours in a day	6 (at present 4.5 hours)
14	Trading days in a week	6 (Saturday to Thursday <i>At present 5 days, Sunday to Thursday</i> )
15	Listed Companies (Equity) – Main Board	500
16	Listed Companies (Equity) – SME Board	100
17	Listed Companies – ATB/OTC	100
18	Corporate Bonds	100
19	Government Bonds	400
20	Mutual Funds	50
21	SUKUK	50
22	Indices	20

*Handwritten signature*

*Handwritten signature*

*Handwritten signature*

*Handwritten mark*



### D. Company's Basic Information

Sl.	Item	Feedback	Remark
1	Provide Company Profile		
2	<b>Corporate and Legal Information</b> <ul style="list-style-type: none"><li>• Certificate of Incorporation issued by competent authority (like RJSC in Bangladesh), with shareholding information</li><li>• Memorandum and Articles of Association (latest certified copies)</li><li>• Valid Trade License</li><li>• Company TIN Certificate and VAT/BIN Registration Certificate</li><li>• Detailed CVs of project team members, and formal engagement agreements/commitment letters of such personnel.</li></ul>		
3	<b>Financial Information</b> <ul style="list-style-type: none"><li>• Audited financial statements of the company for the last two (2) to 5 (five) years (including auditor's report and notes to accounts)</li><li>• Latest income tax return acknowledgement/Tax Return Certificate.</li></ul>		

*Handwritten signature*  
*Handwritten signature*  
*Ms. Saha*

*Handwritten signature*  
*Ms. Saha*  
*B*



Sl.	Item	Feedback	Remark
4	<p><b>Litigation, Compliance, and Declarations</b></p> <ul style="list-style-type: none"> <li>Declaration regarding previous or ongoing litigation (civil, criminal, regulatory, bankruptcy, or arbitration) involving the company and/or its directors and sponsors.</li> </ul>		

### E. High-Level Requirement of Exchange Hosted OMS for DSE

The following table is the high-level scope of work for the proposed system, more details will be defined during design study.

Major Area	Description
<b>Deployment and Management</b>	<p>The proposed system should be deployed as Exchange Hosted Order Management System model. The system should be controlled, managed and monitored from exchange level through a single dashboard.</p> <p>The system application updated, upgraded, released management and enforcement of market rules should be managed through the central dashboard at exchange level.</p> <p>The system should be deployed in both DC and DR sites in parallel at Dhaka city.</p>
<b>Necessary Features</b>	<p>The system should have</p> <p>Multi-exchange connectivity with smart order routing features.</p> <p>Multi-asset classes (Equity – Main Board, ETFs, Bonds - yield based, Financial Derivatives, Corporate Bond, Sukuk, Indices, etc.);</p> <p>Multiple Windows (Normal/Regular, Spot, Block, Cross Deal, Negotiated Deal, Auction, Buy in Auction, Foreign, Bond, Mutual Fund, SME, ATB/OTC etc.) .</p>

*[Handwritten signatures and initials]*



Major Area	Description
<b>External Interfaces &amp; Gateways</b>	The system should be capable to integration with through API Exchange Trading/Matching engine Exchange News Feed and other system Broker Back-office Banks, MFS Clearing house, depository Risk Management System Mobile APP
<b>User Interfaces</b>	The system should support a comprehensive range of user interfaces and access channels, including Trader Terminals, Dealer Terminals (for Proprietary Traders), Mobile Applications, View-Only Terminals, RMS Manager, Broker-Level Administrative Terminals, Exchange Administrative Terminals, and other relevant modules. The solution must also provide HTML5-compatible browser-based access and web applications supporting desktop environments across Windows, Linux, and Mac OS platforms.
<b>Interfaces Investor</b>	Online interface for investor for enrolment. Web base terminal for trading Mobile APP ( <b>Android &amp; iOS</b> ) for trading Real time fund management by the investor
<b>User Hierarchy (Type)</b>	The system should support multi-level user hierarchy: Broker, Branch/Sub-Broker, Team/Group, Dealer/Trader, End Client, RMS Manager, Admin levels etc.
<b>User Accessibility</b>	The system should support user management, role & privilege management, access control, password management, and login hierarchy along with different types of restriction rules (like transaction, board, market, order, customized rule etc.).
<b>Trading Parameters</b>	The system should support configurable market parameters—circuit breakers, circuit filter, price bands, tick size, lot size, etc.

*Handwritten signatures and initials:*  
A  
Md. Selim  
M



Major Area	Description
<b>Order Management</b>	<p>The system should be unified and web-based platform for TREC-holders (brokers) to submit, validate, route, modify, and track client buy/sell orders directly to the Trading (Matching) Engine, with standardized features including real-time order routing, pre-trade risk management, support for various order types, comprehensive audit trails, mobile app compatibility, and mandatory scalability.</p> <p>The system should support full order lifecycle management: entry, modify, cancel, close-out, audit trail, error handling, pre-trade risk controls.</p>
<b>Order Validity</b>	The system should support Good Till Day, Good Till Date and Good Till Cancel, Good Till Session etc. orders.
<b>Risk Management</b>	<p>The system should support following pre-trade risk control:</p> <ul style="list-style-type: none"><li>- Broker/ Firm limit</li><li>- Trader/Dealer limit</li><li>- Client limit</li><li>- Intraday Cash netting at client level (with customization of rules)</li><li>- Intraday Share/scrip netting at client level (with customization of rules)</li><li>- Mark to market limit</li><li>- Wash Sale control</li><li>- Stop loss order</li></ul>
<b>Graphical User Interface (GUI)</b>	The system should have intuitive and customizable Graphical User Interface (GUI) for dashboard, order management, trading, market depth, charts, ticker tapes, index, account position, and personalized layout and settings.
<b>Real-Time Monitoring</b>	The system should have real-time monitoring dashboards for end users with user status, connection health, order/trade flow, portfolio view, alerts, price/volume charts.
<b>Indices</b>	The system should have real-time and historical index charts, market movements, multiple chart types, analytics, trend indicators etc.
<b>News</b>	The system should display news or announcement in respective terminals Broker/exchange announcements,

*Handwritten signatures and initials:*  
A, Ms. shan, B

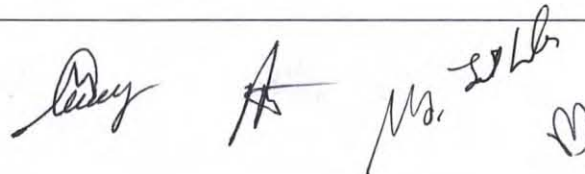


Major Area	Description
	Rich-text format with attachments, URLs etc. Segregation of news based on different criteria Searching and archival of news Print and export news in different format
<b>Market Data Feed Requirements</b>	The system should support market picture, statistics, different levels of Market Depth, top gainers/losers, active securities, re-transmission protocols (Multicast/UDP), compressed/uncompressed messaging.
<b>Reports</b>	Real-time, historical, dynamic reports. Export to PDF/TXT. Export End of Day Report for Broker Back Office or other Systems SMS trade confirmations; alert/message queues.
<b>Data Migration</b>	The system provider should migrate workload and respective data from existing system (OMS) to the new system
<b>Capacity &amp; Performance of proposed OMS</b>	The system should meet DSE volumetric metrics for users, orders per second, trades per second, throughput, latency, transactions per day and performance;
<b>Security Features</b>	The proposed system should be designed with secured architecture for credential policy, authentication, encryption, SSL/TLS, MFA, session management, security controls, safe-guarding measures etc..
<b>System Scalability</b>	The proposed system should ensure modular architecture, scalability, load balancing, support for expansion, OS/DB/app upgrades with minimal or no downtime.
<b>System Availability</b>	The proposed system should support high-availability architecture, failover, on site redundancy at DC and DR. The business operation will be run at DC or DR, and other site will be standby.
<b>Site Synchronization</b>	The proposed system should support synchronization between the Primary Data Center and the Disaster Recovery site; DR drill will be conducted periodically considering the defined RPO and RTO.

*Aditya* *A* *Ms. Saha* *♡*



Major Area	Description
<b>Monitoring &amp; Manageability</b>	The proposed system should have application/service/hardware/network monitoring tools, alert mechanisms, housekeeping, error handling, service continuity metrics.
<b>Audit Trail</b>	The proposed system should have configurable audit trails of all actions, logs for investigations, automated audit processes, field-level configuration.
<b>User Acceptance Test (UAT)</b>	The system provider should provide functional/operational/performance test cases of OMS and test cases for matching integration with engine.
<b>Regulatory Compliance</b>	The proposed system ensures compliance with DSE rules, market regulations, data protection, and national legal requirements.
<b>Implementation Timeline</b>	<p>The proposed system should be implemented by six (6) months (target Go-Live by June 2027) upon signing of the agreement by following all standard processes:</p> <ul style="list-style-type: none"><li>- Design study or requirement analysis</li><li>- Development or customization</li><li>- QA and stress testing</li><li>- System and Application Deployment</li><li>- Training and User Acceptance Testing (UAT)</li><li>- MOCK Run etc.</li></ul>






## F. Functional and Technical Requirement

Bidders must fill up the following tables with appropriate information and submit along with the RFP.

### 19 Proposed Application/Software Description

Sl.	Requirement Information	Description
1.	Name of the Product and Version	
2.	Number of concurrent users (trader) supported by the system	
3.	Number of investor profiles available in the system at present	
4.	Highest Orders per second supported by the system at peak period	
5.	Highest Orders per second Experienced at peak period	
6.	Maximum number of Orders supported per day.	
7.	Maximum number of Orders experienced per day.	
8.	Average number of Orders per second experienced in a day.	
9.	Highest Trades per second supported by the system at peak period	
10.	Highest Trades per second Experienced at peak period	





Sl.	Requirement Information	Description
11.	Maximum number of Trades supported per day.	
12.	Maximum number of Trades experienced per day.	
13.	Average number of Trades per second experienced in a day.	

## 20 Proposed OMS System Architecture

RN	Requirement Information	Feedback	Remarks
1	Please provide the High-level system architecture of the OMS System		
2	Please provide the details architecture of the OMS Application/Software		
3	Data processing model of the OMS		
4	Preferred and Supported Operating system, its version, service pack etc.		
5	Define Operating System Licensing policy in detail.		
6	Preferred and supported Database, its version, service pack etc.		
7	Define Database Licensing policy in detail.		
8	Other related application software(s) (if necessary). (for example, web browser, reporting tool, web container, web server etc..)		
9	Define licensing policy of the other applications		

*Handwritten signatures and initials:*  
A signature, the letter 'A', and the signature 'Ms. Sohan' with a 'B' below it.



RN	Requirement Information	Feedback	Remarks
10	Describe workstation platform (OS, DB etc.) for desktop application		
11	Describe supported browsers like HTML5		
12	Platform dependencies of OMS (if any), specific - hardware, software, or environment the system requires to run.)		
13	Describe different types of deployment available. Which one is recommended in what condition, mention briefly?		
14	Describe message passing architecture of the OMS		

## 21 Capacity and Performance

RN	Requirement Information	Feedback	Remarks
	System should have the following volumetric at a maximum (for most powerful server currently available for running OMS)		
1	Average end to end Latency as per design specification.		
2	Average end to end throughput as per design specification.		
3	Network bandwidth required for data transfer (for different configurations such as desktop and Internet based) <ul style="list-style-type: none"><li>• Between OMS to Trading Engine</li><li>• Between OMS to end user</li></ul>		
4	Provide the benchmarks and stress test report of proposed OMS.		

*Aditya* *AB* *Ms. Isha* *B*



RN	Requirement Information	Feedback	Remarks
5	Solution providers should demonstrate above system capacity by performing stress testing with their supplied data scripts and initial data sets before implementing the system.		
6	Scripts / Tools with solution provider's initial data set for performing benchmarking should be provided to Exchange for periodic benchmarking to gauge the system capacity.		
7	Availability of simulation for performance analysis for different load conditions		
8	Required Onboarding time for new brokers.		

## 22 Network Details

RN	Requirement Information	Feedback	Remarks
1	Please provide schematic network connectivity diagram of the OMS System.		
2	Please describe the Core network capacity: e.g. Fast Ethernet, Giga/10G Ethernet.		
3	Please describe peripheral Network architecture description: to connect users		
4	Please describe Network connectivity between OMS and other users.		
4.1	Used protocols name and type.		

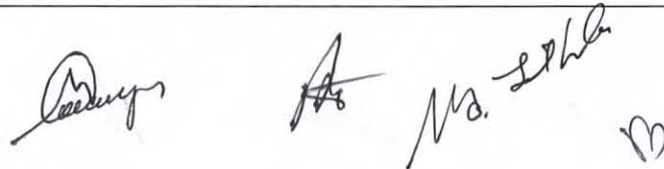
*[Handwritten signatures and initials]*



RN	Requirement Information	Feedback	Remarks
4.2	Packet size for different types of communication: (Order submission/market depth broadcast/news dissemination etc.)		
4.3	Is there any special configuration required for a particular protocol for end-to-end network transmission?		
5	Please describe briefly the error/missing broadcast packets handling mechanism.		
6	Required bandwidth for login between Trader terminal and Central OMS		
7	Required bandwidth for trading operation through a Trader terminal and Central OMS		
8	Required bandwidth for trading operation through a client terminal		
9	Maximum allowable network latency Central OMS and Trader/Client terminal for smooth trading		
10	Broadcast Messaging system between Central OMS and client: Multicast / broadcast for market data		
11	Required bandwidth between DC and DR site connectivity.		

### 23 Security Features

RN	Requirement Information	Feedback	Remarks
1	<b>System Security:</b> System should have high level of security, which includes:		





RN	Requirement Information	Feedback	Remarks
1.1	Describe Authentication Method. (Two factors, encryption standards, password policy, face/finger authentication etc.)		
1.2	Strong encryption of passwords in storage and memory, with international standard password control.		
1.3	During data transmission across the internal network, sensitive data must be encrypted with strong algorithm.		
1.4	Is there encryption of Network traffic between the Core Server and client application?		
2	<b>User Authentication Process</b>		
2.1	Standard Password Policy and customization as per DSE policy		
2.2	In addition to password authentication, System can facilitate End Client Authentication through Two Factor Authentication		
2.3	Standard Policy for change Password		
2.4	System can control multi session/login for a single user		
2.5	System can contain 'SSL (Secure Sockets Layer)' level of security for End Clients login in through Internet Based Trading Platforms		
2.6	<b>User Session Management</b>		
2.6.1	System Supports user auto logoff on interruption of communication		
2.6.2	System should not allow multi session and multi logon for a single user		




*Handwritten signatures and initials:*  
A. M. S. H. B.



RN	Requirement Information	Feedback	Remarks
2.6.3	System supports single session per user for web application		
2.7	Is there any application-level security mechanism? e.g.: Safeguard		

## 24 System Scalability

RN	Requirement Information	Feedback	Remarks
1	Entire system should be modular basis. Please describe it.		
2	Is there any ability of Application to continue to function well when it changes in size or volume in order to meet user need by adding additional hardware?		
3	How does solution provider accommodate any up gradation of OS / DB or the Application itself?		
4	System is scalable to support all activities / functions defined by the exchange from time to time		
5	System is scalable horizontally to support capacity expansion by incrementally adding more partitions or nodes, with minimum impact on latency performance, and without requiring major reconfigurations or changes to system.		
6	System is balanced statically, i.e. load profile is known beforehand and system is configured to follow the profile. As a plus, dynamic load balance mechanism is preferred.		

  Ms. Iphla  




RN	Requirement Information	Feedback	Remarks
7	System is scalable to include more segments in future as and when introduced by the exchange with minimal changes required in the source code and without affecting the performance of the system.		
8	Does the system support the failure of server, service, process and interface etc. without having any interruption to operation?		

## 25 Monitoring and Manageability

RN	Requirement Information	Feedback	Remarks
1	Specify monitoring tools to monitor the health and state of application. System health monitoring may include Service failure message Audit Trail: Please describe the level of auditing Illegal Attempts Heartbeat etc.		
2	Specify monitoring tools to check the health and state of hardware and network. System hardware and network monitoring may include: System resource monitoring Hardware failure messaging Network devices monitoring etc.		
3	Audit trail for system login/application parameters updating/data modification related activities should be provided		

*[Handwritten signatures and initials]*  
A Ms. S.H. B



RN	Requirement Information	Feedback	Remarks
4	The solution provider must provide appropriate backup, restore and recovery procedures and scripts with sufficient details.		
5	Logging of all the activity of the users for monitoring purposes (error finding or any investigations)		
6	System housekeeping features that will backup and clean application logs as well as transaction logs, events and message files, application databases etc.		
7	Down time for maintenance in any		
8	Restrictions on maintenance if any		
9	Unplanned service interruption if any		
10	Describe different types of alerts that can be defined in the system		

## 26 User Acceptance Test

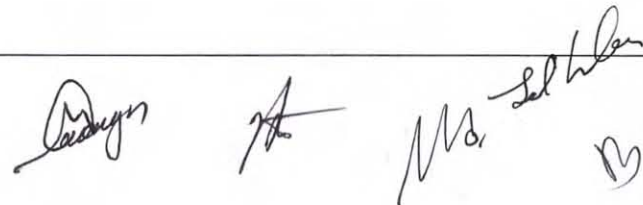
RN	Requirement Information	Feedback	Remarks
1	The solution provider provides all necessary Test Cases (functional, operational and performance) for UAT of OMS		
2	The solution provider capable to provide all necessary Test Cases for UAT with Exchange Matching engine.		

*Asaduzzaman* *Asad* *Md. Idris*  
B





RN	Requirement Information	Feedback	Remarks
	<ul style="list-style-type: none"><li>• Report writing tools for the development of existing &amp; new reports.</li><li>• Impact Analysis</li><li>• End User training (administrative and operational)</li><li>• The vendor is expected to provide training for any other third-party products.</li><li>• Related training for upcoming products as and when required basis</li></ul>		
2	<b>Documentation</b>		
2.1	Solution vendor should provide all type of user manual, Please mention different types of user manuals.		
2.2	Vendors should provide DFD, BRS, SRS, FSD and signed by both parties.		
2.3	Vendor will provide samples of UAT Test cases and feedback forms		
2.4	Please mention Technical documents for User (Operator's Manual and Operator's Reference Guide, Installation & configuration Guide for System and Application, System error code list & description etc.)		
2.5	Does the solution vendor should provide API, SDK specification document along with sample source code.		

Handwritten signatures and initials, including a large signature on the left, a smaller signature in the middle, and the name 'Ms. Selma' followed by a mark resembling a 'B' on the right.



## 28 System Infrastructure Specification for Proposed OMS

RN	Requirement Information	Feedback	Remarks
	Provide detail specification of System Hardware and Infrastructure as per "DSE Metrics for Trading System". <b>Section: C in Page: 27</b>		
1	System deployment platform <ul style="list-style-type: none"><li>• On premises virtual environment</li><li>• On premises bear mental environment</li><li>• Local Cloud</li><li>• Global Cloud</li></ul>		
2	Infrastructure architecture of the proposed system		
3	Total number of Server units: Describe server categories based on activities or services.		
4	Server specification details based on categories: e.g. Processor details, Chipset, RAM, HDD, RAID type, NIC/other interfaces, Expansion slots, PCI Express, Hot plug Devices, Media type etc.		
5	Storage system requirement with required benchmarking		
6	Describe data archival/backup policy and storage media.		
7	Operating system, its version, service pack etc.		
8	Operating System Licensing policy in detail.		





RN	Requirement Information	Feedback	Remarks
9	Database, its version, service pack etc.		
10	Database Licensing policy in detail.		
11	Other related software(s) dependencies (if necessary).		
12	Provide network architecture for deployment of proposed system		
13	End user system or device prerequisite (system specification, OS, Browser and others)		
14	Required bandwidth, latency, protocols, packet size for end users		
15	Messaging protocol (broadcast/multicast)		
16	Required bandwidth latency, protocols, packet etc. for DC and DR site connectivity.		
17	Maximum message size for a packet.		

*[Handwritten signatures and initials]*



## G. Acronyms

Term	Full Form	Detailed Elaboration & Context
AMC	Annual Maintenance Contract	Recurring yearly support and maintenance contract (bug fixes, releases, monitoring, security patches). It can be for 5 or 10 years. Price must be quoted separately and adjusted if broker count changes.
API	Application Programming Interface	Standardized or proprietary interfaces used for: (a) OMS ↔ ME integration, (b) OMS ↔ broker back-office, (c) mobile/web channels. Vendor must provide full API documentation.
DC	Primary Data Center	Main production site in Dhaka where OMS and other systems will be installed and business operation will run.
DR	Disaster Recovery Site	Redundant site (also in Dhaka) where OMS and other systems will be installed as standby. DSE will conduct periodic DR drills based on defined RPO/RTO.
DSE	Dhaka Stock Exchange PLC.	The purchaser and end-client. DSE will host the new OMS centrally, manage it for all brokers, and integrate it with the future new Matching Engine. DSE reserves the right to accept/reject any bid without mentioning the reason.
FAST	FIX Adapted for Streaming	Global standard a binary compression protocol designed to reduce latency and bandwidth for high-volume market data.
FIX	Financial Information Exchange (protocol)	Global standard protocol for real-time order routing and market data.
ITCH	NASDAQ ITCH (proprietary protocol)	Alternative low-latency market-data protocol used by NASDAQ systems.
ME	Trading Engine / Matching Engine	The core system that actually matches buy/sell orders. The present system is X-Stream INET provided by NASDAQ Inc.
OMS	Order Management System (Centralized OMS)	The web-based, Exchange-hosted platform that brokers (TREC-holders) will use to submit, validate, route, modify, cancel, and track client orders to the Matching Engine.
RFP	Request for Proposal	The complete tender document issued by DSE for selecting a vendor to <b>supply, implement, and support</b> a new Exchange Hosted Order Management System. It defines technical, functional, financial, and legal requirements. All proposals must strictly comply with the format, timelines, and clauses in this RFP.
RJSC	Registrar of Joint Stock Companies	RJSC is the <b>Registrar of Joint Stock Companies and Firms</b> , the government authority responsible for registering and regulating companies, partnerships, and societies in Bangladesh. It handles name clearance, incorporation, annual returns, and all legal changes such as director updates or share transfers. RJSC ensures the legal status, transparency, and compliance of all registered business entities in the country.








Term	Full Form	Detailed Elaboration & Context
RMS	Risk Management System	Pre-trade risk controls modules inside the OMS. Mandatory features include broker/firm limits, trader limits, client limits, intraday netting, mark-to-market, wash-sale prevention, stop-loss, etc.
SLA	Service Level Agreement	Legally binding agreement defining service quality. Key metric: <b>99.9% uptime</b> (yearly). Includes incident response/resolution times, penalties, Tier-I/II/III support, and Premier Account Service.
TREC	Trading Right Entitlement Certificate	Official license issued by DSE to brokerage firms (TREC-holders). The new OMS is designed primarily for mid- and small-sized TREC-holders (up to 220 brokers). Large brokers may use their own independent OMS.
TWS	Trader Workstations	Desktop trader terminals to be used by dealers/traders of brokerage houses, including HTML5-compatible browser-based and web application access supporting desktop environments across Windows, Linux, and macOS platforms.
UAT	User Acceptance Test	Formal testing phase of delivered application by end users (DSE and brokers). Vendor must supply all functional, operational, performance, and ME-integration test cases.

Ms. Zahid

~~M. Rahman~~  
Bazilur Rahman  
ESD Incharge