Computer to Computer Link (CTCL)

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CHAPTER 1
Empanelment of ISVs

1.1 Empanelment of ISVs

1.1.1 The Exchange empanels qualified software vendors for providing approved CTCL / IBT / WT / ATF / DMA software to the Members of Exchange. Exchange supports FIX protocol and native (Non-FIX) API to connect to the Exchange Trading Platform.

1.2 Criteria for Empanelment as an ISV

1.2.1 The software vendors desirous of being empanelled with the Exchange as an Independent Software Vendor (ISV) for CTCL / IBT / WT / ATF / DMA would be required to meet the criteria as prescribed in **Annexure 1**.

1.3 Documentation for ISV Application

1.3.1 ISVs seeking empanelment with Exchange shall submit the application, undertaking and other documents as per the checklist given in **Part A – Appendix.**

1.4 Procedure of ISV Empanelment

1.4.1 On receipt of the above duly completed documents and applicable charges, the Exchange will verify the eligibility of the applicant and on meeting requirements of the Exchange / regulatory body(ies), on the acceptance of application the Exchange will provide test credential to test software using exchange API (available on MCX India website).

1.4.2 The ISVs shall ensure that the software developed by them meets the bare minimum requirements/checklist outlined in **Annexure 6** (Reference points while developing Software). On completion of development of CTCL/IBT/WT / ATF / DMA software, the ISV shall test the software on the test environment provided by the Exchange. ISV may request Exchange through official email ID for credentials to access Test Environment. After successful completion of testing on the Exchange test environment, the ISV shall request an appointment to demonstrate the software to the Exchange.

1.4.3 On being satisfied with the demonstration of the software and compliance with Exchange / regulatory body(ies) minimum requirements, the ISV may be empanelled with the Exchange. The Exchange shall specify the software in respect of which such empanelment is given.

1.4.4 In case of version change or customization of the specified software, the ISV shall apply to the Exchange in defined format along with details of changes in the software. The Exchange may approve such application/software after satisfying itself through a demonstration or otherwise as may be specified. Only after approval of the Exchange, ISV shall release the modified software to the Members of the Exchange.

1.5 Other terms and conditions

1.5.1 ISVs empanelled for CTCL solutions would not be required to pay additional charges at the time of empanelment for IBT / WT / ATF / DMA and vice versa.

1.5.2 The Exchange at its discretion may impose additional conditions as it deems fit for the continuous empanelment of ISV from time to time. In the event the empanelled ISVs fails to comply with the conditions so imposed, the Exchange reserves the right to cancel their empanelment.

1.5.3 Without prejudice to the above, the Exchange reserves the right to cancel or modify the empanelment/approval if the need so arises at its sole discretion.

1.6 Enhancement of API Authentication & Security for Exchange Empaneled Vendors and Application Service Providers (ASP's)

The exchange has issued circular on "Enhancement of API authentication & security for exchange empaneled vendors and application service providers (ASP's)" circular no.: MCX/TECH/462/2024 dated July 12, 2024, stating that the Exchange empaneled software vendors and ASP's are required to follow the best practices mentioned in the circular.

1.7 Documentation for approval of New / additional CTCL/IBT/WT/ATF/DMA software/strategy(ies) by Empanelled ISV

1.7.1 Empanelled ISV seeking approval for additional CTCL/IBT/WT/ATF/DMA software/strategy(ies) shall submit necessary documents to Exchange as per **Part A – Appendix**

1.7.2 The empanelled ISV will have to test the CTCL/IBT/WT/ATF/DMA software/strategy(ies) for additional software / strategy(ies) on the test environment provided by the Exchange. ISV may request Exchange through official email ID for credentials to access Test Environment. After successful completion of testing on the Exchange test environment, the ISV shall request an appointment to demonstrate the CTCL/IBT/WT/ATF/DMA software/strategy(ies)to the Exchange.

On being satisfied that empanelled ISV meets the requirement which may be stipulated from time to time by Exchange / regulatory body, the Exchange shall approve the CTCL/IBT/WT/ATF/DMA software/strategy(ies)

1.8 Charges for ISV Empanelment

1.8.1 The charges as mentioned below shall be payable by ISVs

Category	Charges (Non-refundable) plus applicable taxes
Software Vendors who are applying for empanelment for providing CTCL / IBT / WT / ATF solutions using FIX or Non-FIX API provided by the Exchange.	INR.10,00,000/- as one-time charges and INR 2,50,000/- as annual charges.

1.8.2 The ISVs shall pay the annual charges for the first year in advance along with the application. The annual fee shall be calculated on a pro-rata basis from the date of receipt of the ISV's application till the ensuing March 31st for the first year. Any excess amount paid for the first year (on pro-rata basis) shall be adjusted towards annual fees for the next financial year. The annual fee shall be payable by the 30th day of April each year. Interest @ 15% p.a. shall be levied on late payment of the annual fees. Any ISV who wishes to discontinue as Empanelled ISV needs to inform the Exchange before 10th day of April.

CHAPTER 2
Computer-to-Computer Link (CTCL) facility

The Exchange provides a trading front end MCX Trade Station (MTS) for trading to members. The Exchange also allowed Members to use their own software to connect and transact with the Exchange. This facility is called Computer-to-Computer Link (CTCL) facility and is available only to trading members of the Exchange

Members can use their own software customized to meet their specialized needs like provision of on-line trade analysis, risk management tools, integration of back-office operations etc. A member using CTCL can have complete control of the trading operations and provide an effective and efficient service to all its local and remote clients.

Exchange allows Members to use trading services offered by empanelled Application Service Providers (which may inter-alia include providing / maintaining software / hardware / other infrastructure etc.) for providing CTCL Trading / Internet Based Trading (IBT) / Wireless Trading (WT) services to members of the Exchange. Exchange empanelled Application Service Provider (ASP) has setup infrastructure for providing CTCL/IBT/WT services to members of the Exchange.

2.1 CTCL software

Member may procure the CTCL software from the exchange empanelled software vendor or may develop the software in-house or may develop through non-empanelled (third-party) vendors. It may be noted that members are fully responsible for implementing the solution at their end. The exchange shall not be liable for any loss, damage or other costs arising in any way out of the failure of their own system.

2.2 Conditions to be met by Member for providing Internet Based Trading Service

Internet Based trading can take place through order routing systems, which will route client orders, to exchange trading systems, for execution. Members can introduce the service after obtaining permission from Exchanges.

Members seeking permission to offer Internet Based Trading are required to ensure minimum conditions specified by Exchange / SEBI's in its circular. The some of the conditions to be met are:

2.2.1 Networth Requirement

Member must have a minimum net worth of rupees fifty lacs if the member is providing the Internet-based facility on his own. However, if some members collectively approach a service provider for providing the internet trading facility, networth criteria as stipulated by the stock exchange will apply. The networth computation shall be as per methodology prescribed by the Exchange/SEBI from time to time.

2.2.2 Operational and System Requirements

Operational Integrity: The system used by the member has provision for security, reliability and confidentiality of data through use of encryption technology. (Basic minimum-security standards are specified in the following paras). Members must also ensure that records maintained in electronic form are not susceptible to manipulation.

System Capacity: Members maintain adequate backup systems and data storage capacity. The Exchange must also ensure that the brokers have an adequate system capacity for handling data transfer and arranged for alternative means of communications in case of Internet link failure.

Minimum Qualified Personnel**:** The employees working on Internet based trading are required to have a minimum educational qualification of graduate and have NCFM / NISM or equivalent certification.

2.2.3 Risk Management

Members must have a system-based control over the trading limits of clients, and exposures taken by clients. Members must set pre-defined limits on the exposure and turnover of each client.

Member systems should be capable of assessing the risk of the client as soon as the order comes in. The client should be informed of acceptance/rejection of the order within a reasonable period. In case system-based control rejects an order because of client having exceeded limits etc., the member system may have a review and release facility to allow the order to pass through.

Reports on margin requirements, payment and delivery obligations, etc. should be informed to the client through the system.

2.2.4 **Cross Trades**

As in the case of existing system, Member using Internet based systems for routing client orders will not be allowed to cross trades of their clients with each other. All orders must be offered to the market for matching.

In addition to the requirements mentioned above, all existing obligations of the Trading Member as per current regulations will continue without changes.

2.2.5 **Network Security –**

The following security features are mandatory for all Internet-based trading systems:

I. User id
II. First Level password (Private code)
III. Automatic expiry of passwords at the end of a reasonable duration. Reinitialise access on entering fresh passwords.
IV. All transaction logs with proper audit facilities to be maintained in the system.
V. Secured Socket Level Security for server access through Internet
VI. Suitable Firewalls between trading set-up directly connected to and Exchange trading system and the Internet trading set-up.

The following advanced security products are advisable.

a. Microprocessor based SMART cards

b. Dynamic Password (Secure ID Tokens)

c. 64 bit/128 bit encryption **

d. Second Level password (personal information e.g. village name, birth date, bio metric etc.)

**DOT policy and regulations will govern the level of encryption.

2.2.6 **Standards for Web Interfaces and Protocols –**

Between a Trading Web Server and Trading Client Terminals, Interfaces Standards as per recommendations of IETF (Internet Engineering Task Force)

and W3C (World Wide Web Consortium) may be adopted. E.g.: HTTP Ver 4 or above HTML Ver 4/XML.

2.3 Trading using Wireless Technology

2.3.1 Members seeking permission for offering Wireless Trading / Security Trading using wireless Technology (STWT) are required to ensure compliance with the minimum conditions specified in the Exchange and SEBI circular and as amended/updated from time to time

2.3.2 Only SEBI registered brokers who have been granted permission by the Exchange for providing Internet Based Trading shall be eligible to provide securities trading using Wireless Technology.

2.3.3 All relevant requirements applicable to internet-based trading shall also be applicable to securities trading using wireless technology.

2.3.4 Securities Trading using Wireless technology shall include devices such as mobile phones, laptop with data card, etc., that use Internet Protocol (IP).

2.3.5 In addition, Member of the exchange shall ensure complies with the following:

2.3.5.1 There shall be secure access, encryption and security of communication for internet-based trading and securities trading using wireless technology. DOT policy and regulations shall govern the level of encryption.

2.3.5.2 Adequate measures should be taken for user identification, authentication and access control using means such as user-id, passwords, smart cards, biometric devices or other reliable means, to prevent misuse of facility by unauthorized persons.

2.3.5.3 A unique identification number as given in the case of internet-based trading shall be made applicable for securities trading using wireless technology.

2.3.5.4 In case of failure of the wireless network, alternative means of communication for placing orders should be available.

2.3.5.5 Additional provisions specifying possible risks, responsibilities and liabilities associated with securities trading using wireless technology should be incorporated in the Trading Member-Client agreement as an addendum or by bringing to the notice of clients, who are desirous of availing such a facility, and taking their concurrence on the same.

2.3.5.6 As it may not be possible to give detailed information to the investor on a handheld device e.g. mobile phones, it may be ensured by the Trading Member that minimum information may be given with addresses of the Internet web site/web page where detailed information would be available.

2.3.5.7 Order confirmation should be provided to the user on submitting the order. Order modification / cancellation facilities should also be provided. Trade confirmation should be provided to the user, along with the history of trades for the day.

2.3.5.8 Session login details should not be stored on the devices used for internet-based trading and securities trading using wireless technology.

2.3.5.9 Network security protocols and interface standards should be as per prevalent industry standards and sound audit trails should be available for all transactions conducted using wireless devices.

2.3.5.10 Member server routing orders to the exchange trading system shall be located in India.

2.3.5.11 Member should arrange for periodic systems audits of their systems to ensure that requirements specified in the circulars are being met.

2.4 Additional Requirements for Internet Based Trading (IBT) and Wireless Trading / Securities trading using Wireless Technology (WT/STWT)

2.4.1 Members shall comply with the following

2.4.2 The Member shall capture the IP (Internet Protocol) address (from where the orders are originating), for all IBT/ STWT orders.

2.4.3 The Member system should have built-in high system availability to address any single point failure.

2.4.4 There should be secure end-to-end encryption for all data transmission between the client and the broker through a Secure Standardized Protocol. A procedure for mutual authentication between the client and the broker server should be implemented.

2.4.5 The Member system should have adequate safety features to ensure it is not susceptible to internal/ external attacks

2.4.6 In case of failure of IBT/ STWT, the alternate channel of communication shall have adequate capabilities for client identification and authentication.

2.4.7 Two-factor authentication for login sessions may be implemented for all orders emanating using Internet Protocol. Public Key Infrastructure (PKI) based implementation using digital signatures, supported by one of the agencies certified by the government of India, is advisable. Further the two factors in the Two-factor authentication framework should not be the same.

2.4.8 In case of no activity by the client, the system should provide for automatic trading session logout.

2.4.9 Further to the above, the following practice is advisable –

The back-up and restore systems implemented by the Member should be adequate to deliver sustained performance and high availability. The broker system should have on-site as well as remote site back-up capabilities.

2.4.10 There shall be secured access, encryption and security of communication for internet based trading. DOT policy and regulation shall govern the level of encryption.

2.5 Display of Brokerage statutory Regulatory Levies

2.5.1 Exchanges has decided to issue guidelines for display of brokerage, statutory & regulatory levies to be charged by Members.

2.5.2 Exchange has been receiving complaints from various investors alleging that the members are levying brokerage and other charges more than what has been mutually agreed and specified in the tariff sheet. Hence, members are advised to ensure that the client has not been charged more than the agreed rates and is within the maximum prescribed limits. Further, members shall ensure that statutory and regulatory levies recovered from the client are only at actuals paid/payable.

2.5.3 Further, to bring more transparency to investors on the brokerage and other charges being levied by the members, it has been decided in consultation with SEBI and other Stock Exchanges, that the details of the brokerage and charges applicable for the order to be placed shall be prominently displayed on the “Order placement window/screen” under the separate tab called “Charges” on their Internet Based Trading (IBT) / Wireless Trading (WT) applications.

2.6 Display of Last Trading Day on CTCL front-end and Back-office system

2.6.1 Exchange has decided to issue guidelines for display of Last Trading Day on CTCL Front-end and Back-office system.

2.6.2 As per the current process, the Exchange provides scrip master (MCXScrip.bcp) on daily basis on the Member's SFTP.

In the MCXScrip.bcp, the Exchange publishes **Original Expiry Date** and Last Trading Date for each derivative contract, which are same at the time of launch of the contract. If a holiday is consequently declared, which falls on the last trading day of a derivative contract, the Exchange publishes the revised Last Trading Date in MCX Scrip master (MCXScrip.bcp). Member, CTCL vendors and Back-office vendors may note that 'Original Expiry Date' field remains unchanged. Accordingly, the MCXscrip.bcp file generated for subsequent business days holds the revised 'Last Trading Date' until the expiry of the contract. Market participants upload MCX Scrip Master on daily basis in their CTCL application, Internet based application, Mobile Application and also in the back-office software applications, to display the Expiry Date / Last Trading Day to the end client on trading platform and in communications / files from the Back-office system.

It has come to the notice of the Exchange / SEBI that only a few Members / CTCL vendors and Back-office vendors are correctly mapping/displaying the Last Trading Date on its CTCL Front-end exposed to the end clients and the contract note generated from back office system, as applicable. As per the above directions and with an objective that the end clients are having the correct visibility of the revised Last Trading Date at all point in time, Members, CTCL vendors and the Back-office vendors are directed to display the 'Last Trading Date' on applicable screens (where Expiry Date is displayed) on their CTCL application, Internet based application, Mobile Application and the contract note published by the Members to its constituents.

2.6.3 Members using CTCL software / Back office procured from empaneled vendors are also directed to co-ordinate with respective vendors and update their system to comply with the above requirement.

2.6.4 Members / CTCL / Back-office vendors connecting through Open interface (API) may refer to Instrument Master (file name: MCXScrip.bcp) column number 20 i.e. Last trading Date in terms of seconds from 01-01-1970 00:00:00 hrs as provided by the Exchange.

2.6.5 Member /CTCL/Back-office vendors may also refer file format Mcx_ProductMaster.csv column number 24 i.e Product End Date Time and advised to take a note of the above and implement the directions of the circular.

2.7 Implementation of Two Factor Authentication

2.7.1 Members were required to mandatorily implement two-factor authentication on application offered by Members to customers through Internet Based Trading (IBT) and Wireless Technology (WT).

2.7.2 In addition to user ID, Members shall preferably use biometric authentication as one of the authentication factors, along with any one of the below-mentioned factors:

a. Knowledge factor (something only the user knows): - for e.g., Password, PIN.
b. Possession factor (something only the user has): - for e.g., OTP, security token, authenticator apps on smartphones etc. In the case of OTP, the same should be sent to clients through both email and SMS on their registered email ID and Mobile number.

2.7.3 In cases, where biometric authentication is not possible, Members shall use both the aforementioned factors (Knowledge factor and Possession factor), in addition to the user ID, for 2-factor authentication (2FA). It is to be noted that the abovementioned authentication shall be implemented on every login session by the client to IBT and WT

Note:

1. Members should submit all the required documents within six months from date of application.
2. In-case of new application Mock and Simulation participation date shall be considered on/after application date.
3. While submitting the documents on the CTCL Web portal, members should mention the software name and version as mentioned in the application form.
4. Exchange reserves the right to call for additional information / documents / demonstration at any time as it may deem fit.

2.8 **List of authorized mobile applications and social media handles of Trading members:**

List of authorized mobile applications and social media handles of Trading Members, need to be published on the exchange website in HTML format with appropriate links of play store(s) of the respective mobile application (Android / IOS based application). Members have to submit Annexure a, after taking approval from exchange for Wireless trading (WT) facility.

Annexure a

Details of Mobile application/s hosted on Play store / App store and Social Media handles
(On Member Letter Head)

To,

CTCL Department
Multi Commodity Exchange of India Limited
255, Exchange Square,
Suren Road, Chakala,
Andheri (East),
Mumbai – 400 093

Dear Sir/Madam,

Please find details of mobile applications hosted on Play store / App store in Table A and Social media handles in table B.

Table A

Sr. No.	*Member Name*	*Member Code*	*Name of Mobile Application on*		*Approved WT software name with version number*	*Developer Name*	*IOS App link (App Store)*	*Android App link (Google Play Store)*
			Android Play store	*IOS App Store*				

Table B

Sr. No.	*Member Name*	*Member Code*	*Social Media Handles*					
			Facebook	*Instagram*	*X (formerly Twitter)*	*Youtube*	*LinkedIn*	*Others*

In addition, Members must also ensure their mobile application description on the Play store and App store includes the following information.

- Member name:
- SEBI Registration Number:
- Member Code:
- Registered Exchange/s name:

- Exchange approved segment/s:

We certify that all the above information provided by us are true and correct to the best of our knowledge. We undertake to ensure continuous compliance with all the requirements, rules and regulations of the Regulator and Exchange in this regard, as may be issued from time to time.

Signed sealed and delivered by the Authorised representative of the Applicant.

Date
Place
Stamp/Seal:
(valid digital signatures are acceptable)

CHAPTER 3

CTCL / IBT / WT Facility for Members from Empanelled ISVs

3.1 Documentation for CTCL / IBT /WT Procurement from Empanelled ISV

3.1.1 The list of Exchange empanelled ISVs for CTCL / IBT / WT is available on Exchange website **www.mcxindia.com** under Technology Section.

3.1.2 Members desirous of applying CTCL / IBT /WT facility procured from Empanelled ISV, are requested to login to CTCL web portal using existing MCX Integrated portal :– integrated portal. Members are requested to use the existing login ID and Password of MCX Member Profile Interface (MMPI) portal.

The 'CTCL Web Portal - Help File' is available on SFTP in the 'Online Portal Help Files' folder, on the path: https://sftp.mcxindia.com/

3.1.3 Members shall seek approval of the Exchange by submitting required documents as detailed below:-

Type of Software	Required Documents
CTCL	**Part B of Appendix**
IBT / WT	**Part C of Appendix**
Version change of CTCL/IBT/WT	**Part D of Appendix**

Please note that for each type of software separate application should be submitted.

3.1.4 Members desirous of applying CTCL / IBT /WT facility procured from Empanelled ISV are required to submit CTCL/IBT/WT/ATF Undertaking Annexure 13 (one time) and same is required to be submitted in physical form to the Exchange within 10 days of approval, to the below mentioned address:

CTCL Department
Multi Commodity Exchange of India Ltd.
Exchange Square, Suren Road, Chakala,
Andheri (East), Mumbai – 400093, India

3.1.5 The member will have to test the CTCL/IBT/WT software on the test environment provided by the Exchange. For this purpose, Exchange shall provide Test Environment & Simulation Environment credentials and parameters on authorized Email id. The member should ensure that the software procured by them meets the bare minimum requirements/Checklist outlined in Annexure 14. Members are required to sign and provide the checklist as confirmation of necessary testing.

3.1.6 As part of the testing process, Members are also required to participate in a mock / simulated trading environment provided by the Exchange.

3.1.7 The software and system proposed for CTCL by the members shall be duly certified by a system auditor. Members applying for IBT / WT shall submit the System Audit Report and Certificate as specified in the table below which are required to be submitted by the member.

Type of Software	Audit Report	Auditor Certificate
CTCL	-	Annexure 28
IBT / WT	Annexure 27	Annexure 28
Version change / Additional IBT/WT Product	-	Annexure 28

3.1.8 On being satisfied with documentation of the proposed software and compliance with Exchange / regulatory body(ies) minimum requirements, the Exchange shall approve the said software to use.

3.1.9 The above procedure will be applicable for first time approval to members and for Vendor change for their respective CTCL/IBT/WT facility.

3.1.10 For change of version in the existing approved CTCL/IBT/WT software, member has to submit the documents mentioned in **Part D of Appendix.**

3.2 Periodic System Audit & CSCR Audit of CTCL / IBT / WT systems

Members using CTCL / IBT / WT facility shall ensure that the periodic audit report is submitted as may be specified by the Exchange from time to time and covers compliance of all requirements mentioned by SEBI and Exchange in the in the Master Circular-Member Technology Compliance

3.3 Charges for Using CTCL / IBT / WT Facility Procured from Empanelled ISV

No charges are payable by Members to the Exchange for procuring approved CTCL / IBT / WT software from empanelled ISVs.

3.4 Implementation of Two Factor Authentication

Members availing for CTCL facility from vendors are required to refer Section 2.7 of Chapter 2 related to CTCL Compliance

3.5 Display of Brokerage statutory Regulatory Levies

Members availing for CTCL facility from vendor are required to refer Section 2.5 of Chapter 2 related to CTCL Compliance

3.6 Display of Last Trading Day on CTCL front-end and Back-office system

Members availing CTCL facility from vendor are required to refer Section 2.6 of Chapter 2 related to CTCL Compliance.

CHAPTER 4

In-House Development of CTCL / IBT / WT Software by obtaining API from Exchange or from empanelled vendor

4.1 Documentation for In-House CTCL/IBT/WT Software Application by Member

4.1.1 Member desirous of applying for CTCL facility that is Computer to Computer Link (CTCL) / Internet Based Trading (IBT) / Wireless Trading (WT) software developed In-house or through Non-Empanelled Vendor using Non-FIX / FIX API provided by the Exchange

OR

4.1.2 CTCL / IBT / WT software developed In-house using API provided by the Empanelled Vendor are now required to submit Annexure 22 over email and thereafter member can login to CTCL Web Portal using existing MCX Integrated portal – integrated-portal and submit the application through CTCL web portal.

4.1.3 Members are requested to use the existing login ID and password of MCX Member Profile Interface (MMPI) Portal

4.1.4 Members desirous of applying CTCL / IBT /WT facility are required to submit CTCL/IBT/WT/ATF Undertaking Annexure_20 (one time) and same is required to be submitted in physical form to the Exchange within 10 days of approval, to the below mentioned address:

CTCL Department
Multi Commodity Exchange of India Ltd.
Exchange Square, Suren Road, Chakala,
Andheri (East), Mumbai – 400093, India

4.1.5 Application should be digitally signed and submitted along with other documents mentioned below:

Type of Software	Required Documents
CTCL	**Part E of Appendix**
IBT / WT	**Part F of Appendix & Part G of Appendix**

4.2 Approval to Member

4.2.1 Members shall be fully responsible for the development and testing of the software. They shall make the CTCL/IBT/WT set up ready at their offices/branch offices which include software, hardware and network.

The member will have to test the CTCL/IBT/WT software on the test environment provided by the Exchange. For this purpose, Exchange shall provide Test Environment & Simulation Environment credentials and parameters on authorized Email id. The member should ensure that the software developed meets the bare minimum requirements/checklist outlined in Annexure 14**.** Members are required to sign and provide the checklist as confirmation of necessary testing.

4.2.2 As a part of testing process, Members are also required to participate in mock / simulated trading environment provided by the Exchange.

4.2.3 The software and system proposed for CTCL by the members shall be duly certified by a system auditor. Members applying for IBT/WT shall submit the System Audit Report and Certificate as specified in table below which are required to be submitted by the member.

Type of Software	Audit Report	Auditor Certificate
CTCL	-	Annexure 28
IBT / WT	Annexure 27	Annexure 28

4.2.4 In case of version change in the existing approved CTCL/IBT/WT software, member has to submit the documents mentioned in **Part D of Appendix**

4.3 Charges for In-House Development of CTCL/IBT/WT Software:

4.3.1 The charges as mentioned below shall be payable by members:

Category	Charges (Non-refundable) plus applicable taxes
Members who are applying for developing in-house CTCL / IBT / WT solutions using Non- FIX API and/or FIX API provided by the Exchange.	Rs. 1,50,000/- as one-time Charges and Rs. 50,000/- as annual charges.

4.3.2 The members shall pay the annual charges for the first year in advance along with the application. The annual charges shall be calculated on a pro-rata basis from the date of receipt of the member's application till the end of March 31st for the first year. Any excess amount paid for the first year (on pro-rata basis) shall be adjusted towards annual charges for the next financial year. The annual charges shall be payable by 30th April each year. Interest @15% p.a. shall be levied on late payment of the annual fees. Any Member who wishes to discontinue in-house facility should inform to the Exchange before 10th day of April.

4.4 Periodic System Audit & CSCR Audit of CTCL / IBT / WT systems

Members using CTCL / IBT / WT facility shall ensure that the periodic audit report is submitted as may be specified by the Exchange from time to time and covers compliance of all requirements mentioned by SEBI and Exchange in the Master Circular-Technology Compliance.

4.5 Implementation of Two Factor Authentication

Members are required to refer Section 2.7 of Chapter 2 related to CTCL Compliance

4.6 Display of Brokerage statutory Regulatory Levies

Members are required to refer Section 2.5 of Chapter 2 related to CTCL Compliance

4.7 Display of Last Trading Day on CTCL front-end and Back-office system

Members are required to refer Section 2.6 of Chapter 2 related to CTCL Compliance

CHAPTER 5
Algorithmic Trading Facility (ATF)

5.1 Algorithmic Trading Facility (ATF)

5.1.1 The Exchange allows Algorithmic (Algo) Trading for placing orders on the trading system of the Exchange subject to the terms and conditions mentioned in this chapter. Algorithmic Trading (hereinafter referred to as "Algo") means "Any order that is generated using automated execution logic." Or mean any software or program facility by the use of which, upon the fulfillment of certain specified parameters, without the necessity of manual entry of orders, buy/sell orders are automatically generated and entered by the software/ program facility through CTCL software into the Trading System of MCX.

5.2 Documentation by Member for Algo through Empanelled ISV

5.2.1 The list of Exchange empanelled ISVs for ATF Strategy is available on Exchange website **www.mcxindia.com** under Technology Section.

5.2.2 Members desirous of using 'Approved Strategy' of empanelled ISV shall apply to Exchange through CTCL Web Portal using existing MCX Integrated portal – integrated-portal.

5.2.3 Members are requested to use the existing login ID and password of MCX Member Profile Interface (MMPI) Portal

5.2.4 Application should be digitally signed and submitted along with other documents as mentioned in **Part I of Appendix**.

5.2.5 Annexure 13 – CTCL/IBT/WT/ATF/DMA Undertaking (one time) is required to be submitted in physical form to the Exchange within 10 days of approval, to the address: CTCL Department, (Multi Commodity Exchange of India Ltd, Exchange Square, Suren Road, Chakala, Andheri (East), Mumbai – 400093, India)

5.3 Documentation by Member for In-House Algo Software

5.3.1 Member desirous of developing In-House Algo software using Non FIX API provided by the Exchange or procuring/developing ATF software from non-empanelled vendors are requested to first submit Annexure 22 over email and thereafter can login to CTCL Web Portal using existing MCX Integrated portal – https://integrated.mcxindia.com/.

5.3.2 Members are requested to use the existing login ID and password of MCX Member Profile Interface (MMPI) Portal

5.3.3 Application should be digitally signed and submitted along with other documents as mentioned in **Part J of Appendix.**

5.3.4 Members are required to submit CTCL/IBT/WT/ATF/DMA Undertaking Annexure 20 (one time) and same is required to be submitted in physical form to the Exchange within 10 days of approval, to address: CTCL Department(Multi Commodity Exchange of India Ltd ,Exchange Square, Suren Road, Chakala, Andheri (East), Mumbai – 400093, India)

5.4 Charges for In-house development of Algo Software

5.4.1 The charges mentioned below shall be payable by members:

Category	Charges (Non-refundable) plus applicable taxes
Members who are applying to develop in-house ATF solutions using Non-FIX API and/or FIX API provided by the Exchange.	Rs. 1,50,000/- as one-time Charges and Rs. 50,000/- as annual charges.

5.4.2 Members who already have Application Programming Interface (API) provided by Exchange for In-House CTCL development can use the same API for developing Algo without additional charges, after submitting the documents mentioned above.

5.4.3 The members shall pay the annual charges for the first year in advance along with the application. The annual charges shall be calculated on a pro-rata basis from the date of receipt of the member's application till the end of March 31st for the first year. Any excess amount paid for the first year (on pro-rata basis) shall be adjusted towards annual charges for the next financial year. The annual charges shall be payable in by 30th April each year. Interest @15% p.a. shall be levied on late payment of the annual fees. Any Member who wishes to discontinue in-house facility should inform to the Exchange before 10th day of April.

5.5 Approval to member for Algo Facility

5.5.1 The member will have to test the Algo software on the test environment provided by the Exchange. For this purpose, a User Id on the test environment should be requested from the Exchange via authorised email id**.** The member should ensure that the software developed meets the bare minimum requirements/checklist outlined in **Annexure 14.** Members are required to sign and provide the checklist as confirmation of necessary testing.

5.5.2 As a part of testing process, Members are also required to participate in mock / simulated trading environment provided by the Exchange.

5.5.3 The software and system proposed for Algo by the member shall be duly certified by a system auditor (Annexure 28) which is required to be submitted by the member.

5.5.4 Exchange may require a demonstration of the Algo software developed In-house before granting approval. Members shall arrange to provide a demonstration of the Algo software developed In-house, after taking an appointment. During the demonstration, the Exchange may check for conformance with such parameters as it may deem relevant including those laid by Exchange / any other regulatory body(ies). After successful demonstration of the software and on being satisfied with the documents submitted by the member, Exchange may grant permission to Member for the usage of Algo facility.

5.5.5 Further, it is mandatory for members to participate in periodic Mock Trading sessions conducted by Exchange using all User Ids approved for Algo trading, irrespective of the algorithm having undergone change or not. In case the member fails to participate in such mock trading sessions, the Exchange shall call for reasons for non-participation and if the reason is found to be unsatisfactory, the Exchange shall suspend the proprietary trading rights of the member for a minimum period of one trading day.

5.5.6 After obtaining approval to use Algo, the members shall install the Algo Software as approved by Exchange only at the location approved by the Exchange and after ensuring that all the requirements stipulated by the Exchange / regulatory body(ies) in this regard have been complied with.

5.6 Modifications in Approved Algo Software

5.6.1 In case of version change in the existing approved CTCL/IBT/WT software, member has to submit the documents mentioned in **Part D of Appendix**

5.7 Periodic System Audit & CSCR Audit of Algo system

Members using ATF/Algo facility shall ensure that the periodic audit report is submitted as may be specified by the Exchange from time to time and covers compliance of all requirements mentioned by SEBI and Exchange in the Master Circular-Technology Compliance

5.8 Conditions for use of Algo system

5.8.1 Members may use Algo subject to the following and other conditions as may be specified by the Exchange / Regulatory body(ies) from time to time.

5.8.1.1 Member shall use Algo facility only with the prior permission of the Exchange and only at the location approved by the Exchange.

5.8.1.2 All algo orders shall be placed through the specified CTCL id allotted and approved by the Exchange and not to place any algo order from any other User Id.

5.8.1.3 Clear classification of algo orders by identification flag as specified by the Exchange is used in their algo orders as specified in Chapter 6.

5.8.1.4 Orders of their clients are routed through member servers only and client orders are not placed directly to the Exchange system.

5.8.1.5 The strategies which are approved by the Exchange for placing algo orders are only used and Members should not send any algo order which is not conducive to efficient price discovery or fair play.

5.8.1.6 IOC (Immediate or Cancel) algo order shall not be placed from ATF software.

5.8.1.7 Market orders shall not be allowed to be placed using ATF and only Limit Order will be allowed to place using ATF.

5.8.1.8 Members who are using ATF software are required to incorporate at least following order level risk controls at the individual order level and client level in their ATF software before releasing the algo order to the trading system of the exchange:

Daily Price Range (DPR) check or Daily Price Limit: - The price quoted in the order shall not violate the DPR limit or Daily Price limit as defined in the contract specification or any other limit specified by the Exchange from time to time.

Maximum Order Size: - The quantity quoted in the order shall not violate the maximum order size limit as defined in the contract specification from time to time.

Position Limit: - The quantity quoted in the order shall not violate the position limits of the client/member level as defined in the respective commodity contract specification/specified by the Exchange / regulatory body(ies) from time to time.

Market Price Protection: - All algo orders released to the Exchange trading system should have a price limit which is a pre-set percentage of LTP within the daily price limit or any other price limit as may be defined by the Exchange from time to time.

Algo Identifier: All algo orders shall be tagged with a unique identifier (strategy ID) provided by the Exchange and the Member shall keep all data / trigger points and logs of all trading activities to facilitate the audit trail.

Automated Execution Check: An algo shall account for all executed, unexecuted and unconfirmed orders placed by it before releasing any further order/s. Further, Members shall have a real-time monitoring system to identify dysfunctional algo. The algo system shall have pre-defined parameters for automatic stoppage in the event of algo execution leading to a loop or runaway situation.

Order Value Check: Algo orders shall not be released in breach of the 'value per order' as defined by the Exchange.

Cumulative Open Order Value Check: The individual client level cumulative open order value check as may be prescribed by the member for the clients and Algo orders shall not be released in breach of the same. Cumulative open order value for a client is the total value of its unexecuted orders released from the members' system.

5.8.1.9 Members have to put in place a real-time monitoring system to identify algorithms that may not behave as expected and take measures to impede any possible instances of order flooding by ATF software. Further, Members shall inform to the Exchange of any such incidents on immediate basis.

Further, in order to ensure orderly trading in the market and fair usage of the trading platform for all Members, following daily order-to-trade-ratio with economic disincentive (Charges) is prescribed by the Exchange.

Member wise - Daily Order-to-Trade Ratio	**Charges (Per Order)**
Up to 50	NIL
More than 50 to less than 250 (on incremental basis)	1 paise
More than 250 to less than 500 (on incremental basis)	5 paise
500 or more than 500 (on incremental basis) *	5 paise

* In case the ratio is 500 or more than 500 during a trading day, the concerned member shall not be permitted to place any order for the first 15 minutes on the next trading day (in the continuous trading session) as a cooling off action. However, the trading member shall be permitted to enter transactions in risk reducing mode during such a cooling off period. For the purpose of calculation of daily Order-to-Trade ratio, all algorithmic order, i.e. order entry, order modifications and order cancellations shall be considered.

It may further be noted that:
The algorithmic orders entered and/ or modified within 1% of the last traded price (LTP) of the respective contract shall not be included in the calculation of the aforesaid order-to-trade ratio, viz. ((Absolute (Limit price – LTP)/LTP) <= 1%).

The above penalty structure is applicable for only those members who have placed 10,000 algorithmic orders or more in a day.

5.8.1.10 ATF software should have control feature to restrict the Algo order place a limit on the numbers of orders per second from a particular CTCL ID/ATS User-ID not exceeding one hundred and twenty (120) orders per second or any number as prescribed by Exchange from time to time and there will be economic disincentives for number of Algo orders exceeding

120 orders per second (as mentioned below). Compliance with the limit of 120 OPS set by a particular CTCL ID/ATS User-ID shall be measured over a rolling period of five seconds (i.e., 5X orders for 0th – 5th second, 5X orders for 1st-6th second, 5X orders for 2nd to 7th second and so on).

5.8.1.11 ATF software should have control feature to restrict the Algo orders from a particular CTCL ID / ATS User Id not exceeding 120 orders per second.

Orders per rolling period of five seconds	Economic Disincentive
601–750	Rs.10 per instance
751–1250	Rs.10 per instance
1251 & Above	Rs.10 per instance

5.8.1.12 The Exchange has introduced below mentioned additional measures for both Order-to-trade ratio and Order-per-second limit violations for the repeat offenders:

No. of days Member levied charges	Total Charges
> 3 days during the calendar month	Twice the applicable charges from 4th instance to 7th instance (i.e., 100% Additional charges)
> 7 days during the calendar month	Four times the applicable charges from 8h instance onwards till end of calendar month (i.e., 300% Additional charges)
> 30 days during the Quarter (Jan. to March, April to June & so on)	Additional charges equivalent to the Total charges levied during the quarter (i.e., 100% Additional charges for the quarter)

Note: The above structure of additional economic disincentive for Algo orders is subject to revision in future, based on actual data/details of number of instances of OPS / OTR exceeding specified limit or regulatory direction. Members are requested to refer to the relevant circular(s) issued by the Exchange from time to time for penalty structure.

5.8.1.13 Members shall ensure that their algo orders should be routed through Members Servers located in India and through the specified CTCL IDs/ ATS User IDs approved by the Exchange for algo trading. Further, ATF software / IDs shall not have any interlink with any system or ID located / linked outside India.

5.8.1.14 Members to ensure that their ATF system should have control features to ensure that the sufficient deposits / funds are available for margin/ settlement obligations, in respect of the trades effected through algo facility, whether on own account or client's account and that algorithmic trading does not result in shortages in margin deposit or settlement obligation.

5.8.1.15 Members to ensure that their trades routed through algo shall not be in the nature of abnormal/ manipulative trades and should facilitate orderly trading and integrity of the commodity market.

5.8.1.16 Since Member's ATF strategy should not take away liquidity from the market but it should induct liquidity into the market, Members are required to provide write up in their strategy document explaining how the strategy will induct the liquidity into the Market and also to submit write-up on procedures and arrangements which are in place to safeguard algorithms from misuse or unauthorised access.

5.8.1.17 Details of algo strategies should be made available to the Exchange wherever required for the purpose of inquiry, surveillance, investigation etc...

5.8.1.18 Members shall have proper procedures and arrangements to safeguard algorithms from misuse or unauthorised access and to ensure that access shall be given only to authorised persons.

5.8.1.19 Members shall maintain logs of all trading activities to facilitate audit trial for a minimum of 3 years and should provide such logs to the Exchange / appointed auditors during inspection / audits.

5.8.1.20 Members shall maintain a record of control parameters, orders, trades and data points emanating from trades executed through algorithmic trading for a minimum of 3 years and should provide these information / data to the Exchange / appointed auditors during inspection / audits.

5.8.1.21 Members may please note that they should not use Algorithmic trading without prior written permission of the Exchange. Prior permission of the Exchange should also be obtained for any changes in the approved ATF software / strategy(ies).

5.8.1.22 Members availing ATF facility are required to undertake System Audit of their software and submit compliance letter (Annexure-41) to the Exchange every half yearly as specified in the Master Circular-Technology Compliance Further, Exchange reserves right to conduct System Audit by the Exchange officials or appointed auditors whenever required with or without prior intimation.

5.8.1.23 In addition to the above, the members shall execute, sign agreements or undertakings as may be prescribed or required by the Exchange / regulatory body(ies) from time to time.

5.8.1.24 Algo software should have the facility to generate / restrict orders for contracts / commodities specified by the Exchange from time to time. Exchange reserves right to withdraw or modify ATF for all / any commodity, generally or specifically for any Member or User ID of any Member. Further, Exchange may disable Member's terminal who are not complying with the algorithmic trading guidelines of the Exchange.

5.8.1.25 Members who provides services relating to algorithmic trading shall not:
Directly or indirectly make any reference to the past or expected future return/performance of the algorithm; and/or directly or indirectly associate with any platform providing any reference to the past or expected future return/performance of the algorithm.

CHAPTER 6

CTCL Terminal Details (15 Digits)

6.1 CTCL Terminal Info

6.1.1 CTCL Terminal Info (15 Digits)

Members using CTCL facility are required to provide CTCL terminal details (15 digits) information as per the format prescribed by Exchange. Members are required to populate the 15-digit CTCL terminal details in the order structure for every order emanating from CTCL terminal. Exchange may take disciplinary action / levy penalty on Members who are not complying with the requirement of CTCL Terminal info as required by the Exchange.

6.1.2 Identification of 1-12 digits

For orders generated from CTCL terminals 1-12 digits should be as follows:

CTCL terminal	• First six digits should be Pin code of the CTCL terminal location. • Digits 7 to 9 should be Branch ID of the CTCL terminal location. • Digits 10 to 12 should be Running serial number of trading terminal Id, under the CTCL Id within the branch.
IBT Terminal	111111111111
DMA Terminal	222222222222
Wireless Trading Terminal	333333333333

6.1.3 Identification of 13th digit

13th digit would indicate whether the order is generated through program trading software or not, It sholud be:
0 - if order is not generated through program trading (Algo) software,
1 - if order is generated through program trading (Algo) software,

6.1.4 Identification of 14-15 digit

Digits 14-15 should be valid Vendor Code / In-House CTCL code for member as provided by the Exchange.

CHAPTER 7
Activation / Deactivation of CTCL facility on User ID

7.1 Enablement / Disablement of CTCL/IBT/WT/ATF/DMACTCL/DMAATF facility on User ID(s) through eUIMS Portal.

7.1.1 Members desirous of enabling/disabling CTCL facility - Computer to Computer Link (CTCL) / Internet Based Trading (IBT) / Wireless Trading (WT) / Algorithmic Trading Facility (ATF) / Direct Market Access (DMA) software procured from Independent Software Vendor (ISV) or Application Services Provider (ASP) or In-house software developed are now required to seek approval by submitting application through eUIMS -Electronic User ID Management System.

7.1.2 Below are the high-level steps to enable CTCL / IBT / WT / ATF / DMACTCL/DMAATF facility on User ID:

a. Members are requested to use the existing login ID and Password to login - https://eUIMS.mcxindia.com portal.
b. Existing approved software details from CTCL online portal will reflect in the eUIMS portal for selection to enable/disable the same on User ID.
c. Members are required to submit/upload the online application and supporting documents with valid digital signature.
d. Help file "Help File - CTCL facility Enablement & disablement through eUIMS" is available on SFTP: https://sftp.mcxindia.com/Common in the folder – 'Online Portal Help Files.

7.1.3 Documentation for enablement of CTCL/IBT/WT/ATF/ DMACTCL/DMAATF facility on User ID(s) :

Particulars	**Annexure #**
Application Form for Inhouse developed Software	• Online submission
Application Form for Software procured from ISV	• Online submission • Annexure 11
Application Form for Software procured from ASP	• Online submission

7.1.4 Documentation for disablement of CTCL/IBT/WT/ATF/DMACTC/DMAATF facility on User ID(s) for software procured from ISV & In-house & ASP:

Particulars	**Annexure #**
Application for Deactivation of facility	Online submission

7.2 Documentation for Discontinuation of CTCL / IBT / WT / ATF / DMACTCL/DMAATF Software

Members who wish discontinue usage of CTCL / IBT / WT / ATF Software are required to submit **Annexure 43** on email ctcl@mcxindia.com.

Members are required to note that once software / strategy is discontinued, Members are required to follow entire approval process for software, as applicable.

CHAPTER 8
Testing of software

For the purpose of this chapter and approval process for change/modification in software version, CTCL/IBT/WT/ATF/DMA facility is hereinafter referred to as CTCL Software'.

The approval process for change in software version will be applicable to members applying for CTCL facility of empanelled ISVs software and / or In-house developed software. The process to be followed in case of changes in software version (impacting major functionalities or risk management system) is summarized below:-

Particulars	Testing of Software	Mock/Simulated Trading Environment Participation	Demo
Version change for software procured from ISV	Yes	Yes	No
Version change for software developed In-house	Yes	Yes	Only in-case of ATF / DMAATF

8.1 Documentation

Member is required to submit the Application form through CTCL Online Portal in case of change in the version of approved CTCL software impacting major functionalities or risk management system (RMS & OMS).

With regard to changes / updates to stock broker's trading software that intend to modify the 'look and feel' and do not affect the risk management system of the stock broker or the connectivity of the trading software with stock exchange's trading system, it is clarified member can submit the 'no change letter' i.e. Annexure 21 and applicable documents.

Request Type	Documents
1) Version Change in-case of change in RMS / OMS Server of software	• Application • Auditor Report. • Auditor Certificate. • Product and RMS writeup (NA for ISV) • No Change letter.
2) Version Change in-case change in Software Feature/ Functionality of software / TBT.	• Application • Auditor Certificate. • Product and RMS writeup (NA for ISV). • No Change letter.
3) Version change in case of change in look and feel or other than point 1 & 2.	• Application • No Change letter. • Product Write up.

8.2 Testing of CTCL Software

Exchange provides simulated test environment and facilities to the market participants / software vendors to test new software or existing software that have undergone change. The member / software vendor shall test the software on the test environment provided by the Exchange before putting it into use and testing is

mandatory. The member should ensure that the software meets the minimum requirements outlined in Annexure 14.

The Exchange provides Application Programming Interface (API) specifications to connect to the trading system for development of software for using CTCL facility to the Members (developing software in-house) and empanelled vendors.

8.3 Mock Trading Participation / Simulated Trading Environment

Exchange organizes mock trading sessions in a close-to-real trading environment on a regular basis, at least once in a calendar month for a minimum period of 2 hours, to facilitate testing of new software or existing software that has undergone change.

As a part of testing process, Members are required to participate for the minimum period of 1 hour in mock / simulated trading environment provided by the Exchange to test their software for any change.

Members may also note that it will be mandatory for members to participate in periodic mock trading sessions conducted by the Exchange using all approved Strategies for Algo trading on an ongoing basis, irrespective of the algorithm having undergone change or not. The details of such participation have to be covered in the periodic system audit report. In case the member fails to participate in such mock trading sessions, the Exchange shall call for reasons for non-participation and if the reason is found to be unsatisfactory, the Exchange may suspend the proprietary trading rights of the member for a minimum period of one trading day.

8.4 Segregation of Test / Mock and Production environment

Members are advised to keep Development, testing, and production environments separate to reduce the risks of unauthorized access or changes to the production environment. Members should use their test environment while connecting to the Exchange for testing or participating in mock trading.

Member should ensure to restore their trading system to “Production State” at the end of testing Session so as to ensure integrity of trading system.

8.5 System Audit

Trading members seeking approval for modified CTCL software shall be required to engage system auditor(s) to examine reports of tests performed in test environment, participation in mock/simulated trading environment and to certify that the tests were satisfactorily undertaken. Trading members are required to submit the audit certificate and audit report of the system audit conducted of their software & system to the Exchange. Members should ensure that the audit certificate submitted by them is strictly in accordance with the formats specified that is System Audit Certificate (Annexure 28) and System Audit Report (Annexure 27). Any deviation in the format of the certificate and report may lead to rejection of submission. The system audit certificate and System Audit Report should be on the letterhead of the system auditor. The System Audit Certificate and System Audit Report must contain the name and registration number of system auditors along with their stamp, place and date at the end of report. The system auditor should categorically certify the absence of conflict of interest as given in System Audit Report/Certificate format.

The system audit to be conducted by a system auditor who possesses at least one of the following certifications:

- CISA (Certified Information System Auditors) from ISACA
- DISA (Post Qualification Certification in Information Systems Audit) from Institute of Chartered Accountants of India (ICAI)
- CISM (Certified Information Securities Manager) from ISACA

- CISSP (Certified Information Systems Security Professional) from International
- Information Systems Security Certification Consortium, commonly known as (ISC)

The system audit charges shall be negotiated and paid directly by the member to the system auditor.

8.6 Demonstration

The Exchange may require the demonstration of the ATF software in case of software developed In-house before granting approval. Member shall arrange to provide demonstration of the software for new version or version change after taking a prior appointment from Exchange team. After successful demonstration and on being satisfied with the documents submitted by the member, the Exchange may grant permission to Member for the usage of 'ATF facility'.

8.7 Penalty for the Malfunctioning of software

The Exchange will examine the cases of malfunctioning of CTCL Software used by trading members and apply deterrent penalties in the form of fines or suspension on the trading member for software malfunctions in accordance with Rules, Byelaws and Business Rules of the Exchange.

Members may implement suitable measures like obtaining insurance cover or adding suitable clauses in their agreement with the software vendors to meet probable losses or to minimize risk in event(s) of software malfunction.

8.8 Test Market of availability

8.8.1 The test / simulated environment is available for all Trading members, Empaneled vendors, and Application Service Providers for testing the software.

8.8.2 The test / simulated environment shall be available from 09:30 AM to 7:30 PM during the week on trading days to test the software.

8.8.3 The Exchange will generate liquidity in the test / simulated environment for selected commodity contracts to provide live like trading experience to members. This would be done by tool trade generated from 04:00 PM to 7:30 PM.

8.8.4 The Exchange will also be updating live environment Scrip master file on fortnightly basis on test/simulated environment and would be provided on request.

8.8.5 Members are provided multicast of tick by tick and trading market data in the test / simulated environment as provided in live trading environment.

8.8.6 Test market environment shall be available to Empaneled vendors and Application Service Providers for testing the software.

8.8.7 To facilitate testing of new software or existing software that has undergone any change of functionality, the Exchange would also be conducting monthly mock trading session for Members testing.

8.8.8 Members shall be allowed to connect to test / simulated environment using a dedicated leased line or through VPN (Virtual private network).

8.8.9 The Exchange shall endeavor to provide the test / simulated environment on best efforts basis.

8.8.10 The Exchange shall promptly address any defects/problems in the test / simulated environment related systems as reported to it but does not warrant that the environment shall be uninterrupted or error free.

8.8.11 Members developing in-house CTCL applications can write to ctcl@mcxindia.com for availing Test/Simulated Environment facility or for any technical queries.

8.8.12 Please contact MCX customer support team (on Call 022 – 6649 4040 / Email - customersupport@mcxindia.com) any assistance.

8.8.13 Connectivity Details – Test please refer Circular no.: MCX/CTCL/101/2025 dated February 21, 2025.

CHAPTER 9
Empanelment of Application Service Provider (ASP)

9.1 Empanelment of ASP

9.1.1 Exchange allows Members to use trading services offered by empanelled Application Service Providers (which may inter-alia include providing / maintaining software / hardware / other infrastructure etc.) for providing CTCL Trading / IBT / WT services to members of the Exchange. Empanelment of ASP software solution and CTCL solution are separate, and vendors are required to apply separately for empanelment for the same. However, vendors empanelled for CTCL solution would not be required to pay additional one-time non-refundable fees at the time of ASP empanelment.

9.2 Criteria for Empanelment as an ASP

9.2.1 The software vendors desirous of being empanelled with the Exchange as an Application Service Providers (ASP) would be required to meet the criteria prescribed in **Annexure 1**.

9.3 Documentation for ASP Application

9.3.1 ASPs seeking empanelment with Exchange shall submit the application, undertaking and other documents as per the checklist given in **Part K of Appendix**.

9.4 Procedure of ASP Empanelment

9.4.1 On receipt of the above duly completed documents and the applicable fees and on the ASP meeting requirements of the Exchange / regulatory body(ies), the Exchange will share the API with ASP.

9.4.2 ASP shall be fully responsible for the development and testing of ASP Software Solution. They shall make the software solution set up ready which includes software, hardware and network.

9.4.3 ASP will have to test the software on the test environment provided by the Exchange. For this purpose, a User Id in the test environment should be requested from the CTCL department of the Exchange**.** The ASP should ensure that the software developed meets the bare minimum requirements/checklist outlined in **Annexure 6.** ASP is required to sign and provide the checklist as confirmation of necessary testing.

9.4.4 As a part of testing process, ASP is also required to participate in mock / simulated trading environment provided by the Exchange.

9.4.5 The software and system proposed by the ASP shall be duly certified by a system auditor in format specified by the Exchange.

9.4.6 Exchange may require the demonstration of ASP software solution before granting approval. ASP shall arrange to provide a demonstration of software, after taking an appointment. After a successful demonstration of the software and on being satisfied with the documents submitted by the ASP, Exchange may grant permission to ASP for providing ASP services to Members of the Exchange. The Exchange shall specify the software in respect of which such empanelment is given.

9.4.7 In case of version change or customization of the specified software, the ASP shall apply to the Exchange for its approval, participate in mock / simulated trading environment and submit audit certificate. The Exchange may approve such application after satisfying itself through a demonstration or otherwise as may be specified.

9.5 Other Terms and Conditions

9.5.1 ASPs empanelled for CTCL solutions would not be required to pay additional charges at the time of empanelment for IBT and WT and vice versa.

9.5.2 The Exchange at its discretion may impose additional conditions as it deems fit for the continuous empanelment of ASP from time to time. In the event the empanelled ASP fails to comply with the conditions so imposed, the Exchange reserves the right to cancel the empanelment.

9.5.3 Without prejudice to the above, the Exchange reserves the right to cancel or modify the empanelment/approval if the need arises at its sole discretion.

9.6 Charges for ASP Empanelment

9.6.1 The charges as mentioned below shall be payable by ASPs

Category	One -time Charges (Non-refundable)	Annual Charges (Non-refundable)
	Plus, applicable taxes	
Application Service Provider providing CTCL trading / IBT / WT services	INR. 10,00,000/- at the time of application	INR. 2,50,000 on a financial year basis.

9.6.2 The ASP shall pay the annual charges for the first year in advance along with the application. The annual fee shall be calculated on a pro-rata basis from the date of receipt of the ASP's application till the end of March 31st for the first year. Any excess amount paid for the first year (on pro-rata basis) shall be adjusted towards annual fees for the next financial year. The annual fee shall be payable by the 30th day of April each year. Interest @ 15% p.a. shall be levied on late payment of the annual fees. Any ASP who wishes to discontinue as Empanelled ASP needs to inform the Exchange before 10th day of April.

9.7 Periodic System Audit

9.7.1 ASP vendor shall ensure that the periodic audit report is submitted on an annual basis as detailed in the Master Circular- Member Technology Related Compliance

CHAPTER 10

Tick by Tick Trading Market Data (Enhanced Order Book Interface (EOBI) & Enhanced Market Data Interface (EMDI)

As part of our constant endeavor to provide value to market participants, the Exchange has decided to provide Tick by Tick Trading Market Data (EOBI) & Enhanced Market Data Interface (EMDI) to the members as per EOBI & EMDI API. Members are requested to note that Tick by Tick Trading Market Data & Enhanced Market Data Interface data shall be provided in multiple streams having data of different class of commodities.

10.1 Application for *EOBI* API

The members who have developed In-House software wish to use EOBI data (TBT) are required to participate in the test in Exchange test environment. CTCL Empanelled Vendors who have developed software with Tick-by-Tick Trading Market Data may require participation in the Exchange test environment before providing software with Tick-by-Tick Trading Market Data to members of the Exchange.

10.2 Enable *EOBI* or *EMDI* for live trading

10.2.1 To enable Tick by Tick Trading Market Data (EOBI) for live trading using the approved software, members are required to apply to the Exchange in the format enclosed as **Annexure 31**. Upon receipt of application Exchange shall enable the required Tick by Tick Data Stream based on bandwidth availability of the leased line and will provide the requisite parameters for receiving Tick by Tick Trading Market Data (EOBI).

10.2.2 To enable Enhanced Market Data Interface (EMDI) for live trading using the approved software, members are required to apply to the Exchange in the format enclosed as **Annexure 32**. Upon receipt of application Exchange shall enable the required Enhanced Market Data Stream based on bandwidth availability of the leased line and will provide the requisite parameters for receiving Enhanced Market Data Interface (EMDI) Trading Market Data.

10.3 Other Terms and Conditions

10.3.1 The Tick-by-Tick Trading Market Data will be provided to members on a dedicated point-to-point leased line with higher bandwidth. Members may please note that order routing will not be allowed on the Leased Lines enabled for Tick-by-Tick Trading Market Data. Members should monitor the link utilization and may opt for separate leased lines for different data streams.

10.3.2 The software developed by the Trading Members using the EOBI API shall be used by the Trading Members exclusively for their own activities and for the activities of their clients on MCX platform only. Trading Members shall not use the EOBI API received from the Exchange for any other purposes.

CHAPTER 11
Application for CTCL / IBT / WT Services through ASP

Members desirous of availing of the CTCL/IBT/WT services of empanelled ASP shall apply to the Exchange.

11.1 Documentation for CTCL / IBT /WT services from Empanelled ASP

11.1.1 Exchange empanelled Application Service Provider (ASP) has set up infrastructure with the exchange for providing CTCL/IBT/WT services to members of the Exchange. The list of empanelled Asp vendors is provided on the exchange website https://www.mcxindia.com under Technology & Services section.

11.1.2 Members desirous of availing the CTCL/IBT/WT services of empanelled ASP shall apply to the Exchange along with the documents as per formats specified in **Part M of Appendix**

11.1.3 Members availing the services of the empanelled ASP shall ensure compliance as may be required by the Exchange and Regulatory Authorities from time to time.

11.1.4 Members desirous of using CTCL/IBT/WT services provided by exchange empanelled ASPs may do so solely at their own discretion and responsibility.

CHAPTER 12
Application for Direct Market Access (DMA) facility

12.1 Direct Market Access (DMA) facility

SEBI has issued circular no. SEBI/HO/MRD/MRD-PoD-1/P/CIR/2023/68 dated May 10, 2023 regarding "Direct Market Access (DMA) to SEBI registered Foreign Portfolio Investors (FPIs) for participating in Exchange Traded Commodity Derivatives (ETCDs)".

Direct Market Access (DMA) is a facility, which allows brokers to offer clients direct access to the exchange trading system through the broker's infrastructure without manual intervention by the broker. Some of the advantages offered by DMA are direct control of clients over orders, faster execution of client orders, reduced risk of errors associated with manual order entry, greater transparency, increased liquidity, lower impact costs for large orders, better audit trails and better use of hedging and arbitrage opportunities through the use of decision support tools / algorithms for trading.

12.2 Enablement of DMA Facility.

1. **Application for permission:**

   Members or Vendors desirous of providing DMA facility shall make an application to the Exchange giving the details of the software and systems proposed to be used, which shall be duly certified by the auditor. Members or Vendors shall seek approval of the Exchange by submitting required documents as detailed in **Part N**.

2. **Charges for In-house development of DMA Software**

Category	Charges (Non-refundable) plus applicable taxes
Members who are applying for developing in-house DMACTCL / DMAATF solutions using Non- FIX API and/or FIX API provided by the Exchange.	Rs. 1,50,000/- as one-time Charges and Rs. 50,000/- as annual charges.

3. **Charges for Using DMACTCL / DMAATF Facility Procured from Empanelled ISV**

   No charges are payable by Members to the Exchange for procuring approved DMACTCL / DMAATF software from empanelled ISVs.

4. **Eligibility:**

   DMA facility is being permitted only to FPI's as specified in SEBI/Exchange circular from time to time.

5. **Operational specifications:**

a. All DMA orders shall be routed to the exchange trading system through the broker's trading system. The broker's server routing DMA orders to the exchange trading system shall be located in India.

b. The broker should ensure a sound audit trial for all DMA orders and trades and be able to provide identification of actual user-id for all such orders and trades. The audit trail data should be available for at least five (5) years.

c. The DMA system shall have sufficient security features including password protection for the user ID, automatic expiry of passwords at the end of a reasonable duration, and re-initialisation of access on entering fresh passwords.

d. In case where the clients access the DMA server of the broker through a third-party service provider, the password maintenance and authentication can be done either by the broker or by third party network service provider, so long as the exchange/broker ensures secured access and communication and a sound audit trail for all DMA orders/ trades. The authorized user and client details should be part of the order details received and authenticated at the DMA server of the broker.

e. The broker members and the DMA clients are required to have appropriate agreements with the third-party service provider for ensuring secure access and communication.

f. Brokers should follow the similar logic/priorities used by the Exchange to treat DMA client orders. Brokers should maintain all activities/ alerts log with audit trail facility. The DMA Server should have internally generated unique numbering for all such client order/trades.

g. A systems audit of the DMA systems and software shall be periodically carried out by the broker as may be specified by the exchange and certificate in this regard shall be submitted to the exchange (Half Yearly in case of Algo).

h. The brokers should provide adequate systems and procedures to handle the DMA trades.

i. The trading system of brokers should not have the default option of providing preference to any particular trading venue at the time of placement of orders. As and where applicable, users are provided with all exchange options available and users are required to choose one, while placing each order.

6. **Risk Management**

a. The broker shall ensure that trading limits/ exposure limits/ position limits are set for all DMA clients based on risk assessment, credit quality and available margins of the client. The broker system shall have appropriate authority levels to ensure that the limits can be set up only by persons authorized by the risk / compliance manager.

b. The broker shall ensure that all DMA orders are routed through electronic/automated risk management systems of the broker to carry out appropriate validations of all risk parameters including Quantity Limits, Price Range Checks, Order Value, and Credit Checks before the orders are released to the Exchange.

c. All DMA orders shall be subject to the following limits:
   i. Order quantity / order value limit in terms of price and quantity specified for the client.
   ii. All the position limits which are specified in the derivatives segment as applicable.
   iii. Net position that can be outstanding so as to fully cover the risk emanating from the trades with the available margins of the specific client.

iv. Appropriate limits for securities which are subject to FPI limits as specified by the Regulator.

d. The broker may provide for additional risk management parameters as they may consider appropriate.

7. **Broker to be liable for DMA trades.**

The broker shall be fully responsible and liable for all orders emanating through their DMA systems. It shall be the responsibility of the broker to ensure that only clients who fulfill the eligibility criteria are permitted to use the DMA facility.

8. **Cross Trades**

Brokers using DMA facility for routing client orders shall not be allowed to cross trades of their clients with each other. All orders must be offered to the market for matching.

9. **Other legal provisions**

In addition to the requirements mentioned above, all existing obligations of the broker as per current regulations and circulars will continue without change. Exchanges may come with additional conditions as they may deem fit for allowing DMA facilities to their brokers.

10. **Other Terms and Condition Documents:**

a. Exchange shall specify from time to time the categories of investors to whom the DMA facility can be extended. Currently, this facility is available for institutional clients. Brokers shall specifically authorize clients or investment managers acting on behalf of clients for providing DMA facility, after fulfilling Know Your Client requirements and carrying out necessary due diligence. The broker shall maintain proper records of such due diligence.

b. In order part to bring uniformity on the requirement of documentation for trading account opening process, in view of the SEBI circular no CIR/MIRSD/16/2011 dated August 22, 2011, the specific Broker – Client Agreement for the purpose of DMA shall be replaced with the "**Terms and Condition**".

c. The "**Terms and Conditions**" shall be provided to the client or investment manager acting on behalf of a client (s) for availing the DMA facility.

d. In case the DMA facility provided by the stockbroker is used by the client the paragraphs one to eighteen of **Part 1 of Annexure-33** shall be applicable.

e. In case the DMA facility provided by the stockbroker is used by the client through investment manager paragraphs one to eighteen of **Part 2 of Annexure-33** shall be applicable.

f. Additionally, the investment manager shall provide to the Stockbroker the details as specified at **Annexure - 34**.

11. **Periodic System Audit & CSCR Audit of DMACTCL / DMAATF systems**

Members using DMACTCL / DMAATF facility shall ensure that the periodic audit report is submitted as may be specified by the Exchange from time to time and covers compliance of all requirements mentioned by SEBI and Exchange in the in the Master Circular-Member Technology Compliance.

Chapter 13

Application for Drop-copy.

13.1 Documentation for Drop-copy facility.

Members desirous of availing drop-copy services shall apply to the Exchange. Using Drop Copy facility, Members will be able to monitor their trading activities on the Exchange platform.

The Member will also get a copy of trade-related information for all user IDs under the member through a secured mechanism for risk management and other business operations.

Test environment will be provided to the Member to test their Drop Copy Software / Application.

To enable the Drop Copy facility, members are required to apply to the Exchange by placing requests from eUIMS portal. Upon receipt of application Exchange shall enable the requested facility for receiving Drop Copy data.

The Drop Copy Data will be provided to members on Leased Line connectivity. Members should monitor the link utilization and may opt for separate leased line connectivity if required.

Members availing CTCL facility may apply for Drop Copy without any additional charges. The Exchange at its discretion may impose any additional conditions as it deems fit for the continuous use of Drop Copy facility. In the event the Members fail to comply with the conditions so imposed, the Exchange reserves the right to withdraw from the Drop Copy facility provided to them.

Chapter 14

A [Standard Operating Procedure - Safer Participation of Retail Investors in Algorithmic Trading][1]

1. Background:

1.1. SEBI, vide circular no. SEBI/HO/MIRSD/MIRSD-PoD/P/CIR/2025/0000013 dated February 4, 2025 on 'Safer participation of retail investors in Algorithmic trading'. Exchange vide circular MCX/CTCL/235/2025 dated May 06, 2025 has issued "Implementation Standards for safer participation of retail investors in Algorithmic trading".

1.2. Definition of an algo order -As per the above SEBI circular "Algo orders" are orders generated using automated execution logic.

1.3. The above circular required Exchanges to issue necessary guidelines regarding the following -

1.3.1. Clause 5 III (a) any Algo Provider, providing the facility to place algo orders with Brokers through API, shall require to be empanelled with Exchanges in a manner as stipulated by Exchanges (Refer Para 5 of this document for empanelment procedure)

1.3.2. Clause 5 III (b) Exchanges shall specify the empanelment criteria for the algo providers. (Refer Annexure of Para 5 for empanelment criteria)

1.3.3. Clause 5 IV (a) (i) Exchanges to put in place a comprehensive Standard Operating Procedure (SOP) for testing of algos (refer para 12 of this document)

1.3.4. Clause 5 IV (a) (iv) defining the roles and responsibilities of brokers (refer para 10 of this document)

1.3.5. Clause 5 IV (a) (v) defining the roles, criteria and process of empanelment of algo providers (Process of empanelment provided in Para 5 of this document and empanelment criteria provided in Annexure of Para 5)

1.3.6. Clause 5 IV (c) The detailed operational modalities, covering the following aspects, shall be issued by stock exchanges, in consultation with SEBI,

1.3.6.1. Roles and responsibilities of the brokers including risk management system of brokers for orders through API, roles of algo providers along with the criteria and process of empanelment of algo providers. (refer Para 11, Para 10, Para 5 and Annexure Para 5 of this document)

1.3.6.2. Registration process for algos and the circumstances in which a re-registration shall be required. (refer Para 7 and Para 9 of this document)

1.3.6.3. Measures to enhance the confidentiality of retail algo strategies including confidentiality clauses, non-disclosure agreements, encrypted submissions etc. (refer Para 13 of this document)

1.3.6.4. Data flow between the algo provider, broker and the Exchange, while ensuring that the broker remains responsible for compliance with the outsourcing guidelines specified by SEBI from time to time. (refer Para 14 of this document)

1.3.6.5. Clause 5 IV (d) Exchanges shall specify the turnaround time (TAT) to register certain types of algos (eg. Execution algos) on a fast track basis while registering other types of algos on a normal basis. For both these scenarios, TAT shall be decided by the

[1] Inserted vide MCX Circular No. MCX/CTCL/364/2025 dated July 25, 2025

stock exchanges and mentioned in their SOP, disclosed on their website. (refer Para 4 of this document)

2. **Revised Framework for identification of the following**

2.1. Revised Identification for first 12-digits of Terminal Id– Provisions with respect to the Terminal Id as defined in Exchange circular MCX/CTCL/223/2025 dated April 30, 2025 is revised as under to incorporate identification ALGO orders from Client Direct API.

Platform	Algo allowed Y/N	CTCL Terminal id* (12 digit)	13th Digit Validations
CTCL (should be only operated by Dealer of TM or Direct system of TM – for square off orders)	N	First six digits - Pin code. Digits 7 to 9 -Branch ID. Digits 10 to 12 - Running serial number.	13th digit can be "0" which will determine NON-ALGO
CTCL Algo (should be only operated by Dealer of TM or Direct system of TM – for square off orders)	Y		13th digit can be "1" which will determine ALGO
IBT (should be with front end of the TM which captures only manual order entry of all order attributes such as date, order qty, order limit price , symbol, contract etc.)	N	111111111111	13th digit can be "0" which will determine NON-ALGO
WT (should be with front end of the TM which captures only manual order entry of all order attributes such as date, order Qty, order limit price , symbol, contract etc.)	N	333333333333	13th digit can be "0" which will determine NON-ALGO
DMA (only FPI's clients) DMA (only specific category of clients as specified by Exchange from time to time)	Y	222222222222	13th digit can be "0" for Non-ALGO and "1" for ALGO.
Client Direct API (Facility provided by TM to Clients to send order messages through API, other than the above options)	Y	444444444444	13th digit can be "1" which will determine Retail-ALGO

2.2. The existing categorization for ALGO registered with CTCL id and DMA will remain unchanged.

2.3. The new categorization for client direct API "444444444444" will be as under. ALGO ID registration with CTCL Terminal id "IBT – "111111111111" or WT – "333333333333" will NOT be allowed. In cases of IBT and WT the front end should be only with TMs own front end which captures manual order entry of all order attributes such as date, order qty, order limit price, symbol, contract etc.-

2.3.1. 1st level category (Front end):

i. Client Direct API (Facility provided by TM to Clients to send order messages through API, other than the above options)

2.3.2. 2nd level category (Developer):

i. Vendor Algo
ii. Trading Member (In-House) Algo
iii. Tech Savvy retail investor (beyond 10 OPS threshold)
iv. Tech Savvy retail investor (within 10 OPS threshold)

2.3.3. 3rd level category (User):

i. Dealer of a TM
ii. Client

2.3.4. 4th level category (Logical grouping):

i. White Box
ii. Black Box

2.4. For Tech savvy client category, TM needs to disclose in Name and UCC as reported by member to the exchange.

2.5. In all cases where there is a Black Box ALGO, the vendor developer needs to be registered as RA with SEBI.

2.6. As per Implementation standards published (MCX Circular MCX/CTCL/235/2025 dated May 06, 2025 – Section B3), all orders received via API from clients / Algo Provider's platform shall be considered as Algo and will be required to be tagged as defined in this document.

3. Definition of ALGO Provider: As per definition provided in the SEBI/HO/MIRSD/MIRSD-PoD/P/CIR/2025/0000013 (Para 5 I a), '*Algo Provider*' can be any fintech / vendor providing algo facility through the usage of API. For the purpose of provision of algo trading through Client Direct API – "444444444444", brokers shall be the principal while algo provider shall act as its agent, while using the API provided by the broker. It is further emphasized that for all other categories, as per extant byelaws/rules/regulations, TM is responsible for all orders messages sent to Exchange through their terminals.

4. Chronology to be followed for registration of an ALGO.:

4.1 Empanelment of Vendor

4.1.1 Already Empanelled Vendor of Exchange – Empanelment not required

4.1.2 New ALGO provider empanelment (including "ALGO provider") - Process to be followed is similar as mentioned in Exchange circular MCX/CTCL/223/2025 dated April 30, 2025 (Chapter 1: Empanelment of Vendors for providing software used in trading and risk management). Further details are in subsequent paragraphs.

4.1.3 Trading Member (In-house) – Empanelment not required

4.2 Registration of ALGO product

4.3 Application and Registration of ALGO strategy through a Trading Member and grant of ALGO ID by Exchange

5. Turnaround Time (TAT) –

As per the SEBI circular, "Exchanges shall specify the turnaround time (TAT) to register certain types of algos (e.g. Execution algos) on a fast-track basis while registering other types of algos on a normal basis. For both these scenarios, TAT shall be decided by the stock exchanges and mentioned in their SOP, disclosed on their website".

5.1 For empanelment of "Algo Provider" with the Exchange – The proposed TAT for empanelment of Algo providers with the Exchange is T + 30 working days from receipt of complete application as per formats communicated from time to time and communicate the status as Empanelled / Rejected with appropriate reasons to the applicant.

5.2 For processing of application for registration of Algo's from "Algo Provider" / Empanelled Vendors / Trading Members

5.2.1 Each activity has a defined TAT as per the criticality and operational functions. Accordingly, TAT is defined as T+10 working days for Algo registration requests being submitted to Exchange.

5.2.2 In case of Execution algos, a faster TAT of T+7 working days will be applicable.

5.2.3 TAT shall mean the maximum timeline within which Exchange officials shall take expected course of action upon the receipt of complete application/documents/request and communicate the status as registered / Rejected with appropriate reason to the applicant.

5.2.4 The TAT may be reviewed at a later date based on experience gained on execution of process or feedback from internal / external stake holders.

6. Empanelment process of Algo providers

6.1. As stipulated in the SEBI circular, The Algo Provider should get empanelled with the Exchange. Accordingly, the Algo provider shall be required to follow the below empanelment process:

6.2. Document submission for Empanelment – The Algo Provider shall make an application to the Exchange for empanelment as per specified format and shall execute an undertaking in favour of the Exchange.

6.2.1. Criteria for empanelment as per details provided in **Annexure A**

6.2.2. Submission of Empanelment application as per format attached as **Annexures B**

6.2.3. Submission of Empanelment Undertaking as per format attached as **Annexure C**

6.2.4. 2 years of Securities Market experience for the Proprietor/Directors (Any 1)/Partners (Any 1)

6.2.5. Registration for various algorithmic trading software to be provided by vendor is a separate process. Accordingly, Algo Providers are required to apply separately for registration of the same.

6.3. Allotment of vendor (including ALGO provider) code by the Exchange to the Algo Providers

6.3.1. Upon processing of empanelment application, if all the documents / requirements are found to be satisfactory, the Algo Provider shall be registered, and a unique Vendor code shall be allotted.

6.3.2. Circular shall be issued to market announcing the empanelment as a "Algo Provider"

6.3.3. Algo Provider list shall be updated on Exchange website

6.4. Independent Commercial Arrangement

6.4.1. The empanelled Algo Provider will enter into an independent commercial arrangement with the members and shall execute relevant contracts with them.

6.4.2. The Exchange shall not be liable for any payment due to the Algo Provider for provision of services to the Members/Clients or for the provision, non-provision, failure or glitch in the provision of services to the Members/Clients by the Algo Provider.

6.4.3. Termination: Any breach of the terms and conditions of this empanelment, including its annexures, will entitle the Exchange to terminate the empanelment immediately.

7. Product registration

7.1. Algo Provider -

7.1.1. As part of product registration – Algo Provider is required to submit user Interface document and Algo product registration request to the exchange.

7.1.2. User Interface registration

7.1.2.1. Product name with frontend writeup including password policy, version, segments, exe / browser based etc.

7.1.2.2. URL (details of portal) via which service will be provided to investors

7.1.2.3. Writeup on the basic Risk Management System (RMS) implemented

7.1.2.4. Auditor certificate applicable for Algo Provider as per **Annexure F**

7.1.2.5. On being satisfied with the demonstration of the software and compliance with Exchange / regulatory body(ies) minimum requirements, the Algo provider may be empanelled with the Exchange. The Exchange shall specify the software in respect of which such empanelment is given.

7.1.3. Registration of Algo Product

7.1.3.1. fType of Algo to be provided by Algo Provider – Whitebox or Blackbox

7.1.3.1.1. In case of Whitebox, following documents to be submitted by Algo Provider

7.1.3.1.1.1. Writeup on the basic Risk Management System (RMS) implemented

7.1.3.1.1.2. Auditor certificate applicable for Algo Provider as per **Annexure F**

7.1.3.1.2. In case of Blackbox algo, following documents to be submitted by Algo Provider

7.1.3.1.2.1. Registration certificate as a Research Analyst in name of the Algo Provider

7.1.3.1.2.2. Writeup on the basic Risk Management System (RMS) implemented

7.1.3.1.2.3. Auditor certificate applicable for Algo Provider as per **Annexure F**

7.1.3.1.2.4. Undertaking that detailed report of trades generated by the blackbox algo has been maintained and will be reproduced to the Exchange / regulator as and when requested.

7.1.3.1.2.5. Undertaking that they shall renew their RA certificate prior to expiry and communicate the updated certificate to the Exchange else the Algo registered under "Blackbox" category shall be considered as "Deemed Surrendered" by the Exchange upon expiry.

7.1.3.1.2.6. Undertaking that in case there are any changes made to the Algo (as mentioned in Section 9 of this document) post registration, there will be a requirement of re-registration of the Algo.

7.2. Existing empanelled vendors

7.2.1. Existing empanelled vendors desirous of extending their API to Members of the Exchange shall be required to submit registration request with the following documents:

7.2.1.1. Product name with writeup including the following features and functionality

7.2.1.1.1. Password policy and identification of user,

7.2.1.1.2. version,

7.2.1.1.3. segments supported,

7.2.1.1.4. market data dissemination

7.2.1.1.5. orders and trade management features supported via API including logs / history,

7.2.1.1.6. reports for limits, margins, holdings, positions etc.

7.2.1.1.7. any other features

7.2.1.2. Writeup on the basic Risk Management System (RMS) implemented

7.2.1.3. Writeup of maintenance of audit trail / transaction logs

7.2.1.4. Auditor certificate applicable for Algo Trading as per **Annexure - F**

7.2.2. Registration of Algo product:

7.2.2.1. Type of Algo to be provided by the empanelled vendor – Whitebox or Blackbox

7.2.2.1.1. In case of Whitebox, following documents to be submitted by the empanelled vendor

7.2.2.1.1.1. Writeup on the basic Risk Management System (RMS) implemented

7.2.2.1.1.2. Auditor certificate applicable for empanelled vendor as per **Annexure F**

7.2.2.1.2. In case of Blackbox algo, following documents to be submitted by empanelled vendor

7.2.2.1.2.1. Registration certificate as a Research Analyst in name of the empanelled vendor

7.2.2.1.2.2. Writeup on the basic Risk Management System (RMS) implemented

7.2.2.1.2.3. Auditor certificate applicable for empanelled vendor as per **Annexure F**

7.2.2.1.2.4. Undertaking that detailed report of trades generated by the blackbox algo has been maintained and will be reproduced to the Exchange / regulator as and when requested.

7.2.2.1.2.5. Undertaking that they shall renew their RA certificate prior to expiry and communicate the updated certificate to the Exchange else the Algo registered under "Blackbox" category shall be considered as "Deemed Surrendered" by the Exchange upon expiry.

7.2.2.1.2.6. Undertaking that in case there are any changes made to the Algo (as mentioned in Section 9 of this document) post registration, there will be a requirement of re-registration of the Algo.

7.3. Trading Members

7.3.1. Algo product and "API" product registration process

7.3.1.1. Brokers desirous of providing API services to Investors shall be required to submit request for "API" registration for products developed "Inhouse" / Empanelled Vendor. This would identify that the member is using an API interface for providing the facility to client. Existing Members already exposing API to its client shall also be required to register with the Exchange

7.3.1.2. For market data provisioned to Registered Broking Clients via APIs, members will need to ensure that the following controls are implemented:

7.3.1.2.1. Clients being provided real-time or near-real-time data as permitted will use the same strictly for their trading purposes and shall not be permitted to or redistribute the data as per the terms and conditions being covered in the member client agreement.

7.3.1.3. Following documents shall be submitted by the Trading Member –

7.3.1.3.1.1. Undertaking

7.3.1.3.1.2. Network Diagram

7.3.1.3.1.3. Detailed RMS document/product write-up and Algo Audit certificate

7.3.1.3.1.4. System Audit for API

7.3.1.4. Registration of Algo product:

7.3.1.5. Type of Algo to be provided by the Trading Member – Whitebox or Blackbox

7.3.1.5.1. In case of Whitebox, following documents to be submitted by the Trading Member

7.3.1.5.1.1. Writeup on the basic Risk Management System (RMS) implemented

7.3.1.5.1.2. Auditor certificate applicable for empanelled vendor as per **Annexure I**

7.3.1.5.2. In case of Blackbox algo, following documents to be submitted by Trading Member

7.3.1.5.2.1. Registration certificate as a Research Analyst in name of the Trading Member

7.3.1.5.2.2. Writeup on the basic Risk Management System (RMS) implemented

7.3.1.5.2.3. Auditor certificate applicable for Trading Member as per **Annexure I**

7.3.1.5.2.4. Undertaking that detailed report of trades generated by the blackbox algo has been maintained and will be reproduced to the Exchange / regulator as and when requested.

7.3.1.5.2.5. Undertaking that they shall renew their RA certificate prior to expiry and communicate the updated certificate to the Exchange else the Algo registered under "Blackbox" category shall be considered as "Deemed Surrendered" by the Exchange upon expiry.

Undertaking that in case there are any changes made to the Algo (as mentioned in Section 9 of this document) post registration, there will be a requirement of re-registration of the Algo.

8. Algo strategy Registration:

8.1. For all Algo strategy registrations, whether the Algo strategy is developed by Trading Member (In-house), Algo strategy developed by Algo Providers or empanelled vendors, the Trading Member has to submit a registration application with the Exchange.

8.2. Following changes would be incorporated in algo registration application form for Members:

8.2.1. Algo registration is applicable only through CTCL and DMA. In order to implement SEBI circular for providing access to algos to retails investors, members will be allowed to provide algorithmic trading to clients through a new category "Client Direct API" and members will need to register each algo with the Exchange. Accordingly, following multilayered categories i.e. shall be included in the application form. The following categorization is only applicable for "Client Direct API".

8.2.1.1.1. 1st level category (Front end):

8.2.1.1.1.1. Client Direct API (Clients other than DMA clients without TM front end with all order attributes like Direct API) / Member Frontend for Retail Algo (IBT and STWT)

8.2.1.1.2. 2nd level category (Developer):

8.2.1.1.2.1. Vendor Algo

8.2.1.1.2.2. In-House Algo

8.2.1.1.2.3. Tech Savvy retail investor (beyond OPS threshold)

8.2.1.1.2.4. Tech Savvy retail investor (within OPS threshold)

8.2.1.1.3. 3rd level category (User):

8.2.1.1.3.1. Dealer of a TM

8.2.1.1.3.2. Client

8.2.1.1.4. 4th level category (Logical grouping):

8.2.1.1.4.1. White Box

8.2.1.1.4.2. Black Box

8.2.1.2. Member shall apply for registration of Algos giving details of the 5-level category disclosure to the Exchange.

8.2.1.3. For Tech savvy client category, TM needs to disclose in the application form -. Name and UCC as reported by member to the exchange

8.2.1.4. For members applying registration of client Algos on "Client Direct API" category, following fields shall be introduced and made mandatory to be submitted by the member as per respective product:

8.2.1.4.1. "API" set up Name using which the algorithm orders shall be released to the Exchange

8.2.1.4.2. "API" Version number using which the algorithm orders shall be released to the Exchange

8.2.1.4.3. "API" Registration Date using which the algorithm orders shall be released to the Exchange.

8.2.2. Allotment of Algo ID to Trading Member - Upon processing of the algo strategy registration application, if all the above documents / requirements are found to be satisfactory, unique Algo Id will be allotted for the registered algo strategy as per TAT defined above for In-house software developed by member. In case of member procuring Algo software from ISV or Algo provider, they should use the unique strategy id allocated by the Exchange to ISV & Algo provider at the time of empanelment.

8.2.3. For orders being sent beyond 10 OPS, members are required to register the algos developed by clients as per process detailed above, for which unique algo id shall be assigned by the Exchange.

8.2.4. As per implementation guidelines, point A.4. Trading Members need to ensure that non-registered algos (within 10 orders per second i.e. OPS) developed by clients are run only through one of the predefined API keys. In such case members shall be required to send the value in the Algo ID field as "99999" in the order message and 13th digit of the 15 digit Terminal ID as "1".

8.2.5. Algo strategy Registration documents to be submitted by Trading Member

8.2.5.1. For Empanelled vendor / Algo Provider:

8.2.5.1.1. Auditor report as per format attached as **Annexure J** (applicable for empanelled vendor)

8.2.5.1.2. Auditor certificate as per format attached as **Annexure I**

8.2.5.1.3. Vendor confirmation letter as per format attached as **Annexure L**

8.2.5.2. For Algo provided by Trading Member, developed In-House:

8.2.5.2.1. Auditor report as per format attached as **Annexure J**

8.2.5.2.2. Auditor certificate as per format attached as **Annexure I**

8.2.5.2.3. Strategy writeup
8.2.5.2.4. RMS writeup

8.2.5.3. Algo developed by client:

8.2.5.3.1. Auditor certificate as per format attached as **Annexure I**
8.2.5.3.2. Strategy writeup
8.2.5.3.3. RMS writeup

Note: Members desirous of providing Services through Algo Provider or API shall be required to fulfil the BMC requirement as applicable for Category 4 – "All trading members/ Brokers with Algo"

9. Circumstances in which re-registration shall be required by the Trading Members for Algo's by Algo Provider:

9.1. In case of any change in logic governing the algo's
9.2. Any change in OMS and/or RMS pertaining to the algos (Applicable only if it results in a code change in the algo)
9.3. Addition of segment/ Version change
9.4. Exchange mandated changes, as is applicable.
9.5. Implementation of new SEBI circular, as is applicable
9.6. Changes in policy of login and/ or password management.
9.7. Changes in URL for providing Algos by the Algo Provider
9.8. Change in API provided by the Member

Note: No modification shall be allowed for registered Blackbox algos. Algo Provider shall be required to apply for fresh registration in case of any change in logic governing the algo's

10. Operational Specifications for providing API /Algo Provider including roles and responsibilities of brokers:

10.1. Trading members providing API /Algo Provider facility for routing client orders shall not be allowed to cross trades of their clients with each other. All orders must be offered to the market for matching.
10.2. All API orders shall be routed to the exchange trading system through the members trading system. The broker's server routing API /Algo Provider orders to the exchange trading system shall be located in India.
10.3. The trading member should ensure sound audit trail for all API /Algo Provider orders and trades and be able to provide identification of actual user-id for all such orders and trades. The audit trail data should be available for at least 5 years.
10.4. The trading member should ensure that their API's /Algo Provider's do not permit clients to place orders for order types and/or contract/securities which are restricted by the Exchange / SEBI from time to time .
10.5. Trading member shall be required to have systems and procedures in place to detect / identify and categorise all orders as algo orders.
10.6. Trading member shall have suitable system in place to identify orders being sent by the client are below or above the defined threshold and appropriately tag the algo id in the orders being sent to the Exchange.
10.7. The API /Algo Provider system shall have sufficient security features including password protection for the user ID, automatic expiry of passwords at the end of a reasonable duration, and re-initialisation of access on entering fresh passwords. System shall authenticate client access to API /Algo Provider through two factor authentication.
10.8. Trading members shall be required to put in place system, processes and policies to ensure that open API are not permitted, and access is being provided only through a

unique client specific API key and static IP whitelisted by the broker to ensure identification and traceability the end user i.e. investor.

10.9. Trading members shall be required to have OAuth (Open Authentication) / SEBI mandated 2FA based authentication only or any authentication mechanism allowed / communicated by the Exchange / SEBI from time to time. All other authentication mechanisms shall be discontinued.

10.10. Trading members should maintain all activities/ alerts log with audit trail facility. The API /Algo Provider Server should have internally generated unique numbering for all such client order/trades.

10.11. A systems audit of the API /Algo Provider systems and software shall be periodically carried out by the broker as may be specified by the exchange and certificate in this regard shall be submitted to the exchange.

10.12. The trading members should provide for adequate systems and procedures to handle the API /Algo Provider

10.13. The broker shall be fully responsible and liable for all orders emanating through their API /Algo Provider systems. It shall be the responsibility of the broker to define and ensure that only clients who fulfil the eligibility criteria are permitted to use the API /Algo Provider facility.

10.14. The “Terms and Conditions” shall be provided to the client for availing the API /Algo Provider facility as per format attached Annexure K.

10.15. Members may take such other measures and implement such other safeguards as they deem fit to ensure security and integrity of transactions conducted via API /Algo Provider facility.

10.16. Trading members, while submitting the application for API /Algo Provider with the Exchange are required to confirm compliance mentioned above.

10.17. Trading Member to ensure that they have systems and procedures in place to detect/identify and categorize all orders above the specified threshold as algo orders.

10.18. Trading Member shall not permit open APIs and allow access only through a unique vendor client specific API key and static IP whitelisted by the broker to ensure identification and traceability of the algo provider and the end user (i.e. investor)

10.19. Trading Member to authenticate access to API through two factor authentication

10.20. Trading Member to deal with only empanelled algo providers only and handle all related complaints, as such algo providers are agents of such broker.

10.21. The facility of algo trading shall be provided by the broker only after obtaining requisite permission of the stock exchange for each algo

10.22. All algo orders shall be tagged with a unique identifier provided by the Exchange in order to establish audit trail and the broker shall seek approval from the Exchange for any modification or change to the registered algos.

10.23. Brokers shall be solely responsible for handling investor grievances related to algo trading and the monitoring of APIs for prohibited activities.

10.24. Before onboarding an empaneled algo provider on its platform, the broker shall also do the necessary due diligence.

10.25. Algo providers and brokers may share the subscription charges and brokerage collected from the client. However, prominent and complete disclosures of all the charges shall be made to the client. The broker shall also ensure that such arrangements do not result in any conflict of interest.

11. Risk Management:

11.1. Following RMS checks are compulsory

Sr. No.	Pre Trade Risk Control	Requirement
At individual order level		
1	Price Check	Algo orders shall not be released in breach of the price bands /dummy filters as defined by the Exchange in respective segments.
2	Quantity Check	Algo Orders shall not be released in breach of order quantity limit per order as defined by the Exchange in respective segments.
3.	Order Value Check	Algo Orders should not exceed the limit specified by the Exchange. The order value check should be within the ranges as prescribed by Exchange circulars
At client level		
6	Cumulative Open Order Value Check	Algo orders shall not be released in breach of Individual client level cumulative open order value check at the client level. Open order value for a client is the total value of its unexecuted orders released from trading members system. System shall not permit the user to set “Unlimited values”
7.	Automated Execution Check	Algo shall account for all executed, unexecuted, and unconfirmed orders placed by the system before releasing further orders. Algo system shall have pre-defined parameters for an automatic stoppage in event of Algo execution leading to a loop or a runaway situation.
8.	Net Position Vs. available margin	Algo orders shall not be released in breach of Net positions as against the available margin defined by the trading member for the client.
10.	MWPL violation check	Algo orders shall not be released in breach of market wide position limit as defined by the Exchange for the security in respective segments.
11.	Position Limit Check	Algo orders shall not be released in breach of position limit as defined by the trading member for the client. (In case of commodity derivatives, the net positions of the client / member are not in violation of the position limits prescribed for the respective commodity.)
12.	Trading Limit Check	Algo orders shall not be released in breach of overall trading limits as defined by the trading member for the client.
13.	Exposure Limit check at individual client level and at overall level for all clients	Algo orders shall not be released in breach of exposure limit as defined by the trading member for the client.
14.	Turnover Limit Check	Orders shall not be released in breach of turnover limit as defined by the trading member for the client.
15	Security Wise Limit Check	Orders shall not be released in breach of security-wise value limit as defined by the trading member for individual security.
16	Efficient Price Discovery and Fair Play Check	The algorithm strategy/ies are conducive to efficient price discovery and fair play and shall not take liquidity away from the market (applicable to algorithm strategy/ies in the Commodity Derivative segment).

11.2. The broker shall ensure that trading limits/ exposure limits/ position limits are set for all API clients based on risk assessment, and available margins of the client. The broker system shall

have appropriate authority levels to ensure that the limits can be set up only by persons authorized by the risk / compliance manager.

11.3. The broker shall ensure that all orders received from API are routed through electronic/automated risk management systems of the broker to carry out appropriate validations of all risk parameters including Quantity Limits, Price Range Checks, Order Value etc. before the orders are released to the Exchange.

11.4. All orders received from API shall be subjected to the following limits:

11.4.1. Order quantity / order value limit in terms of price and quantity specified for the client.

11.4.2. All the position limits which are specified in the derivatives segment as applicable.

11.4.3. The net position of the client / member are not in violation of the position limits prescribed for the respective commodity

11.4.4. Net position that can be outstanding so as to fully cover the risk emanating from the trades with the available margins of the specific client.

11.4.5. The broker may provide for additional risk management parameters as they may consider appropriate.

11.4.6. Market Orders and IOC orders shall not be allowed to place Algo orders in Commodity Segment.

11.4.7. System shall have provision to restrict Algo order placement in Mini and Micro contract as defined by the Exchange from time to time as per the Broad Algo guidelines applicable for Commodity Segment.

12. Testing of software

12.1. Member registered retail algos are required to participate in mock/simulation on a periodic basis as per circular issued by the Exchange time to time

12.2. Trading Members can avail Test Environment as detailed in MCX circular MCX/CTCL/891/2020 Dated November 25, 2020 and MCX/CTCL/101/2025 Dated February 21, 2025

13. Confidentiality of retail algo strategies including confidentiality clauses, non-disclosure agreements, encrypted submissions etc.

13.1. Retail algo strategies may be of following types

13.1.1. ALGO is developed by trading Member or Vendor

a) As per SEBI circular Algos shall be categorized into two categories:

i. Algos where logic is disclosed and replicable i.e. Execution Algos or White box Algos;

ii. Algos where the logic is not known to the user and is not replicable, i.e. Black box Algos –

For Algos in category (ii), the algo provider shall:

- Register as a Research Analyst and maintain a detailed research report for each such algo and confirm to the exchanges that such report has been maintained.
- In case of any change in the logic governing the algo, register such algo as a fresh algo and maintain a detailed research report.

13.1.2. ALGO is developed by tech-savy client – The entire responsibility of the logic of the strategy and RMS requirement as per SEBI/MCX circular will be ensured by the Tech Savvy client.

13.1.3. In all the above cases, a detailed agreement with respect to confidentiality clauses, non-disclosure agreements, encrypted submissions etc. needs to be entered between the concerned parties i.e. Broker, Vendor and Tech Savy client wherever applicable.

14. Data flow between the algo provider, broker and the Exchange – TM shall be responsible for the orders placed through any ALGO or otherwise. MCX circular MCX/CTCL/235/2025 dated May 06, 2025 (Annexure to the circular Para (I) (h)) states that all the strategies shall be run on the brokers servers. The order messages shall be originated from brokers server. Broker will be responsible to ensure that the data of clients do not flow beyond their servers so that confidentiality can be ensured. Brokers shall thus be responsible for the outsourcing guidelines specified by SEBI from time to time.

15. All the provisions of system audit, cyber security, VAPT and inspection related requirements would be applicable to all algos including Retail algos.

16. Member / Client / Algo Vendor shall ensure compliance to Algorithmic Trading guidelines applicable for the Commodity Segment as issued from time to time.

Note:

1) All applications will be processed offline till the online portal is available.
2) Member will not be allowed to place manual and Algo orders from same user ids, member will have to maintain separate user Ids.

Annexure A –Empanelment process of Algo providers

1. Criteria for Empanelment of "Algo Provider":

SR. No	Criteria for Empanelment of "Algo Provider"	Response to Criteria
1	The constitution of applicant vendor may be individual / a firm registered under the Indian Partnership Act, 1932 / a Limited Liability Partnership registered under Limited Liability Partnership Act 2008/a Company registered under the Companies Act 2013/1956 or Body Corporate.	Copy of Certificate to be attached
2	Parameters for vendor / algo provider empanelment - background, infrastructure, systems etc.	Supporting documents need to be provided
4	Details of promoters and their background	Supporting documents need to be provided
5	2 years of Securities Market experience for the Proprietor/Directors (Any 1)/Partners (Any 1)	Supporting documents need to be provided
6	Criteria related to ISO certification (New) - 27001:2022, CMM (Capability maturity Mode) certification, SOC1 Type 1, Type 2, and SOC2 Type 1, Type 2 requirements added as per SEBI requirements (SEBI circular SEBI/HO/ ITD-1/ITD_CSC_EXT/P/CIR/2024/113 dated 20 August 2024)	Copy of Certificate to be attached
7	Complete details of infrastructure available (as below) within the organization – Hardware, software, Communication / Networking	Similar to point no. 2
9	Proposed Price (indicative per user & site license fee) of providing the Solution to Trading Members	
12	Organisation details - Organisational structure, total staff, technical staff, Name and PAN of proprietor/ partners/ directors/promoters and their background, Name and mobile number of contact person, No. of offices across the country	
13	Declaration of any cyber / adverse technical incident for the previous 2 years, VAPT reports covering assessment of the Application, APIs, Infrastructure along with Closure report (ATR) from CERT-In empaneled auditor (SEBI circular SEBI/HO/ ITD-1/ITD_CSC_EXT/P/CIR/2024/113 dated 20 August 2024)	

Annexure B – APPLICATION FOR EMPANELMENT AS ALGO PROVIDER
(To be executed on letter head of the software vendor)

To
CTCL Department
Multi Commodity Exchange of India Limited
255, Exchange Square,
Suren Road, Chakala,
Andheri (East),
Mumbai – 400 093.

Sr. #	Particulars	Details
1.	Application for empanelment for ATF	
2.	API required from Exchange:	Non-FIX
3.	Name of the Algo Provider:	
4.	Registered Address:	
5.	Telephone No.:	
6.	Email Id.:	
7.	Name(s) & Designation of Authorised Signatory:	
8.	Contact details (Phone, Email) of Authorised Signatory:	
9.	Correspondence Address of Authorised Signatory:	
10.	Organisational structure:	To be enclosed
11.	Total Staff:	
12.	Directors:	
13.	Technical Staff - Hardware:	
14.	Technical Staff - Software:	
15.	Technical Staff - Support:	
16.	Technical Staff - Others:	
17.	No. of support offices across the country:	Complete details to be enclosed
18.	Details of promoters and their background:	To be enclosed
19.	No. of years in the IT Business:	
20.	IT Turnover for the last three years:	
21.	Technical Details – Hardware Infra Structure available within Organisation:	To be enclosed
22.	Technical Details – Software Infra Structure available within Organisation:	To be enclosed

23.	Technical Details – Communication / Networking Infra Structure available within Organisation:	To be enclosed
24.	Details of Empanelment as Algo Provider / ISV with other Exchanges:	If Yes provide details
25.	Complete details of Proposed Solution along with Platforms used:	Comprehensive write-up explaining features of the solution, programming language, OS platform, Database details and network diagram to be provided.
26.	Name and reference of Exchange (MCX) trading members where a solution is implemented, if any:	
27.	Proposed Price (indicative per user & site license fee) for providing the Solution to the Members of the Exchange: Price for Workgroup edition	(Give details)
28.	Networth Details	(CA/CS certified networth certificate to be enclosed)

We certify that all the statements are true and correct to the best of our knowledge. We undertake to ensure continuous compliance with the requirements of the Exchange, Department of Technology (Government of India) policy and regulations with regard to levels of encryption, etc., SEBI and directives and other statutory requirements including tax and foreign exchange laws of the regulators in this regard, as may be issued from time to time.

Further, we are aware that the list of vendors empaneled with the Exchange including address and contact person details are displayed on the website of the Exchange and accordingly we have no objection to display of our details on the website.

Signed sealed and delivered by the Authorised signatory of the Vendor

Date:
Place:

Annexure C – UNDERTAKING To be provided by Algo Provider

To be executed on Rs. 1000/- stamp paper / applicable stamp duty of the state (whichever is higher), duly Notarized on all pages, signed, stamped & sealed by Authorized Signatory on all pages

I / We _____, an individual / a firm registered under the Indian Partnership Act, 1932 / a Limited Liability Partnership registered under Limited Liability Partnership Act 2008/a Company / Body Corporate incorporated under the Companies Act of 2013/ _____ Act, ___, and residing at / having our registered office at/ having place of business at _____ (including its successors, assigns and legal representatives) give this UNDERTAKING on this _____ day of _____ at _____ IN FAVOUR of MULTI COMMODITY EXCHANGE OF INDIA LTD., a company incorporated under the Companies Act of 1956, with its registered office at Exchange Square, CTS No.255, Suren Road, Chakala, Andheri (East), Mumbai – 400 093 India (hereinafter referred to as "MCX", which expression shall unless repugnant to the context include its successors, assigns and legal representatives)

WHEREAS

a) I/We (hereinafter also referred to as "Algo Providers") am/are desirous of making available decision support tools/algorithms ("Algorithm/Tools") to trading members of MCX (hereinafter "Trading Members") for the purpose of algorithmic trading and has/have approached MCX.

b) MCX may, at its sole discretion, empanel such Algo Providers to provide Trading Members with Algorithm/Tools purposed for algorithmic trading ("Product") based on the application received from them and fulfilment of criteria stipulated by MCX from time to time. This includes the vendor providing an undertaking in favour of MCX in the prescribed format and agreeing to abide by and be bound by the various terms and conditions prescribed by MCX from time to time.

c) I / We have developed the Product for Trading Members to enable them to avail of the algorithmic trading facilities with the Exchange, and in this regard, I/ We, have submitted our application to MCX for empanelment along with an undertaking as herein below:

NOW THEREFORE IN CONSIDERATION OF MCX having agreed to identify / identified me / us as "Algo Provider" and my/our Product as "Registered Product" for the aforesaid purposes, I / we hereby IRREVOCABLY AND UNCONDITIONALLY AGREE, ACCEPT and UNDERTAKE to abide by and be bound by the following terms and conditions:

1. I/We hereby, declare that the information provided by me/ us in the application form submitted to MCX for registration as an Algo Provider or for the registration of the Product (hereinafter as "Registered Product") are correct, complete, true in all aspects. I/We hereby acknowledge and understand that my/our registration as Algo Provider and/or registration of our Product as Registered Product by MCX is only basis the documentation provided by me to MCX and MCX shall not held liable for any claim or penalty arising as a result of use or availment of my Product.
2. I/We agree to pay any such license fees/charges/royalties as may be levied by DOT/SEBI/MCX or any other regulatory/statutory authorities from time to time.
3. I/We shall ensure that the Product along with Risk Management System complies and shall continue to comply at all time with the requirements laid down by MCX and/or SEBI.
4. I/We undertake that our Product adheres to implementation standards formulated by Broker's Industry Standards Forum, under aegis of stock exchanges / commodity exchanges and in consultation with SEBI.
5. I/We undertake to ensure that access shall be given only to the authorized individuals, either it being our representatives ("Algo Provider's Personnel") or representative of the Trading Member

("Approved Users") and shall ensure to deploy necessary security, tools, method (including malware protection) to prohibit any unauthorized access to the Product provided.

6. I/We shall install the Product only at the Trading Member's location only after duly ensuring that all the requirements stipulated by MCX in this regard have been complied by the Trading Member and that the Approved User shall not make the Product available to any other unauthorised person.

7. I/We undertake to give MCX prior notification for any changes to be made to the Software and seek fresh registration from MCX of the Product as Registered Product.

8. I/We undertake that the Product design shall be compatible with MCX's trading system in order to use only the specified messages given by MCX and shall consider all the structures defined by MCX from time to time. I/We shall ensure that the Product shall be compatible with basic functionalities as required by MCX and to any changes thereof. Further, I/We shall ensure that any customization requirement of the Trading Members shall be in line with MCX requirements.

9. I/We undertake that the Product developed by me / us shall be at all times similar to that of the specifications of Member Control Station (MCS) / Member Trade Station (MTS)or any other Exchange provided software including any upgrades stipulated by MCX, from time to time. However, I/ we shall ensure that such Product developed by us shall be distinctly identifiable from MCS / MTS or any other Exchange provided software.

10. I/We undertake that controls shall be inbuilt by me/ us to ensure that the orders are matched by the central computer of MCX only and there is no scope for orders being matched in my / our / Trading Members own private network.

11. I/We undertake that the following controls shall be inbuilt in the Product by me/us to detect loss of product integrity:

    a. Data validation routines to detect input errors.
    b. Backup and recovery procedures.

12. I / We shall ensure that the Product shall have adequate security features and that the Product cannot be made available to any other person other than Approved Users.

13. I / We shall ensure that the Product shall be developed so as to generate the following from the system for the purpose of verification during the inspection:

    (i) Number of users hooked on to the network

    (ii) Number of dealers hooked on to the network including privileges to each dealer.

    (iii) All the systems logs and audit trails of the dealer and the Trading Member.

    (iv) Provision for entering complementary dummy orders.

14. I/We undertake that

    (i) SEBI/MCX shall have the right and privilege of auditing and testing the Product at my/our site and the Trading Members site at any point of time without any prior notice. The source code of the Product shall be made available at my/our site for verification and during such audit by SEBI/MCX.

    (ii) I / We shall provide all the necessary support, technical and otherwise, as may be required for SEBI/MCX or any other regulatory authority to inspect and test the Product and/or our site.

    (iii) I / We shall make available prototype and the technical specifications of the Product to MCX for testing purposes.

(iv) I / We shall be responsible to fix the bugs in the Product if any, found at the time of testing.

15. That I / We shall meet the criteria set to measure the expected level of performance.

16. I/ We agree that the terms for providing the Product and for the payment thereof, shall be as agreed by the Trading Member and myself/us and MCX shall not be responsible for any breach, either by the Trading Member or by me/ us, of such terms and conditions agreed therein.

17. I/We shall provide the documentation i.e. training manuals required to operate the Product and use of system outputs as specified by the Trading Member. Further, such documentation shall include the potential error conditions and recommend action in the event of occurrence of error.

18. I / We undertake to provide user training first when the Product is installed and thereafter whenever a major upgrade is released, or at such other intervals as may be required by Trading Member or stipulated by the Exchange for the following:

    (i) Use of Product

    (ii) Maintenance of the Product

    Further, I / We also undertake that the frequency and calibre of my/our personnel providing the training shall be as specified.

19. I / We shall develop the Product after considering the current and expected increase in workload, to ensure that the desired efficiency can be maintained with future workloads.

20. I / We shall develop the Product and make it compatible to other operating systems, in case of any need to transfer the Product from one piece of hardware to another due to technological changes.

21. I/We am/are fully aware that MCX shall not be responsible for development, maintenance, updates, upgrades, error fixes and other support functions.

22. I/We undertake to provide the training and documentation as and when the Product is technically upgraded.

23. I/ We undertake to provide such warranty as may be required for the purposes of this Undertaking.

24. I / We undertake to ensure as follows:

    (i) That in case of failure or malfunctioning of the Product, I/We shall make such first level trouble shooting and rectification the Product problem to restore the Product in its proper operating condition at no cost to the Trading Member.

    (ii) That I / We shall provide services for regular on-site maintenance of the Product in such manner and at such time intervals as specified by the Trading Member. The fees for the same will be the amount mutually agreed upon by the Trading Member and me/us and shall not at any point of time be unreasonable so as to put the Trading Member in hardship. We are also aware that MCX shall in no way be responsible for non-fulfilment of either this or any other condition by the Trading Member.

    (iii) Shall supply and maintain the Product trading solution to any MCX Trading Member at any location in the country, which the Trading Member desires to operate from.

25. I / We undertake to ensure as follows:

    i. For the purpose of provision of algo trading through APIs, trading member shall be the principal while the Algo Provider shall act as its agent, while using the API provided by the trading member.

ii. All algo orders originating/flowing through Application Programming Interface (API) extended by Trading Member to Algo Providers, shall be tagged with a unique identifier provided by Stock Exchange.

iii. In case, I/We provide the software to tech-savvy retail investors, then, I/we shall get it registered with the Exchange through Member, only if they cross the Specified Order Per Second Threshold.

iv. Software so provided shall be permitted to be used by such retail investors for their family (but not for other investors). 'Family' for this purpose would be as defined in SEBI circular SEBI/HO/MIRSD/MIRSD-PoD1/P/CIR/2024/169 dated 3 December 2024.

v. Access is allowed only through a unique vendor client specific API key and static IP whitelisted by the Trading Member to ensure identification and traceability of the Algo Provider and the end user (i.e. investor) and the access is not permitted through open APIs;

vi. Access to API is authenticated through two factor authentication;

vii. Product shall have Open Authentication (OAuth) based authentication only and any other authentication mechanisms as prescribed by MCX/SEBI from time to time.

viii. For Black Box Algos, i.e. Algos where logic is not known to the user and is not replicable, I/We shall register as a Research Analyst and maintain a detailed research report for each such algo and confirm to MCX that such report has been maintained. In case there is any change in the logic governing the algo, then I/We shall register such algo as a fresh algo and maintain a detailed research report for the new algo and confirm to MCX that such report has been maintained.

26. I / We confirm that the Product complies with all the requirements stipulated by MCX, SEBI and the DOT in this regard and undertake that I/we shall modify the Product, if necessary to ensure continued compliance with the requirements of MCX / DOT / SEBI / any other authority as may be issued from time to time.

27. I / We hereby undertake to duly inform MCX in case of any cause, resulting in any change to my/our entity, or any change in any of the eligibility criteria based on which my / our Product has been identified as 'Registered Product' for these purposes by MCX.

28. I / We hereby undertake to duly inform MCX the list of Trading Members who are using my/our Product as and when MCX seeks such information within the stipulated time, as communicated by MCX.

29. I/We agree and undertake to make any modification/amendment to the Product as required by MCX during the continuation of the empanelment.

30. I/We agree that the term "Empanelment at MCX" is specifically limited to accessing test market and receiving update from MCX regarding the software facility, wherever we display or express our empanelment with MCX.

31. I/We agree that "Empanelment at MCX" does not guarantee the veracity of the Product or any commercial veracity of any contract or agreement done by us with our clients.

32. I/ we agree that our empanelment at MCX does not constitute or imply endorsement, recommendation, or favour by MCX, its associate companies or any of its employees or contractors acting on its behalf. Further that, I/We would not position ourselves to the market at large in a manner that is akin to conveying endorsement, recommendation or favour by MCX.

33. I / We shall render all possible assistance and co-operation to MCX/SEBI by providing access to any kind of information in any form as it may require and I/we hereby undertake to produce such documents, records, accounts, books, data howsoever stored including data stored in magnetic

tapes, floppy diskettes, etc. and any other information as may be required by MCX/SEBI at its discretion.

34. . I/We hereby acknowledge, accept and understand that MCX makes no representations or warranty, express or implied, regarding the advantages, benefits, usefulness, or accuracy of the Product or the advantages accruing from subscribing to it. MCX shall not be responsible or liable for the functionality or performance of the Product and does not guarantee any desired results/outcomes. MCX shall not be liable for any direct or indirect claims, damages or the like arising from the use, availment, or subscription of such facility by the trading member.

35. I/We agree that the empanelment granted by MCX for providing Product does not, in any manner, represent or warrant that the Product shall be free of any error, omission, defects, bugs, shortcoming or limitation of any nature. The Algo Provider and Trading Member are solely responsible for ensuring that the Product does not result in any market disruption, manipulation, aberrations or affect the integrity of the market or sanctity of price discovery mechanism. Furthermore, I/We and Trading Member shall be solely liable for all/any dysfunctional, erroneous or disorderly functioning of the Product and for any technical glitch in the same and the consequences arising therefrom. I/we and Trading Member shall at all times ensure that the Product is not used for any purpose that is contrary to applicable Circulars, Byelaws, Rules and Regulations of the SEBI and/or Exchange.

36. I/We agree that in event of any dispute arising between me/us and Trading Member/s, MCX shall not be responsible for the resolution of such dispute. Furthermore, MCX shall not be liable for any breach of terms and conditions, commercial agreement or other agreements mutually agreed upon between I/we and trading member.

37. I/We agree that MCX only facilitates access for Trading Members to the test market to test the Product that is developed by me/us. The grant of such access by MCX shall not be used by me/us to communicate to any Trading Members that MCX assumes any responsibility for the Product developed by us.

38. I / We shall indemnify and keep MCX harmless and defend against all claims, demands, damages, liabilities, losses and expenses (including the reasonable cost of investigating and reasonable counsel fees) suffered by MCX due to my / our non-compliance, breach or contravention of any provisions of this Undertaking or due to bugs or malfunctioning of the Product provided by us to the Trading Members of MCX or any claims, damages or the like arising from the use, availment, or subscription of such facility by the trading member.

39. The limits on liability as stated above do not apply to: (a) Fraud, fraudulent misrepresentation, wilful misconduct, or conduct that demonstrates a reckless disregard for the rights of others; (b) Negligence causing death or personal injury; (c) any third Party claim related to Intellectual Property Rights.

40. For the purpose of this Undertaking "**Intellectual Property Rights**" means:
    i. Copyrights, patents, know-how, trade secret, database rights and rights in trademarks and designs (whether registered or unregistered),
    ii. Applications for registration, and the right to apply for registration and extensions and renewals for any of the same, and
    iii. All other intellectual property rights and equivalent or similar forms of protection existing anywhere in the world including any future rights that may be recognized.

41. I/We agree that no forbearance, delay or indulgence by MCX in enforcing the provisions of this Undertaking shall prejudice or restrict the rights of MCX nor shall any waiver of its rights operate as a waiver of any subsequent breach and no rights, powers, remedies herein conferred upon or reserved for MCX is exclusive of any other right, power or remedy available to MCX and each right, power or remedy shall be cumulative.

42. I/We undertake that any declaration or other notice to be given by me/us to MCX shall be sent by registered letter or telex/cable or facsimile transmission to the address first mentioned above.

43. I/We shall not advertise or publish any brochure, pamphlet, booklet, notice, or promotional material mentioning MCX or MCS / MTS without the written consent of MCX.

44. I/We shall submit that I/We shall ensure that the empanelment fee payable to MCX is timely paid to MCX.

45. I/We shall submit such details as required by MCX including the details regarding the list of Trading Members of MCX to whom I/we have provided the license to use the Product and number of license provided to the Trading Members of MCX. The details shall be submitted by me / us on a periodical basis or as and when asked by MCX.

46. I/We shall execute, sign, subscribe to such other documents, papers, agreement, covenants, bonds, and/or undertakings as may be prescribed or required by MCX from time to time.

47. I/We shall not (a) Provide advice or recommendations related to securities unless registered with or expressly permitted by SEBI and (b) Make any claims about returns or performance related to securities unless expressly permitted by SEBI. A breach of this clause will allow MCX to terminate my/our empanelment immediately.

48. I/We agree that MCX has the right to withdraw my / our identification as “Algo Provider” or identification of my/our Product ‘Registered Product’ for any segment without giving any reason.

49. I/We undertake that any agreement entered into between Trading Members and Algo Providers shall be separate and independent of this Undertaking and I/We shall ensure that MCX shall not be liable for any claim arising out of such agreement entered into between Trading Members and Algo Providers.

50. I/We undertake that there is no conflict of interest with the business of MCX. I / We shall ensure continued compliance with this requirement. We also undertake that our group companies including holding or subsidiary companies are not engaged in a business which gives rise to conflict of interest with the business of MCX. I/We shall immediately inform MCX in case a conflict of interest arises in the future and in such an event, MCX may take such action as it may deem fit including withdrawal of identification of my/our Product.

51. In the event that the Undersigned wishes to dis-empanel itself, it shall provide MCX with at least 90 days’ prior notice. The Undersigned agrees to extend full cooperation and support to the trading member(s) to ensure a smooth transition, including but not limited to assisting with the porting of services, data and any necessary technical or operational handover.

52. The Undersigned agrees and undertakes that MCX shall not be liable for any direct or indirect loss, damage, costs, claims and expenses whatsoever caused or contributed by any event of force majeure. For the purposes of this Clause, "Force Majeure" means and includes wars, insurrections, revolution, fires, floods, epidemic, quarantine restrictions, declared general strikes in relevant industries, act of God, act of the Government of India and any concerned State Government and such other acts or events beyond MCX's control and further the above is without prejudice to the rights already accrued to MCX due to failure of the Undersigned to perform either in full or in part, its obligations arising prior to the occurrence of events of Force Majeure.

53. I/We affirm to provide all support that is required for the conduct of any audit or investigation or process in respect of our Product, pursuant to any regulatory requirement.

54. I/We affirm to abide by all relevant Laws, Rules and Regulations applicable to me/us during the course of my/our empanelment with MCX for providing Algorithm/Tools to Trading Members of MCX for the purpose of algorithmic trading.
55. I/We affirm that this Undertaking is governed by the laws of India and any dispute arising from the same will be subject to the jurisdiction of courts of Mumbai.
56. We affirm that in the event of contravention of the above terms of the Undertaking, MCX shall have the absolute right to discontinue our empanelment without notice and without assigning any specific reasons whatsoever. We confirm that such decision by MCX to discontinue our empanelment shall be final and binding on us.

IN WITNESS WHEREOF this Undertaking is executed by the undersigned on the day, month, year and the place first mentioned above.

SIGNED, SEALED AND DELIVERED BY

_____

for and on behalf of _____

_____

_____

Before me

In the presence of Witnesses

1. _____ (Name & Address) ……..

2. _____ (Name & Address) ……..

Checklist for Submitting Undertaking

Sr	Pre Checks	Tick wherever applicable
1	Stamp paper is of minimum Rs. 1000 /- **for details refer instruction below	
2	Stamp paper purchased in name of Algo Proivder	
3	Undertaking is executed in favour of MCX	
4	Date of Stamp paper purchase :	
5	Date of execution of undertaking mentioned :	
6	Date of Notarizing to be mentioned :	
7	Notary stamp on all pages	
8	Date of entering into the agreement as specified on the first page of the agreement should be on or before the date of notarizing the agreement.	
9	Undertaking is executed within validity of stamp paper (Date of execution is on or after the date of, and is within six months of, the stamp paper purchase date)	
10	Clauses of Undertaking are as per format	
11	Signature on all pages of the Undertaking	
a	For Individual : Only self can sign	
b	For Partnership Firm : All Partners OR Authorised Signatory	
c	For Corporates : Minimum two directors or a managing director/ Authorised signatories	
d	For others : Authorised signatories	
12	Signature of 2 witness on last pages of the Undertaking	
13	Company's stamp is affixed and in presence of persons authorised by the Board Resolution (for Corporates only)	
14	If there is any correction in the undertaking , then ensure the persons as authorised by the board resolution have signed across the correction	
15	Additional Documents to be collected	Remarks
a	For Individual : None	-
b	For Partnership Firm : Partnership deed or any other documents as advised	
c	For Corporates : Copy of board resolution and specimen signature list of authorised signatories	
d	For others : any other documents as advised	

** To be executed on Rs. 1000/- stamp paper / applicable stamp duty of the state (whichever is higher), duly Notarized on all pages, signed, stamped & sealed by Authorized Signatory on all pages

Annexure D

Application for approval of Client Direct API
(To be executed on letterhead of the Vendor)

To
CTCL Department
Multi Commodity Exchange of India Limited
255, Exchange Square,
Suren Road, Chakala,
Andheri (East),
Mumbai – 400 093.

We are desirous of making available Client Direct API to members of the Exchange for the purpose of Trading to their client. We hereby apply for the permission of the Exchange for registeration of Client Direct API software / strategies.

Sr. #	Particulars	Details
1.	Name of the Algo Provider:	
2.	Registered Office/ Correspondence address :	
3.	Telephone No.:	
4.	Fax No.:	
5.	Name and Designation of the Authorised Signatory:	
6.	Contact details of the Authorised Signatory Telephone No. : Email :	
7.	API Type	Non-FIX
8.	Tick By Tick	Yes/No
9.	Technical Details a) Hardware b) Software	
10.	Operating System	WINDOWS / LINUX / UNIX / MACOS
11.	Name of the Client Direct API Software and Version Number	
12.	Name of the Algo Strategy / API Name and Version number	
13.	**Algo Category** **A. White Box** **B. Black Box**	1. Execution 2. Arbitrage 3. Alpha Seeking 4. High Frequency 5. Scalping 6. Others [provide brief description]
14.	URL through which the Algo is being provided to clients:	
15.	Detailed Write-up on Algo / API (Algo Strategy- Should cover note on Liquidity Infusion and controls built-in in the software to	

	comply Exchange / SEBI guidelines and to be provided on letterhead of the Vendor)	

Signed sealed and delivered by the Authorised Signatory of the Vendor

Date:

Place:

Annexure E Auditor Selection Norms

1. The Auditor shall have minimum 3 years of experience in IT audit of securities market participants e.g. stock exchanges, clearing corporations, depositories, stock brokers, depository participants etc. The audit experience should cover all the major areas mentioned under Terms of Reference (ToR) of the system audit specified by SEBI / stock exchange.

2. Resources employed for the purpose of system audit shall have relevant industry recognized certifications e.g. D.I.S.A. (ICAI) Qualification, CISA (Certified Information System Auditor) from ISACA, CISM (Certified Information Securities Manager) from ISACA, CISSP (Certified Information Systems Security Professional) from International Information Systems Security Certification Consortium, commonly known as (ISC).

3. The Auditor should have experience of IT audit/governance frameworks and processes conforming to industry leading practices like CobiT.

4. The Auditor shall not have any conflict of interest in conducting fair, objective and independent audit of the Stock Broker. Further, the directors / partners of Auditor firm shall not be related to any stock broker including its directors or promoters either directly or indirectly.

5. The Auditor shall not have any cases pending against its previous audited companies/firms, which fall under SEBI"s jurisdiction, which point to its incompetence and/or unsuitability to perform the audit task.

Annexure F

System Auditors' Certificate to be provided by Algo Provider / Empanelled Vendor ISV
(On the letterhead of System Auditor)

System Auditors' Certificate

To

CTCL Department

Multi Commodity Exchange of India Limited
Exchange Square,
Suren Road, Chakala,
Andheri (East), Mumbai – 400 093.

It is hereby confirmed and certified that Algo Provider / Empanelled Vendor ISV Code: _____ Algo Provider / Empanelled Vendor ISV Name:_____, has successfully completed the testing of all areas as laid down by the Exchange for the below mentioned 'CTCL Software' by participating for minimum time period as mandated by the Exchange. The software and system have the capacity to meet all requirements of the Exchange and SEBI as on date.

This is to certify that the above-mentioned product to be used by Clients of the Algo Provider for connecting to the members of the Exchange for the purposes of Algorithmic trading and real-time risk management, is in compliance with the various SEBI/Exchange circulars relevant at the time of the application, more specifically with respect to the following:

- Order Management
- Systems and Network
- Access and Security controls
- Cyber Security & Cyber Resilience framework
- Risk checks listed below

Part I

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Details</th></tr>
<tr><td>1.</td><td>Type of application</td><td>(New / Modification)</td></tr>
<tr><td>2.</td><td>Verification of software testing done by Vendor in Exchange provided Test environment

No. of days software has been tested by vendor in Exchange provided Test environment

vendor Id & User Id used by vendor for testing in the Exchange provided Test environment

Whether any abnormalities observed in the verification of Logs, Reports, Audit Trail and Database of the tests performed by members in Exchange provided Test environment

<table>
<tr><th>Testing Trading Date</th><th>Test Duration</th><th>Segment</th><th>User ID</th><th>Type of the CTCL Product: Client Direct API</th></tr>
</table>
</td><td></td></tr>
</table>

		(Time in Hrs.)				
3.						

Particulars	Name	Version No
Type of the Product:	AT (Algo Trading) / User Interface	
Software developed by		---
Risk Administration / Manager		
Algo Strategy(ies)		
Product Category:	API	---
URL through which the Algo is being provided to clients:		

Part II

Sr. No.	Area of Audit	Complied (Yes / No)	Auditor's Remark
1.	Password policy: a) User should be able to login with valid user id and password b) Password length meets Exchange guidelines c) The password numeric values should not fully comprise of User ID d) In case of multiple invalid password entries the user id should be locked e) Password should be alphanumeric and comprise one special character f) Two factor authentication for login Appropriate message is displayed for login attempt failure		
2.	Product write-up of the software contains detailed strategy(ies) write-up with comprehensive note for the following points: a) Algo Software/strategy will not take liquidity away from market and is conducive to efficient price discovery/ fair play. b) The member has a system to identify dysfunctional algorithms. Further, the algorithmic system has pre-defined parameters for an automatic stoppage in the event of algorithmic execution leading to a loop or a runaway situation. c) Checks are in place to ensure the Maximum order per second does not exceed 120 orders per second.		

Sr. No.	Area of Audit	Complied (Yes / No)	Auditor's Remark
	d) Checks are in place to ensure that OTR does not exceed the ratio prescribed by SEBI (i.e. for excessive modification and cancellation of orders). e) An Algorithmic trading software accounts for all executed, unexecuted and unconfirmed orders, placed by it before releasing further order(s). f) Automated Execution Check: An algo shall account for all executed, unexecuted and unconfirmed orders placed by it before releasing any further order/s.		
3.	CTCL terminal info sent along with the orders placed complies with the guidelines laid by the Exchange. The orders generated by Automated Trading software are identified as Algorithm orders while being released to the Exchange.		
4.	IOC and Market orders are not allowed		
5.	Order Entry during Halt session is not allowed		
6.	Strategy is behaving as expected while partial execution of orders and after DPR relaxation.		
7.	The Algo Provider may have the capability to set up and apply the necessary following risk control checks at the individual order level and client level before each order is generated: **Daily Price Limit**: Orders are not released in violation of the daily price limit defined in the contract specification or any other limit which may be prescribed by the Exchange. Additionally, Orders should not be placed at unrealistic price that are far away from the fair price at the relevant point of time. Appropriate internal systems/ checks in place to restrict placing orders at unrealistic prices. **Maximum Order Size / Position Limits**: (Maximum Single Transaction Value / Maximum Single Transaction Quantity): Order is not released in violation of the maximum order size limit / position limits at client / member level defined in the contract specification. *Alerts of Maximum Single Transaction Value / Maximum Single Transaction Quantity / DPR Limit breach for CTCL Terminal is handled at CTCL Manager level itself.		
8.	**Position Limits**: Provision to generate and monitor alerts on position limits at client level / member level as defined in the contract specifications. Further, Orders shall not be released in breach / violation of position limit at client level / member level and the		

Sr. No.	Area of Audit	Complied (Yes / No)	Auditor's Remark
	same is validated with necessary risk mitigation checks / controls in the algorithmic / CTCL trading system of the member.		
9.	The algorithm strategy/ies are conducive to efficient price discovery and fair play and shall not take liquidity away from the market		
10. **A**	**At Individual Order Level**		
10.1	**Price Check** Orders shall not be released in breach of the price bands /dummy filters as defined by the Exchange in respective segments. Additionally, Orders should not be placed at unrealistic price that are far away from the fair price at the relevant point of time, to ensure that the trades resulting from the execution of such orders are not in the nature of abnormal / manipulative trades. Appropriate internal systems/ checks in place to restrict placing orders at unrealistic prices.		
10.2	**Quantity Limit Check** Orders shall not be released in breach of order quantity limit per order as defined by the Exchange in respective segments.		
10.3	**Order Value Check** All Orders are not released in breach of the "value per order" (combination of price and quantity checks) as defined by the Exchange for security / product in respective segments.		
11. **B**	**At Client Level**		
11.1	**Cumulative Open Order Value Check** Orders shall not be released in breach of Individual client level cumulative open order value check at the client level. The open order value for a client is the total value of its unexecuted orders released from the trading members system. System shall not permit the user to set "Unlimited values".		
11.2	**Net Position Vs. Available Margin Check** Orders shall not be released in breach of Net positions as against the available margin defined by the trading member for the client		
11.3	**Position Limit Check** Provision to generate and monitor alerts on position limits at client level / member level as defined in the contract specifications. Further, Orders shall not be released in breach / violation applicable of position limit at client level /		

Sr. No.	Area of Audit	Complied (Yes / No)	Auditor's Remark
	member level and the same is validated with necessary risk mitigation checks / controls in the algorithmic / CTCL trading system of the member.		
11.4	**Exposure Limit Check at individual client level and at overall level for all clients.** Orders shall not be released in breach of exposure limit as defined by the trading member for the client.		
11.5	**Trading Limit Check & Security Wise Limit Check** Orders shall not be released in breach of security-wise value limit & Trading Limit as defined by the trading member for individual security.		
11.6	Turnover limits Orders shall not be released in breach of turnover limit as defined by the trading member for the client.		

Declaration:

It is hereby confirmed and certified that system audit of the software and systems used by _____ , a vendor of Multi Commodity Exchange of India Limited ('Exchange') has been conducted by me and have been found to be in compliance with the requirements stipulated by SEBI and Exchange and the above-mentioned software can be put to use.

We also certify that none of the current Directors / Partners / Promoters of the Algo Provider / Vendor are directly or indirectly related with any of the Directors / Promoters / Partners of _____ (Name of Auditing Firm) and there is no conflict of interest with respect to the Algo Provider / Vendor being audited.

Signature

(Name of the Auditor & Auditing firm)

CISA / DISA / CISM / CISSP Reg. No. :

UDIN:

Date:

Place:

Stamp/Seal: (valid digital signature is acceptable)

Annexure G – Change Description Document
(To be on the letterhead of Algo Provider, all pages to be duly stamped and signed)

	Previous Registered application details	**Modified application details**
Application Reference No		NA
Product Type	AT (Algo Trading) /Algo Trading over User Interface	AT (Algo Trading) / Algo Trading over User Interface
Name of the Strategy/ies (For ATF):		
Version No		
Change Description	NA-	Not more than 250 characters

Signature of Authorised Personal:

Date:

Place:

Annexure H
(to be provided on Member letter head)

Application form for in-house / ISV Vendor / Algo Provider Client Direct API Software Approval

To
CTCL Department
Multi Commodity Exchange of India Limited
CTS No.255, Exchange Square, Suren Road, Chakala,
Andheri (East), Mumbai – 400 093

I / We _____ (Name of the Member) hereby wish to apply for the following software.

Sr. #	Particulars	Details
1.	Member ID	
2.	Member Name	
3.	Tech Savy Client Name and UCC as per exchange record.	
4.	Type of API	Non-FIX
5.	Type of facility Direct Client API	API / UI
6.	Tick By Tick	Yes/No
7.	Software Name	
8.	Software Version No.	
9.	If Point no. 8 & 9 is already approved, provide an approved software application number.	
10.	ATF Strategy / API Name	
11.	ATF Strategy / API Version No.	
12.	Algo (ATF) Strategy Category (applicable only for Algo facility) A. White Box B. Black Box	1. Execution 2. Arbitrage 3. Alpha Seeking 4. High Frequency 5. Scalping 6. Others [provide brief description]
13.	URL through which the Algo is being provided to clients:	
14.	Operating System	WINDOWS / LINUX / UNIX / MACOS
15.	Software Developed by	In-House Team / Non-Empanelled vendor / ISV Empanelled vendor / Algo Provider
16.	Details of Non-Empanelled / ISV Empanelled vendor / Algo Provider from whom the software is developed	Name: E-Mail ID:

Signed by the Authorised Signatory

Signed
Date:
Place:

Annexure I

System Auditors' Certificate – To be provided by Trading Member
(On the letterhead of System Auditor)

To

CTCL Department

Multi Commodity Exchange of India Limited
Exchange Square,
Suren Road, Chakala,
Andheri (East), Mumbai – 400 093.

It is hereby confirmed and certified that Trading Member ID_____Member Name_____, and member of Multi Commodity Exchange of India Limited ('Exchange') has successfully completed the testing of all areas as laid down by the Exchange for the below mentioned 'CTCL Software' by participating for minimum time period as mandated by the Exchange. The software and system have the capacity to meet all requirements of the Exchange and SEBI as on date.

This is to certify that the above-mentioned product to be used by Clients of the Algo Provider for connecting to the members of the Exchange for the purposes of Algorithmic trading and real-time risk management, is in compliance with the various SEBI/Exchange circulars relevant at the time of the application, more specifically with respect to the following:

- Order Management
- Systems and Network
- Access and Security controls
- Cyber Security & Cyber Resilience framework
- Risk checks listed below

Part I

Sr. No.	Particulars	Details
1.	Category	(New / Modification)
2.	Verification of software testing done by Member in Exchange provided Test environment No. of days software has been tested by members in Exchange provided Test environment Member Id & User Id used by member for testing in the Exchange provided Test environment Whether any abnormalities observed in the verification of Logs, Reports, Audit Trail and Database of the tests performed by members in Exchange provided Test environment	
3.	Verification of participation by Member in Mock Trading or in the simulated environment session conducted by Exchange Tested in Mock or Simulated Environment:	

		Mock / Simulated Trading Date	Test Duration (Time in Hrs.)	Segment	User ID	Type of the CTCL Product: Client Direct API

Whether any abnormalities observed in the verification of Logs, Reports, Audit Trail and Database of the tests performed by members while participating in Mock/Simulated Environment Trading session conducted by Exchange

4.		Particulars	Name	Version No
		Application software Type of the Product:	AT (Algo Trading) / User Interface	
		Software developed by		---
		Risk Administration / Manager		
		Algo Strategy(ies)		
		Product Category:	API	---
		URL through which the Algo is being provided to clients:		

Part II

Sr. No.	Area of Audit	Complied (Yes / No)	Auditor's Remark
1.	Password policy: g) User should be able to login with valid user id and password h) Password length meets Exchange guidelines i) The password numeric values should not fully comprise of User ID j) In case of multiple invalid password entries the user id should be locked k) Password should be alphanumeric and comprise one special character (mandatory for CTCL) l) Two factor authentication for login (mandatory for IBT / WT) Appropriate message is displayed for login attempt failure		
2.	Product write-up of the software contains detailed strategy(ies) write-up with comprehensive note for the following points: g) Algo Software/strategy will not take liquidity away from market and is conducive to efficient price discovery/ fair play.		

Sr. No.	Area of Audit	Complied (Yes / No)	Auditor's Remark
	h) The member has a system to identify dysfunctional algorithms. Further, the algorithmic system has pre-defined parameters for an automatic stoppage in the event of algorithmic execution leading to a loop or a runaway situation. i) Checks are in place to ensure the Maximum order per second does not exceed 120 orders per second. j) Checks are in place to ensure that OTR does not exceed the ratio prescribed by SEBI (i.e. for excessive modification and cancellation of orders). k) An Algorithmic trading software accounts for all executed, unexecuted and unconfirmed orders, placed by it before releasing further order(s). l) Automated Execution Check: An algo shall account for all executed, unexecuted and unconfirmed orders placed by it before releasing any further order/s.		
3.	CTCL terminal info sent along with the orders placed complies with the guidelines laid by the Exchange. The orders generated by Automated Trading software are identified as Algorithm orders while being released to the Exchange.		
4.	IOC and Market orders are not allowed		
5.	Order Entry during Halt session is not allowed		
6.	Strategy is behaving as expected while partial execution of orders and after DPR relaxation.		
7.	The members shall have the capability to set up and apply the necessary following risk control checks at the individual order level and client level before each order is generated: **Daily Price Limit**: Orders are not released in violation of the daily price limit defined in the contract specification or any other limit which may be prescribed by the Exchange. Additionally, Orders should not be placed at unrealistic price that are far away from the fair price at the relevant point of time. Appropriate internal systems/ checks in place to restrict placing orders at unrealistic prices. **Maximum Order Size / Position Limits**: (Maximum Single Transaction Value / Maximum Single Transaction Quantity): Order is not released in violation of the maximum order size limit / position limits at client / member level defined in the contract specification. *Alerts of Maximum Single Transaction Value / Maximum Single Transaction Quantity / DPR Limit breach for CTCL Terminal is handled at CTCL Manager level itself.		

Sr. No.	Area of Audit	Complied (Yes / No)	Auditor's Remark
8.	**Position Limits**: Provision to generate and monitor alerts on position limits at client level / member level as defined in the contract specifications. Further, Orders shall not be released in breach / violation of position limit at client level / member level and the same is validated with necessary risk mitigation checks / controls in the algorithmic / CTCL trading system of the member.		
9.	The algorithm strategy/ies are conducive to efficient price discovery and fair play and shall not take liquidity away from the market		
10.	Whether member has implemented access controls for IT systems & databases		
11.	Whether Member does Vulnerability Assessment and Penetration Testing for its critical assets & Application Security Assessments for all critical applications		
12.	**At Individual Order Level**		
12.1	**Price Check** Orders shall not be released in breach of the price bands /dummy filters as defined by the Exchange in respective segments. Additionally, Orders should not be placed at unrealistic price that are far away from the fair price at the relevant point of time, to ensure that the trades resulting from the execution of such orders are not in the nature of abnormal / manipulative trades. Appropriate internal systems/ checks in place to restrict placing orders at unrealistic prices.		
12.2	Quantity Limit Check Orders shall not be released in breach of order quantity limit per order as defined by the Exchange in respective segments.		
12.3	**Order Value Check** All Orders are not released in breach of the "value per order" (combination of price and quantity checks) as defined by the Exchange for security / product in respective segments.		
13	**At Client Level**		
13.1	**Cumulative Open Order Value Check** Orders shall not be released in breach of Individual client level cumulative open order value check at the client level. The open order value for a client is the total value of its unexecuted orders released from the trading members system. System shall not permit the user to set "Unlimited values".		

Sr. No.	Area of Audit	Complied (Yes / No)	Auditor's Remark
13.2	**Net Position Vs. Available Margin Check** Orders shall not be released in breach of Net positions as against the available margin defined by the trading member for the client		
13.3	**Position Limit Check** Provision to generate and monitor alerts on position limits at client level / member level as defined in the contract specifications. Further, Orders shall not be released in breach / violation applicable of position limit at client level / member level and the same is validated with necessary risk mitigation checks / controls in the algorithmic / CTCL trading system of the member.		
13.4	**Exposure Limit Check at individual client level and at overall level for all clients.** Orders shall not be released in breach of exposure limit as defined by the trading member for the client.		
13.5	**Trading Limit Check & Security Wise Limit Check** Orders shall not be released in breach of security-wise value limit & Trading Limit as defined by the trading member for individual security / Product.		
13.6	**Turnover limits** Orders shall not be released in breach of turnover limit as defined by the trading member for the client.		

Declaration:

I hereby confirm, Member has complied with the requirement of Exchange Circular MCX/CTCL/223/2025 dated April 30, 2025, and other circulars issued from time to time on "Display of Brokerage, Statutory & Regulatory Levies to the investors" to prominently display the details of brokerage/charges to be levied for each order to the investor on the "Order placement window/screen" on their trading applications prior to placement of order.

It is hereby confirmed and certified that system audit of the software and systems used by _____ , a member of Multi Commodity Exchange of India Limited ('Exchange') has been conducted by me and have been found to be in compliance with the requirements stipulated by SEBI and Exchange and the above-mentioned software can be put to use.

We also certify that none of the current Directors / Partners / Promoters of the member are directly or indirectly related with any of the Directors / Promoters / Partners of _____ (Name of Auditing Firm) and there is no conflict of interest with respect to the member being audited.

Signature

(Name of the Auditor & Auditing firm)

CISA / DISA / CISM / CISSP Reg. No. :

Date:

Place:

Stamp/Seal: (valid digital signature is acceptable)

Annexure J

System Audit Report – Format To be provided by Trading Member

(On the letterhead of system auditor)

Date:

Name of Trading Member:

Member Id:

Part I

<table>
<tr><th>Sr. No.</th><th>Area of Audit</th><th>Results & Observations</th><th>Auditor's Remark</th></tr>
<tr><td>A.</td><td>System Features & Functionality</td><td>Results</td><td>Opinions</td></tr>
<tr><td>1.</td><td>Software Details

<table>
<tr><td>Particulars</td><td>Name</td><td>Version No</td></tr>
<tr><td>Application software Type of the Product:</td><td>AT (Algo Trading) / User Interface</td><td></td></tr>
<tr><td>Software developed by</td><td></td><td>---</td></tr>
<tr><td>Risk Administration / Manager</td><td></td><td></td></tr>
<tr><td>Algo Strategy(ies)</td><td></td><td></td></tr>
<tr><td>Product Category:</td><td>API</td><td>---</td></tr>
<tr><td>URL through which the Algo is being provided to clients:</td><td></td><td></td></tr>
</table></td><td></td><td></td></tr>
<tr><td>2.</td><td>The installed system features are as prescribed by MCX.

The Member ensures that the software version number is used to identify the system being approved by the Exchange.

Price Broadcast
The system has a feature for receipt of price broadcast data

Order Processing:
The system has a feature:
a) Which allows order entry and confirmation of orders
b) Which allows for modification or cancellation of orders placed
c) Order modification/ cancellation facility and trade history provided to clients

Trade Confirmation:
The system has a feature which enables confirmation of trades.

The system has a feature which provides history of trades for the day to the user</td><td></td><td></td></tr>
<tr><td>3.</td><td>The installed system provides a system based control facility over the order input process</td><td></td><td></td></tr>
</table>

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	Order Entry The system has order placement controls that allow only orders matching the to be placed. Order Modification The system allows for modification of orders placed. Order Cancellation The system allows for cancellation of orders placed Order Outstanding Check The system has a feature for checking the outstanding orders i.e. the orders that have not yet been traded or partially traded.		
4.	**The installed system provides a system-based control facility over the trade confirmation process** Trade Confirmation and Reporting Feature Should allow confirmation and reporting of the orders that have resulted in trade The system has a feature which provides history of trades for the day to the user		
5.	**The installed system provides a system-based control facility over the order input process** Order Matching Does the System pass all the Orders to the trading platform of the Exchange for execution and not allow any crossing of orders that are routed through it?		
6.	The System generates appropriate audit logs and trails so as to facilitate tracking of events such as orders and trades with timestamp.		
7.	**The installed system allows for placing orders only for authorized clients** Client ID Verification Only duly authorized client's orders are allowed to be placed. The system should not in any manner suggest to the user by default the name of Exchange, Scrip and Segment etc. It is the user who should have the option to select the same.		
8.	**The installed system has a User Management system as per the requirements of MCX.** Approved Users: Only users approved by MCX are allowed to access the system and documentation regarding the same is maintained in the form of a) User Approval Application b) Copy of User Qualifications		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	User Creation: New User IDs are created as per the CTCL guidelines. User ID: All users are uniquely identified through the issue of unique CTCL ids. User Disablement: Users not compliant with the Exchange Requirements are disabled and event logs maintained User Deletion: Users are deleted as per the MCX guidelines Reissue of User Ids: User Ids are reissued as per the MCX guidelines. Locked User Accounts: Users whose accounts are locked are unlocked only after documented unlocking requests are made.		
9.	User management and authentication mechanism a) Whether user management, password policy and procedures are documented? b) Whether registration and de-registration of user IDs are carried out as per the approved policy? c) Whether system has facility to manage users and roles assigned to them? d) Whether system allows access to only authorised users? e) Whether system has User ID and Password combination authentication mechanism which allows access only after providing valid details? f) Whether system requests for identification and new password before login into the system? g) Whether system allows access to functionality / module for which they are authorised?		
10.	Whether all successful and failed login attempts are logged with details like IP address and other data to enable traceability (optional)		
11.	Order/ Trade confirmation displayed on website/ application on real time basis		
12.	**The installed system parameters are as per MCX norms** Gateway Parameters • Trader ID Market Segment • IP Address		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	• (MCX Network) • Leased Line ID		
B	**Risk Management System**	Results	Opinions
13.	**The installed system is capable of assessing the risk of the client as soon as the order comes in and informs the client of acceptance/rejection of the order within a reasonable period.** Should allow for risk management of the orders placed and online risk monitoring of the orders being placed. Order Parameters There is online risk assessment of all orders placed through the system. Order Parameters based on the respective risk profile of the client **There is online risk assessment of all orders placed through the system with following checks :** • Order Value per order should not exceed as specified in RMS (not exceeding the maximum limit as specified by Exchange) • Order Quantity per order should not exceed as specified in RMS • For all checks in Individual Order Level, Trading Members (TM) are required to maintain a policy which shall be approved by the Board/All partners/Proprietor of the Trading Member. • Cumulative value of all unexecuted / open orders should not exceed as specified in RMS at client level • Order value limit at client level • Order value limit at branch level • Security-wise order limits at client level • All orders generated by Algorithmic trading product adheres to the permissible limit of orders per second, if any as may be specified by SEBI /Exchange. **Risk Parameters Control for AT** • The system should allow only authorized users to set the risk parameter. The system auditor should verify the process for any change in Risk Parameters and check whether changes are being done only by Authorised User with proper validation/re-confirmation. • The System should also maintain a log of all the risk parameter changes made. Integrity of all such logs is maintained, in other words logs should not be tampered. System auditor should verify & conduct audit of logs maintained for all modifications in Risk Parameters. **Order /Trade Limit Controls**		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	• Trading Members (TM) are required to maintain a policy along with authorisation for any change, validation/ modification by authorised person. The said policy shall be approved by the Board/All partners/Proprietor of the Trading Member. Whether Broker is using similar logic/ priorities as used by Exchange to treat client orders.		
14.	Whether the system carries out appropriate validations of the following risk parameters including Credit checks before the orders are released to the Exchange: a) Exposure limit b) Margin limit c) Order Quantity Limits d) Order Value Limits e) Daily Price Range Checks f) Cumulative limit on value of unexecuted orders g) Order Price Checks h) Security wise limit check		
15.	**The installed system provides a system-based event logging and system monitoring facility which monitors and logs all activities / events arising from actions taken on the gateway / database server, authorized user terminal and transactions processed for clients or otherwise and the same is not susceptible to manipulation.** The installed systems have a provision for On-line surveillance and risk management as per the requirements of MCX and includes Number of Users Logged In / hooked on to the network incl. privileges of each The installed systems have a provision for offline monitoring and risk management as per the requirements of MCX and include reports / logs on a) Number of Authorized Users b) Activity logs c) Systems logs d) Number of active clients e) Review of logs (activity/system/alert/incident)		
16.	**The installed system provides a system-based control facility on the trading limits of the clients and exposures taken by the clients include set pre-defined limits on the exposure and turnover of each client.** Only orders that are within the parameters specified by the risk management systems are allowed to be placed.		
17.	System-based control over the pre-defined trading limits set by the Member.		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
18.	**The installed system provides for reconfirmation of orders which are larger than that as specified by the members' risk management system.** Whether system has a manual override facility for allowing orders that do not fit the system-based risk control parameters?		
19.	Facility to prompt the user when he puts in orders that are over and above the normal limits set by the Member.		
20.	Review and release facility for orders which got rejected because of clients having exceeded limits etc.		
21.	Internally generated unique numbering for all client order/trades		
22.	To capture IP address for all orders		
23.	System doesn't have any functionality for matching of cross trades and all orders are offered to exchange trading system for matching		
C	**Session Security**	Results	Options
24.	Whether system has secure end-to-end encryption for all data transmission between the client and the member system through a Secure Standardized Protocol. A procedure of mutual authentication between the client and the member server is implemented?		
25.	Session login details are not stored on the devices used for internet-based trading and securities trading using wireless technology.		
26.	**The installed system provides session security f o r all sessions established with the server by the front-end application.** a) The system uses session identification and authentication measures to restrict sessions to authorized users only. b) The system uses session security measures like encryption to ensure confidentiality of sessions initiated.		
27.	**The installed system has provision for security, reliability and confidentiality of data through use of encryption technology, SSL or similar session confidentiality protection mechanisms** a) The system uses SSL or similar session confidentiality protection mechanisms b) The system uses a secure storage mechanism for storing of usernames and passwords c) The system adequately protects the confidentiality of the user's trade data.		
D	**Password Security**	Results	Options
28.	**The installed system Authentication mechanism is as per the guidelines of the MCX**		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	a) The installed system uses passwords for authentication. b) The system requests identification and a new password before logging into the system. c) The Password is masked at the time of entry.		
29.	System authenticates users with a Username and password as first level of security.		
30.	System mandates changing of password when the user logs in for the first time?		
31.	Automatic disablement of the user on entering erroneous password on five consecutive occasions.		
32.	The system provides for automatic expiry of passwords at the end of a reasonable duration and re-initialisation of access on entering fresh passwords.		
33.	Prior intimation is given to the user before such expiry?		
34.	System controls to ensure that the password is alphanumeric (preferably with one special character), instead of just being alphabets or just numerical.		
35.	System controls to ensure that the changed password cannot be the same as of the last 6 passwords.		
36.	System controls to ensure that the Login id of the user and password should not be the same.		
37.	System controls to ensure that the password should be of minimum six characters and maximum 8 characters.		
38.	User/Client is deactivated if the same is not used for a continuous period of 12 (Twelve) months from date of last use of the account.		
39.	System allows users to change their passwords at their discretion and frequency.		
40.	System controls to ensure that the password is encrypted at the member's end so that employees of the member cannot view the same at any point of time.		
E	**Infrastructure & Capacity Management**	Results	Options
41.	System has built-in high system availability to address any single point failure.		
42.	Service has adequate bandwidth and multiple links to ensure reliability and redundancy.		
43.	Are the resources monitored, tuned and calculations made for future capacity requirements to ensure the required performance.		
44.	Adequate un-interrupted power supply for smooth operation of the System is available at the Site?		
45.	Whether backup network link is available in case of failure of the primary link to the MCX?		
46.	Adequate data backup & data storage capacity.		
47.	**Firewall** Whether suitable firewalls are implemented?		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	Suitable Firewalls between trading set-up directly connected to an Exchange trading system and the Internet trading set-up Are all servers placed in a DMZ and segregated from other zones by using a firewall? Is there segregation between application and database servers? Are user and server zones segregated? Is specific port / services access granted on firewall by following a proper approval process?		
48.	Network security protocols & interface standards are as per prevalent industry standards		
49.	**Anti-virus** Is Anti-virus system is installed and updated on regular basis?		
50.	**Additional Access Control Security** **The installed system provides a dual factor authentication system for access to the various components.** Extra Authentication Security The systems use additional authentication measures like smart cards, biometric authentication or tokens etc. The system has a second level of password control for critical features. Whether adequate controls have been implemented for admission of personnel into the server rooms / place where servers are located and whether audit trails of all the entries / exits at the server room / locations are maintained?		
F	**Backup & Recovery Procedures**	Results	Options
51.	Does the organization's documented policy include a backup policy and procedures?		
52.	The back-up and restore systems implemented by the member is adequate to deliver sustained performance and high availability. Whether the member system has on-site as well as remote site back-up capabilities?		
53.	**The Installed systems backup capability is adequate as per the requirements of the MCX for overcoming loss of product integrity.** Are backups of the following system generated files maintained as per the MCX guidelines? a) At the server/gateway level		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	b) Database c) Audit Trails d) Reports At the user level a) Market Watch b) Logs c) History d) Reports e) Audit Trails f) Alert logs Are backup procedures documented, and backup logs maintained? Are the backup logs maintained and are the backups verified and tested? Are the backup media stored safely in line with the risk involved? Are there any recovery procedures and have the same been tested?		
G	**Business Continuity & Disaster Recovery Procedures**	Results	Options
54.	**Does the Organisation have a suitable documented Business Continuity or Disaster Recovery or Incident Response process commensurate with the organization size and risk profile to ensure a high degree of availability of the installed system** Is there any documentation on Business Continuity / Disaster Recovery / Incident Response? Does a BCP / DRP plan exist? If a BCP/DRP plan exists, has it been tested on regular basis? Are there any documented incident response procedures? Are there any documented risk assessments? Does the installation have a Call List for emergencies maintained? Whether redundancy is built at all level of infrastructure? Whether all critical systems / infrastructure are in HA mode?		
55.	**How will the organization assure customers prompt access to their funds and securities in the event the organization determines it is unable to continue its business in the primary location - Network / Communication Link Backup**		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	Is the backup network link adequate in case of failure of the primary link to the MCX? Is the backup network link adequate in case of failure of the primary link connecting the users? Whether detailed network diagram is prepared and available for verification? Is network and network diagram in line with the one submitted to the Exchange?		
56.	Location of all servers is within India		
57.	Security, reliability & confidentiality of data through encryption		
58.	Suitably qualified & Adequate personnel to handle communication including trading instruction & back-office work		
59.	**How will the organization assure customers that prompt access to their funds and securities in the event the organization determines it is unable to continue its business in the primary location - System Failure Backup** Are there suitable backups for failure of any of the critical system components like a) Gateway / Database Server b) Router c) Network Switch Infrastructure breakdown backup Are there suitable arrangements made for the breakdown in any infrastructure components like a) Power Supply b) Water c) Air Conditioning Primary Site Unavailability Have any provision for alternate physical location of employees been made in case of non-availability of the primary site Disaster Recovery Are there suitable provisions for Books and records backup and recovery (hard copy and electronic). Have all mission-critical systems been identified and provision for backup for such systems been made?		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
60.	In case of failure of the IBT or wireless network, alternative means of communication for placing orders for client with identification and authentication. are available		
H	**Operational Integrity**	Results	Options
61.	Does the organization's policy and procedure document have an access control policy for users of the service?		
62.	**The installed system provides a system based access control over the server as well as the risk management and front-end dealing applications while providing for security** Access controls a) The system allows access to only authorized users b) The system has a password mechanism which restricts access to authenticate users.		
63.	**Physical Security** Whether adequate controls have been implemented for admission of personnel into the server rooms / place where servers / hardware / systems are located and whether audit trails of all the entries/exits at the server room / location are maintained? Physical Access Control Server Room/Network Room Security (Environmental Controls) Server Room/Network Room Security (UPS) Server Room/Network Room Security (HVAC)		
64.	**To ensure information security for the Organisation in general and the installed system in particular policy and procedures as per the MCX requirements must be established, implemented and maintained.** Does the organization's documented policy and procedures include the following policies and if so are they in line with the MCX requirements? a) Information Security Policy b) Password Policy / Standards c) User Management and Access Control Policy d) Network Security Policy e) Application Software Policy f) Change Management Policy g) Incident Management Policy h) Version & Patch Management Policy i) Backup & Restoration Policy j) BCP and Response Management Policy		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	k) Audit Trail Policy (data should be available for minimum 5 years) l) Technical Glitch Policy m) Whether all the documents are classified as CIA (Confidentiality, Integrity and Availability) Does the organization follow any other policy or procedures or documented practices that are relevant? o Whether member has proper procedures, systems and technical capability to carry out trading though CTCL software? o Whether member has proper procedure in place to report any abnormal incident to the Exchange on an immediate basis? o Whether system has sufficient security features including password protection for User ID, automatic expiry of password at the end of a reasonable duration and re-initialisation of access on entering fresh password? o Whether any changes / upgrades done to the CTCL software and system only after approval by the Exchange o Whether version and patch management controls in place? o Whether approvals are in place for all the changes during the audit period? o Whether all backup is available for a minimum period of 5 years o Whether backup logs are maintained? o Have backup been verified and tested? o Are there any recovery procedures and have the same been tested? o Whether backup media is stored safely? o Whether Members have defined and implemented recovery procedures to recover system and data from any unforeseen events / disaster? o Whether recovery procedures are tested regularly?		
65.	The Member ensures that the persons supporting the service possess requisite skills for technical support, System administration and other related functions pertaining to the System.		
66.	**Are documented practices available for various system processes** Day Begins Day Ends Other system processes a) Audit Trails b) Access Logs c) Transaction Logs d) Backup Logs e) Alert Logs		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	f) Activity Logs g) Retention Period h) Data Maintenance		
67.	**In case of failure, is there an escalation procedure implemented?** Day Begin Day End Other system processes Details of the various response procedures including for a) Access Control failure b) Day Begin Failure c) Day End Failure d) Other System Processes Failure		
68.	**To ensure system integrity and stability all changes to the installed system are planned, evaluated for risk, tested, approved and documented.** Planned Changes a) Are changes to the installed system made in a planned manner? b) Are they made by duly authorized personnel? c) Risk Evaluation Process d) Is the risk involved in the implementation of the changes duly factored in? Change Approval Is the implemented change duly approved, and process documented? Pre-implementation process Is the change request process documented? Change implementation process Is the change implementation process supervised to ensure system integrity and continuity Post implementation process Is user acceptance of the change documented? Unplanned Changes In case of unplanned changes, are the same duly authorized and the manner of change documented later? In case of members self-developed system SDLC documentation and procedures if the installed system is developed In-House.		
I	**Approvals, Undertaking, Policies and Other Area**	Results	Options
69.	**Insurance (optional)** The insurance policy of the Member covers the additional risk of		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	usage of the system and probable losses in case of software malfunction.		
70.	**Settlement of Trades** **The installed system provides system-based reports on contracts, margin requirements, payment and delivery obligations** Margin Reports feature Should allow for the reporting of client wise / user wise margin requirements as well as payment and delivery obligations.		
71.	**Database Security** a) The installed system has sufficient control over the access to and integrity of the database. b) The access to the database is allowed only to authorized users / applications. c) The database is hosted on a secure platform. d) The database stores the usernames / passwords securely. e) Whether database is hardened with the latest security guidelines. f) Frequency of antivirus patch updation		
72.	Whether system has adequate safety features to ensure it is not susceptible to internal / external attacks?		
73.	Is there any other area/aspect which in the auditor's opinion is not complied with and which is significant and material in relation to the size and the nature of the operations?		
74.	Whether the required details of all the ids created in the server of the trading member, for any purpose (viz. administration, branch administration, mini-administration, surveillance, risk management, trading, view only, testing, etc.) and any changes therein, have been uploaded as per the requirement of the Exchange? If no, please give details		
75.	Whether all the user ids created in the server of the trading member have been mapped to 12-digit codes on a one-to-one basis and a record of the same is maintained? If no, please give details		
J.	**Software Testing Verification**	Results	Options
76.	**Verification of software testing done by Member in Exchange provided Test environment** Whether member has tested the Software in Exchange provided Test Environment Details a) No. of days software has been tested by member in Exchange provided Test environment b) Member Id & User Id used by member for testing in the Exchange provided Test environment		

<table>
<tr><th>Sr. No.</th><th>Area of Audit</th><th>Results & Observations</th><th>Auditor's Remark</th></tr>
<tr><td></td><td>Whether any abnormalities observed in the verification of Logs, Reports, Audit Trail and Database of the tests performed by member in Exchange provided Test environment</td><td></td><td></td></tr>
<tr><td>77.</td><td>Verification of participation by Member in Periodic Mock Session / Simulated Trading Environment conducted by Exchange

Whether members have participated in Mock Trading sessions / Simulated Trading Environment conducted by Exchange (Minimum 1 before approval)

Details
<table>
<tr><th>Mock/Simulated Trading Date</th><th>Test Duration</th><th>Segment</th><th>User ID</th><th>Type of the CTCL Product: Client Direct API</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
</table>
Whether any abnormalities observed in the verification of Logs, Reports, Audit Trail and Database of the tests performed by members while participating in Periodic Mock Trading session conducted by Exchange</td><td></td><td></td></tr>
</table>

Part II

Sr. No	Area of Audit	Results & Observations	Auditor 's Remark
1.	**Order /Trade Limit Controls** **The installed Trading system provides a system based control facility on the trading limits of the clients and exposures taken by the clients including set pre-defined limits on the exposure and turnover of each client.** The system should have functionality for mandatorily routing of orders generated by algorithm through the automated risk management system. The ALGO server should have capacity to monitor orders / trades routed through Algo trading and have online risk management for all orders through Algorithmic trading. The risk management system should have risk controls functionality and only algorithm orders that are within the parameters specified by the risk management systems are allowed to be placed.		
2.	**Execution of Orders / Order Logic** **The installed Trading system provides a system based control facility over the order input process:** Order Numbering Methodology If the system is enabled for internet trading the system has an internal unique order numbering system. Order Matching The system does not have any order matching function resulting into cross trades of the clients orders of a trading member with each other and all orders are passed on to the exchange trading system for matching. Whether Broker is using similar logic/ priorities as used by Exchange to treat API client orders. Whether API orders are having unique flag/ tag as specified by the Exchange and systems identify the orders emanating from API by populating the 15-digit terminal Id in the order structure for every order.		
3.	**API (Application Programming Interface)** **Authentication & Security** • Whether system has provision to ensure Strong & mutual Authentication Mechanisms such as API keys, OAuth, or JWT, ensuring secure token management practices and defining appropriate expiration time. • Open APIs are not permitted by Trading member and allow access only through a unique vendor client specific API key and static IP whitelisted by the trading member to ensure identification and traceability of the retail user.		

Sr. No	Area of Audit	Results & Observations	Auditor 's Remark
	• Whether access is allowed through OAuth (Open Authentication) based authentication only • Whether access to API is provided through two factor authentication • Whether all API sessions are compulsory logged out every day before the start of the next trading day. **Secure Storage of Secrets:** • Whether system have provision not to Store or Transmit API keys, credentials and sensitive data without secure encryption and access controls • Secure Software Development Lifecycle (SDLC): • Integrate security considerations into the entire API development process and conduct security training for developers to promote secure coding practices. • Whether system has provision to Identify Registered and non-registered algos • Whether system has provision to restrict order types/contracts/securities which are restricted by the Exchange. **Non- Registered Algos:** • Whether system has provision that non-registered algos which are below defined Threshold order per second (TOPS) tagged as Algo and a generic id is passed with the order message. • Whether broker have ensured that non- registered Algos are run only through one of the predefined API Keys.		

Overall rating for the Member's software and system:
(Strong / Medium / Weak)

It is hereby confirmed and certified that system audit of the software and systems used by _____ , a member of Multi Commodity Exchange of India Limited ('Exchange') has been conducted by me and have been found to be in compliance with the requirements stipulated by SEBI and Exchange. The software and system have capacity to meet all requirements of the SEBI and Exchange as on date.

We certify that none of the current Directors / Partners / Promoters of the member are directly or indirectly related with any of the Directors / Promoters / Partners of _____(Name of Auditing Firm) and there is no conflict of interest with respect to the member being audited.

_____

Signature

(Name of the Auditor & Auditing firm)

CISA / DISA / CISM / CISSP Reg. No.:

UDIN:

Date:

Place:

Stamp/Seal:

(valid digital signatures are acceptable)

ANNEXURE K – TERMS AND CONDITIONS

API/Algo Provider facility used by the client

1. The client is expected to be fully aware of the risks associated with the market and the financial instruments being traded on stock exchanges through API/ALGO PROVIDER. The client shall be responsible for complying with laws, rules, regulations, notifications etc issued by regulatory authorities as may be applicable from time to time.
2. The client shall ensure that API/ALGO PROVIDER facility provided by the Broker is used only to execute the trades of the client and shall not be used for transactions on behalf of any other person / entity.
3. The client shall be responsible for ensuring that, only persons authorized by it shall access and use the API/ALGO PROVIDER facility provided by the Broker. All orders originating from such facility / system shall be deemed to be authorized by the client.
4. Where the client accesses or proposes to access the Broker's API/ALGO PROVIDER platform through external applications, including but not restricted to services of third party service provider(s), own application(s), etc., the client shall ensure that such applications have adequate security features including but not limited to access controls, password protection etc; and that appropriate agreement(s) with such third party service provider(s) etc. for ensuring secured access and communication has been executed and are in place.
5. The client shall ensure that no person authorized by them to place orders through API/ALGO PROVIDER facility provided by the broker has been / is involved in any adverse action by any regulatory authorities in any jurisdiction.
6. The client shall provide the names of authorized individual users to the broker prior to placing API/ALGO PROVIDER orders.
7. The client shall not use or allow the use of API/ALGO PROVIDER facility to engage in any form of market misconduct including insider trading and market manipulation or conduct that is otherwise in breach of applicable laws, rules and regulation.
8. The client is aware that Algorithmic trading i.e. generation of orders using automated execution logic is governed by Algorithmic trading guidelines issued by SEBI and Exchanges and requires prior registration of the exchanges. The client shall ensure that new algorithms and changes to existing approved algorithms are not used through the API/ALGO PROVIDER facility without prior approval of concerned stock exchanges. The client shall ensure that it has necessary checks and balances, in place to identify and control dysfunctional algorithms and the Broker shall have the right to shut down the API/ALGO PROVIDER facility and remove any outstanding client orders in case of any suspected dysfunctional algo.
9. The client is aware that authentication technologies and strict security measures are required for routing orders through API/ALGO PROVIDER facility and undertakes to ensure that the password of the client and/or his representative are not revealed to any third party.
10. The client is aware that they shall be required to provide information/details/documents/records (physical or electronic) relating to Algorithmic Trading or incidental thereof within the prescribed time to Trading Member.
11. The client acknowledges that all orders placed by them through the API/ALGO PROVIDER facility would be validated by the risk management system of the broker. The Broker has the right to accept or reject any order placed by the client at its sole discretion.
12. The client shall be solely responsible for all acts or omissions of any person using a API/ALGO PROVIDER facility and shall be bound to accept and settle all transactions executed through the API/ALGO PROVIDER facility provided by the Broker notwithstanding that such order(s) may have been submitted erroneously or by an unauthorized user, or that its data is inaccurate or incomplete when submitted, or the client subsequently determines for whatever reason that the order should not have been submitted.

13. The client shall notify the Broker in the event of API/ALGO PROVIDER facility being compromised. Upon receipt of this notice, client's API/ALGO PROVIDER facility shall be promptly disabled but the client shall continue to be responsible for any misuse of the API/ALGO PROVIDER facility or any orders placed through the API/ALGO PROVIDER facility as a result of the compromise of the API/ALGO PROVIDER facility at their end. The Broker shall not be liable for any loss, liability or cost whatsoever arising as a result of any unauthorized use of API/ALGO PROVIDER facility at the client's end.
14. In the event of winding-up or insolvency of the client or his otherwise becoming incapable of settling their obligation, broker may close out the transaction of the client as permissible under bye-laws, rules, regulations of the exchanges. The client shall continue to be liable for any losses, costs, damages arising thereof.
15. The client is fully aware of the risks of transmitting orders to the Broker's API/ALGO PROVIDER facility through vendor systems or service providers and the Broker is not responsible for such risks.
16. The client should be aware that he/she/they will have no recourse against the Trading Member or the Exchange Grievance Redressal Mechanism for any failure of Algorithm, dysfunctional Algorithm, losses arising on account of use of such Algorithmic Software / strategies.
17. The client should be aware of the fact that neither the API/ALGO PROVIDER facility will be uninterrupted nor error free nor the results that may be obtained from the use of the service or as to the timeliness, sequence, accuracy, completeness, reliability or content of any information, service or transaction provided through API/ALGO PROVIDER. The API/ALGO PROVIDER facility service is provided on an "as is", "as available" basis without warranties of any kind, either express or implied, including, but not limited to, those of information access, order execution, merchantability and fitness for a particular purpose. The Broker shall not be liable for any loss, damage or injury including but not limited to direct lost profits or trading losses or any consequential, special, incidental, indirect, or similar damages from the use or inability to use the service or any part thereof.
18. The Broker shall have the right to withdraw the API/ALGO PROVIDER facility in case of:-
    a. Breach of the limits imposed by the broker or any regulatory authority.
    b. On account of any misuse of the API/ALGO PROVIDER facility by the client or on instructions from SEBI/Exchanges.
    c. Any other reason, at the discretion of the broker

    Broker shall endeavour to give reasonable notice to the client in such instances.
19. The Broker shall not be liable or responsible for non-execution of the orders of the client placed using the API/ALGO PROVIDER facility due to any link/system failure at the client/ Broker/ exchange(s) end.
20. This document shall not be altered, amended and /or modified by the parties in a manner that shall be in contravention of any other provisions of this document. Any additional terms and conditions should not be in contravention with rules / regulations /bye-laws/circulars, of the relevant authorities including applicable stock exchanges as amended from time to time.

Annexure L

Algo Provider Confirmation Letter

(On the letterhead of the Algo Provider)

This is to state that trading member M/s _____ with TM code : _____ registered with Multi Commodity Exchange of India Limited has purchased Algo trading software solution for strategy _____ with version no _____from us which has been Registered by the Exchange under the Vendor Algo.

We certify that:

1. The software provides for routing of orders through electronic / automated risk management systems of the broker to carry out appropriate validations of all risk parameters before released to the Exchange trading system such as
    a. Quantity Limits check
    b. Price Range check
    c. Order Value check
    d. Automated Execution Check
    e. Efficient Price Discovery and Fair Play Check (applicable for Commodity Segment)

2. The system has facility for generating and maintaining complete Audit Trail.
3. The orders generated by Decision Support Tools / Algorithmic trading products are identified as 'Algorithm orders' while releasing to the Exchange.
4. All orders generated by Decision Support Tools / Algorithmic trading products are offered to the market for matching and system does not execute cross trades internally.
5. The system has sufficient security features including password protection for the user ID, automatic expiry of passwords as the end of a reasonable duration and reinitialisation of access on entering fresh passwords.
6. The algorithm software has been registered with the Exchange during the process of Identification of aforementioned Decision Support Tools / Algorithms as 'Vendor Algo'. We further certify that there are no changes / upgrades to the software post identification of Decision Support Tools / Algorithms as ''Vendor Algo' by the Exchange.

Thanking you,

Name and Signature of Authorised signatory

Algo Provider Name

Date :

Annexure 21
No Change Letter
(to be provided on letter head)

Member ID & Name / Vendor Name	
Address	
Software Name and Version No.:	
Strategy Name and Version No.:	
Already Approved software Application ID	

Sr. No.	Particulars	Changes Done (Yes/No)
A	**Does not result in change in OMS or RMS:**	
1	Fix the bugs in the Software	
2	Modifications - 'Look and feel'	
3	Changes pertaining other Exchange's Trading System	
B	**Results in change in OMS or RMS:**	
1	Modification in existing feature/functionalities	
2	Addition/Introduction of New feature/functionalities	
C	**Others:**	
1	Member insisting on version change for Uniformity with other Exchanges	
D	**Description on change made:**	

We certify that all the statements are true and correct to the best of our knowledge. We are aware that in case any of the statements are found to be incorrect or false, we are liable for disciplinary action."

Signed sealed and delivered by the Authorised Signatory of the Member/Vendor (valid digital signature is acceptable)

Signed:
Date:
Place:

B. [Amendment to Standard Operating Procedure - Safer Participation of Retail Investors in Algorithmic Trading][2]

This is with reference to SEBI circular SEBI/HO/MIRSD/MIRSD-PoD/P/CIR/2025/0000013 dated February 04, 2025 on 'Safer participation of retail investors in Algorithmic trading', Exchange circulars MCX/CTCL/235/2025 dated May 06, 2025 (Safer Participation of Retail Investors In Algorithmic Trading), MCX/CTCL/364/2025 dated July 25, 2025 (Standard Operating Procedure - Safer Participation of Retail Investors in Algorithmic Trading) and MCX/CTCL/371/2025 dated July 29, 2025 (Extension of timeline for implementation of SEBI Circular Safer participation of retail investors in Algorithmic trading" on February 04, 2025).

It is hereby notified that the following sections of the MCX circular MCX/CTCL/364/2025 dated July 25, 2025, shall stand revised and these paras shall be read as under:

1. MCX circular MCX/CTCL/364/2025 dated July 25, 2025 - Para 2.1 Revised Identification for first 12-digits of Terminal id– point 6 of the table to be read as "Client Direct API (Algo facility provided by TM to Clients to send order messages through API/ Member Frontend/Internet or Mobile based applications, other than the above options)"

2. MCX/CTCL/364/2025 dated July 25, 2025 - 2.3.1. 1st level category (Front end) – To be read as "2.3.1. Client Direct API (Clients other than DMA clients without TM front end with all order attributes like Direct API) / Member Frontend for Retail Algo (IBT and WT)"

3. MCX circular MCX/CTCL/364/2025 dated July 25, 2025 - 6.2.3 Submission of Empanelment Undertaking as per format provided in Annexure C

3.1 Point no. 8 of the Undertaking contained shall be read as "I/We undertake that the Product design shall be compatible with MCX's trading system in order to use only the specified messages given by MCX and shall consider all the structures defined by MCX from time to time. I/We shall ensure that the Product shall be compatible with basic functionalities as required by MCX and to any changes thereof. Further, I/We shall ensure that any customization requirement of the Trading Members shall be in line with MCX requirements. It is further clarified that Algo Providers do not interface with MCX's trading system directly, but only through the APIs made available by Trading Members. Accordingly, the Algo Provider's compliance with MCX requirements shall be limited to the functionality and controls permitted by such Trading Member APIs."

3.2 Point no. 9 of the undertaking contained shall be read as "I/We undertake that the Product developed by me / us shall be at all times similar to that of the specifications of Member Control Station (MCS) / Member Trade Station (MTS) or any other Exchange provided software including any upgrades stipulated by MCX, from time to time. However, I/ we shall ensure that such Product developed by us shall be distinctly identifiable from MCS/MTS or any other Exchange provided software. It is further clarified that Algo Providers do not develop products by directly interfacing with MCS/MTS or any Exchange-provided software. Such products operate solely through the APIs made available by Trading Members, and their functionality is limited to what is permitted by such APIs. Accordingly, the Algo Provider shall regularly seek guidance from the Trading Member to align its product with the specifications of MCS/MTS or other Exchange software."

3.3 Point no. 13 of the undertaking contained shall be read as "I / We shall ensure that the Product shall be developed so as to generate the following from the system for the purpose of verification during the inspection:

[2] Inserted vide MCX Circular No. MCX/CTCL/471/2025 dated September 20, 2025

3.3.1 The number of users hooked on to the network. including privileges to each user.
3.3.2 All the systems logs and audit trails of the user and the Trading Member.

4. Point No. 6 of MCX circular MCX/CTCL/364/2025 dated July 25, 2025 - 6.2.1 Criteria for empanelment of “Algo Provider”.

4.1 Point 6. of Annexure A (Criteria for Empanelment of “Algo Provider”) to be read as “Criteria related to ISO certification (New) - 27001:2022 (SEBI circular SEBI/HO/ ITD1/ITD_CSC_EXT/P/CIR/2024/113 dated 20 August 2024). However, the empanelment will be a provisional empanelment subject to completion of the ISO certification within 3 months from the date of empanelment with the exchange.”

4.2 Point 13. Of Annexure A (Criteria for Empanelment of “Algo Provider”) to be read as “Declaration of any cyber / adverse technical incident for the previous 3 years, (half yearly) VAPT reports covering assessment of the Application, APIs, Infrastructure along with Closure report (ATR) from CERT-In empaneled auditor (SEBI circular SEBI/HO/ ITD1/ITD_CSC_EXT/P/CIR/2024/113 dated 20 August 2024)”.

5. Annexure B of MCX circular MCX/CTCL/364/2025 dated July 25, 2025 - 6.2.2 Submission of application for empanelment as “Algo Provider”.

5.1 Point 19 & 20 of Annexure B to be read as “Financial Details of applicant/proprietor (CA/CS certified net worth certificate to be enclosed) Details of promoters and their background: To be enclosed No. of years in the Fintech Business: Fintech Business Turnover for last five years: (Complete details including balance sheets to be enclosed) Complete details of ISO Certification:”

6. Annexure F of MCX circular MCX/CTCL/364/2025 dated July 25, 2025 - Auditor’s Certificate as per format provided in Annexure F

6.1 The para stands deleted from the declaration is “I hereby confirm, Algo Provider has complied with the requirement of Exchange Circular MCX/CTCL/223/2025 dated April 30, 2025, and other circulars issued from time to time on "Display of Brokerage, Statutory & Regulatory Levies to the investors" to prominently display the details of brokerage/charges to be levied for each order to the investor on the “Order placement window/screen” on their trading applications prior to placement of order.”

The following revised Annexures have been attached for reference.

- Criteria for empanelment as per details provided in **Annexure A**
- Submission of Empanelment application as per format attached as **Annexures B**
- Submission of Empanelment Undertaking as per format attached as **Annexure C**
- Auditor certificate to be provided by Algo Provider as per **Annexure F**

Market Participants are requested to take note of the above and comply.

Annexure A –Empanelment process of Algo providers

2. Criteria for Empanelment of "Algo Provider":

Sr. No	Criteria for Empanelment of "Algo Provider"	Response to Criteria
1	The constitution of applicant vendor may be individual / a firm registered under the Indian Partnership Act, 1932 / a Limited Liability Partnership registered under Limited Liability Partnership Act 2008/a Company registered under the Companies Act 2013/1956 or Body Corporate.	Copy of Certificate to be attached
2	Parameters for vendor / algo provider empanelment - background, infrastructure, systems etc.	Supporting documents need to be provided
3	Details of promoters and their background	Supporting documents need to be provided
4	2 years of Securities Market experience for the Proprietor/Directors (Any 1)/Partners (Any 1)	Supporting documents need to be provided
5	Criteria related to ISO certification (New) - 27001:2022 as per SEBI requirements (SEBI circular SEBI/HO/ ITD 1/ITD_CSC_EXT/P/CIR/2024/113 dated 20 August 2024)	Copy of Certificate to be attached
6	Complete details of infrastructure available (as below) within the organization – Hardware, software, Communication / Networking	Similar to point no. 2
7	Proposed Price (indicative per user & site license fee) of providing the Solution to Trading Members	
8	Organisation details - Organisational structure, total staff, technical staff, Name and PAN of proprietor/ partners/ directors/promoters and their background, Name and mobile number of contact person, No. of offices across the country	
9	Declaration of any cyber / adverse technical incident for the previous 3 years, (half yearly) VAPT reports covering assessment of the Application, APIs, Infrastructure along with Closure report (ATR) from CERT-In empanelled auditor (SEBI circular SEBI/HO/ ITD1/ITD_CSC_EXT/P/CIR/2024/113 dated 20 August 2024)"	

Annexure B – APPLICATION FOR EMPANELMENT AS ALGO PROVIDER
(To be executed on letter head of the software vendor)

To
CTCL Department
Multi Commodity Exchange of India Limited
255, Exchange Square,
Suren Road, Chakala,
Andheri (East),
Mumbai – 400 093.

Sr. No	Particulars	Details
29.	Application for empanelment for ATF	
30.	API required from Exchange:	Non-FIX
31.	Name of the Algo Provider:	
32.	Registered Address:	
33.	Telephone No.:	
34.	Email Id.:	
35.	Name(s) & Designation of Authorised Signatory:	
36.	Contact details (Phone, Email) of Authorised Signatory:	
37.	Correspondence Address of Authorised Signatory:	
38.	Organisational structure:	To be enclosed
39.	Total Staff:	
40.	Directors:	
41.	Technical Staff - Hardware:	
42.	Technical Staff - Software:	
43.	Technical Staff - Support:	
44.	Technical Staff - Others:	
45.	No. of support offices across the country:	Complete details to be enclosed
46.	Details of promoters and their background:	To be enclosed
47.	No. of years in the Fintech Business:	
48.	Fintech Business Turnover for the last three years:	To be enclosed
49.	Technical Details – Hardware Infra Structure available within Organisation:	To be enclosed
50.	Technical Details – Software Infra Structure available within Organisation:	To be enclosed
51.	Technical Details – Communication / Networking Infra Structure available within Organisation:	To be enclosed
52.	Details of Empanelment as Algo Provider / ISV with other Exchanges:	If Yes provide details
53.	Complete details of Proposed Solution along with Platforms used:	Comprehensive write-up explaining features of the solution, programming language, OS platform, Database

		details and network diagram to be provided.
54.	Name and reference of Exchange (MCX) trading members where a solution is implemented, if any:	
55.	Proposed Price (indicative per user & site license fee) for providing the Solution to the Members of the Exchange: Price for Workgroup edition	(Give details)
56.	Net worth Details	(CA/CS certified networth certificate to be enclosed)

We certify that all the statements are true and correct to the best of our knowledge. We undertake to ensure continuous compliance with the requirements of the Exchange, Department of Technology (Government of India) policy and regulations with regard to levels of encryption, etc., SEBI and directives and other statutory requirements including tax and foreign exchange laws of the regulators in this regard, as may be issued from time to time.

Further, we are aware that the list of vendors empaneled with the Exchange including address and contact person details are displayed on the website of the Exchange and accordingly we have no objection to display of our details on the website.

Signed sealed and delivered by the Authorised signatory of the Vendor

Date:
Place:

Annexure C – UNDERTAKING To be provided by Algo Provider

To be executed on Rs. 1000/- stamp paper / applicable stamp duty of the state (whichever is higher), duly Notarized on all pages, signed, stamped & sealed by Authorized Signatory on all pages

I / We _____, an individual / a firm registered under the Indian Partnership Act, 1932 / a Limited Liability Partnership registered under Limited Liability Partnership Act 2008/a Company / Body Corporate incorporated under the Companies Act of 2013/ _____ Act, ___, and residing at / having our registered office at/ having place of business at _____ (including its successors, assigns and legal representatives) give this UNDERTAKING on this _____ day of _____ at _____ IN FAVOUR of MULTI COMMODITY EXCHANGE OF INDIA LTD., a company incorporated under the Companies Act of 1956, with its registered office at Exchange Square, CTS No.255, Suren Road, Chakala, Andheri (East), Mumbai – 400 093 India (hereinafter referred to as "MCX", which expression shall unless repugnant to the context include its successors, assigns and legal representatives)

WHEREAS

d) I/We (hereinafter also referred to as "Algo Providers") am/are desirous of making available decision support tools/algorithms ("Algorithm/Tools") to trading members of MCX (hereinafter "Trading Members") for the purpose of algorithmic trading and has/have approached MCX.

e) MCX may, at its sole discretion, empanel such Algo Providers to provide Trading Members with Algorithm/Tools purposed for algorithmic trading ("Product") based on the application received from them and fulfilment of criteria stipulated by MCX from time to time. This includes the vendor providing an undertaking in favour of MCX in the prescribed format and agreeing to abide by and be bound by the various terms and conditions prescribed by MCX from time to time.

f) I / We have developed the Product for Trading Members to enable them to avail of the algorithmic trading facilities with the Exchange, and in this regard, I/ We, have submitted our application to MCX for empanelment along with an undertaking as herein below:

NOW THEREFORE IN CONSIDERATION OF MCX having agreed to identify / identified me / us as "Algo Provider" and my/our Product as "Registered Product" for the aforesaid purposes, I / we hereby IRREVOCABLY AND UNCONDITIONALLY AGREE, ACCEPT and UNDERTAKE to abide by and be bound by the following terms and conditions:

57. I/We hereby, declare that the information provided by me/ us in the application form submitted to MCX for registration as an Algo Provider or for the registration of the Product (hereinafter as "Registered Product") are correct, complete, true in all aspects. I/We hereby acknowledge and understand that my/our registration as Algo Provider and/or registration of our Product as Registered Product by MCX is only basis the documentation provided by me to MCX and MCX shall not held liable for any claim or penalty arising as a result of use or availment of my Product.
58. I/We agree to pay any such license fees/charges/royalties as may be levied by DOT/SEBI/MCX or any other regulatory/statutory authorities from time to time.
59. I/We shall ensure that the Product along with Risk Management System complies and shall continue to comply at all time with the requirements laid down by MCX and/or SEBI.
60. I/We undertake that our Product adheres to implementation standards formulated by Broker's Industry Standards Forum, under aegis of stock exchanges / commodity exchanges and in consultation with SEBI.
61. I/We undertake to ensure that access shall be given only to the authorized individuals, either it being our representatives ("Algo Provider's Personnel") or representative of the Trading Member

("Approved Users") and shall ensure to deploy necessary security, tools, method (including malware protection) to prohibit any unauthorized access to the Product provided.

62. I/We shall install the Product only at the Trading Member's location only after duly ensuring that all the requirements stipulated by MCX in this regard have been complied by the Trading Member and that the Approved User shall not make the Product available to any other unauthorised person.

63. I/We undertake to give MCX prior notification for any changes to be made to the Software and seek fresh registration from MCX of the Product as Registered Product.

64. I/We undertake that the Product design shall be compatible with MCX's trading system in order to use only the specified messages given by MCX and shall consider all the structures defined by MCX from time to time. I/We shall ensure that the Product shall be compatible with basic functionalities as required by MCX and to any changes thereof. Further, I/We shall ensure that any customization requirement of the Trading Members shall be in line with MCX requirements. It is further clarified that Algo Providers do not interface with MCX's trading system directly, but only through the APIs made available by Trading Members. Accordingly, the Algo Provider's compliance with MCX requirements shall be limited to the functionality and controls permitted by such Trading Member APIs."

65. I/We undertake that the Product developed by me / us shall be at all times similar to that of the specifications of Member Control Station (MCS) / Member Trade Station (MTS) or any other Exchange provided software including any upgrades stipulated by MCX, from time to time. However, I/ we shall ensure that such Product developed by us shall be distinctly identifiable from MCS/MTS or any other Exchange provided software. It is further clarified that Algo Providers do not develop products by directly interfacing with MCS/MTS or any Exchange-provided software. Such products operate solely through the APIs made available by Trading Members, and their functionality is limited to what is permitted by such APIs. Accordingly, the Algo Provider shall regularly seek guidance from the Trading Member to align its product with the specifications of MCS/MTS or other Exchange software."

66. I/We undertake that controls shall be inbuilt by me/ us to ensure that the orders are matched by the central computer of MCX only and there is no scope for orders being matched in my / our / Trading Members own private network.

67. I/We undertake that the following controls shall be inbuilt in the Product by me/us to detect loss of product integrity:

    a. Data validation routines to detect input errors.
    b. Backup and recovery procedures.

68. I / We shall ensure that the Product shall have adequate security features and that the Product cannot be made available to any other person other than Approved Users.

69. I / We shall ensure that the Product shall be developed so as to generate the following from the system for the purpose of verification during the inspection:

    a. Number of users hooked on to the network, including privileges to each user.

    b. All the systems logs and audit trails of the user and the Trading Member.

70. I/We undertake that

(v) SEBI/MCX shall have the right and privilege of auditing and testing the Product at my/our site and the Trading Members site at any point of time without any prior notice. The source code of the Product shall be made available at my/our site for verification and during such audit by SEBI/MCX.

(vi) I / We shall provide all the necessary support, technical and otherwise, as may be required for SEBI/MCX or any other regulatory authority to inspect and test the Product and/or our site.

(vii) I / We shall make available prototype and the technical specifications of the Product to MCX for testing purposes.

(viii) I / We shall be responsible to fix the bugs in the Product if any, found at the time of testing.

71. That I / We shall meet the criteria set to measure the expected level of performance.

72. I/ We agree that the terms for providing the Product and for the payment thereof, shall be as agreed by the Trading Member and myself/us and MCX shall not be responsible for any breach, either by the Trading Member or by me/ us, of such terms and conditions agreed therein.

73. I/We shall provide the documentation i.e. training manuals required to operate the Product and use of system outputs as specified by the Trading Member. Further, such documentation shall include the potential error conditions and recommend action in the event of occurrence of error.

74. I / We undertake to provide user training first when the Product is installed and thereafter whenever a major upgrade is released, or at such other intervals as may be required by Trading Member or stipulated by the Exchange for the following:

(iii) Use of Product

(iv) Maintenance of the Product

Further, I / We also undertake that the frequency and calibre of my/our personnel providing the training shall be as specified.

75. I / We shall develop the Product after considering the current and expected increase in workload, to ensure that the desired efficiency can be maintained with future workloads.

76. I / We shall develop the Product and make it compatible to other operating systems, in case of any need to transfer the Product from one piece of hardware to another due to technological changes.

77. I/We am/are fully aware that MCX shall not be responsible for development, maintenance, updates, upgrades, error fixes and other support functions.

78. I/We undertake to provide the training and documentation as and when the Product is technically upgraded.

79. I/ We undertake to provide such warranty as may be required for the purposes of this Undertaking.

80. I / We undertake to ensure as follows:

(iv) That in case of failure or malfunctioning of the Product, I/We shall make such first level trouble shooting and rectification the Product problem to restore the Product in its proper operating condition at no cost to the Trading Member.

(v) That I / We shall provide services for regular on-site maintenance of the Product in such manner and at such time intervals as specified by the Trading Member. The fees for the same will be the amount mutually agreed upon by the Trading Member and me/us and shall not at

any point of time be unreasonable so as to put the Trading Member in hardship. We are also aware that MCX shall in no way be responsible for non-fulfilment of either this or any other condition by the Trading Member.

(vi) Shall supply and maintain the Product trading solution to any MCX Trading Member at any location in the country, which the Trading Member desires to operate from.

81. I / We undertake to ensure as follows:

ix. For the purpose of provision of algo trading through APIs, trading member shall be the principal while the Algo Provider shall act as its agent, while using the API provided by the trading member.

x. All algo orders originating/flowing through Application Programming Interface (API) extended by Trading Member to Algo Providers, shall be tagged with a unique identifier provided by Stock Exchange.

xi. In case, I/We provide the software to tech-savvy retail investors, then, I/we shall get it registered with the Exchange through Member, only if they cross the Specified Order Per Second Threshold.

xii. Software so provided shall be permitted to be used by such retail investors for their family (but not for other investors). 'Family' for this purpose would be as defined in SEBI circular SEBI/HO/MIRSD/MIRSD-PoD1/P/CIR/2024/169 dated 3 December 2024.

xiii. Access is allowed only through a unique vendor client specific API key and static IP whitelisted by the Trading Member to ensure identification and traceability of the Algo Provider and the end user (i.e. investor) and the access is not permitted through open APIs;

xiv. Access to API is authenticated through two factor authentication;

xv. Product shall have Open Authentication (OAuth) based authentication only and any other authentication mechanisms as prescribed by MCX/SEBI from time to time.

xvi. For Black Box Algos, i.e. Algos where logic is not known to the user and is not replicable, I/We shall register as a Research Analyst and maintain a detailed research report for each such algo and confirm to MCX that such report has been maintained. In case there is any change in the logic governing the algo, then I/We shall register such algo as a fresh algo and maintain a detailed research report for the new algo and confirm to MCX that such report has been maintained.

82. I / We confirm that the Product complies with all the requirements stipulated by MCX, SEBI and the DOT in this regard and undertake that I/we shall modify the Product, if necessary to ensure continued compliance with the requirements of MCX / DOT / SEBI / any other authority as may be issued from time to time.

83. I / We hereby undertake to duly inform MCX in case of any cause, resulting in any change to my/our entity, or any change in any of the eligibility criteria based on which my / our Product has been identified as 'Registered Product' for these purposes by MCX.

84. I / We hereby undertake to duly inform MCX the list of Trading Members who are using my/our Product as and when MCX seeks such information within the stipulated time, as communicated by MCX.

85. I/We agree and undertake to make any modification/amendment to the Product as required by MCX during the continuation of the empanelment.

86. I/We agree that the term “Empanelment at MCX” is specifically limited to accessing test market and receiving update from MCX regarding the software facility, wherever we display or express our empanelment with MCX.

87. I/We agree that “Empanelment at MCX” does not guarantee the veracity of the Product or any commercial veracity of any contract or agreement done by us with our clients.

88. I/ we agree that our empanelment at MCX does not constitute or imply endorsement, recommendation, or favour by MCX, its associate companies or any of its employees or contractors acting on its behalf. Further to that, I/We would not position ourselves to the market at large in a manner that is akin to conveying endorsement, recommendation or favour by MCX.

89. I / We shall render all possible assistance and co-operation to MCX/SEBI by providing access to any kind of information in any form as it may require and I/we hereby undertake to produce such documents, records, accounts, books, data howsoever stored including data stored in magnetic tapes, floppy diskettes, etc. and any other information as may be required by MCX/SEBI at its discretion.

90. . I/We hereby acknowledge, accept and understand that MCX makes no representations or warranty, express or implied, regarding the advantages, benefits, usefulness, or accuracy of the Product or the advantages accruing from subscribing to it. MCX shall not be responsible or liable for the functionality or performance of the Product and does not guarantee any desired results/outcomes. MCX shall not be liable for any direct or indirect claims, damages or the like arising from the use, availment, or subscription of such facility by the trading member.

91. I/We agree that the empanelment granted by MCX for providing the Product does not, in any manner, represent or warrant that the Product shall be free of any error, omission, defects, bugs, shortcomings or limitations of any nature. The Algo Provider and Trading Member are solely responsible for ensuring that the Product does not result in any market disruption, manipulation, aberration or affecting the integrity of the market or sanctity of price discovery mechanism. Furthermore, I/We and Trading Member shall be solely liable for all/any dysfunctional, erroneous or disorderly functioning of the Product and for any technical glitch in the same and the consequences arising therefrom. I/we and Trading Member shall at all times ensure that the Product is not used for any purpose that is contrary to applicable Circulars, Byelaws, Rules and Regulations of the SEBI and/or Exchange.

92. I/We agree that in event of any dispute arising between me/us and Trading Member/s, MCX shall not be responsible for the resolution of such dispute. Furthermore, MCX shall not be liable for any breach of terms and conditions, commercial agreement or other agreements mutually agreed upon between I/we and trading member.

93. I/We agree that MCX only facilitates access for Trading Members to the test market to test the Product that is developed by me/us. The grant of such access by MCX shall not be used by me/us to communicate to any Trading Members that MCX assumes any responsibility for the Product developed by us.

94. I / We shall indemnify and keep MCX harmless and defend against all claims, demands, damages, liabilities, losses and expenses (including the reasonable cost of investigating and reasonable counsel fees) suffered by MCX due to my / our non-compliance, breach or contravention of any provisions of this Undertaking or due to bugs or malfunctioning of the Product provided by us to the Trading Members of MCX or any claims, damages or the like arising from the use, availment, or subscription of such facility by the trading member.

95. The limits on liability as stated above do not apply to: (a) Fraud, fraudulent misrepresentation, wilful misconduct, or conduct that demonstrates a reckless disregard for the rights of others; (b) Negligence causing death or personal injury; (c) any third Party claim related to Intellectual Property Rights.

96. For the purpose of this Undertaking "**Intellectual Property Rights**" means:
    iv. Copyrights, patents, know-how, trade secret, database rights and rights in trademarks and designs (whether registered or unregistered),
    v. Applications for registration, and the right to apply for registration and extensions and renewals for any of the same, and
    vi. All other intellectual property rights and equivalent or similar forms of protection existing anywhere in the world including any future rights that may be recognized.

97. I/We agree that no forbearance, delay or indulgence by MCX in enforcing the provisions of this Undertaking shall prejudice or restrict the rights of MCX nor shall any waiver of its rights operate as a waiver of any subsequent breach and no rights, powers, remedies herein conferred upon or reserved for MCX is exclusive of any other right, power or remedy available to MCX and each right, power or remedy shall be cumulative.

98. I/We undertake that any declaration or other notice to be given by me/us to MCX shall be sent by registered letter or telex/cable or facsimile transmission to the address first mentioned above.

99. I/We shall not advertise or publish any brochure, pamphlet, booklet, notice, or promotional material mentioning MCX or MCS / MTS without the written consent of MCX.

100. I/We shall submit that I/We shall ensure that the empanelment fee payable to MCX is timely paid to MCX.

101. I/We shall submit such details as required by MCX including the details regarding the list of Trading Members of MCX to whom I/we have provided the license to use the Product and number of license provided to the Trading Members of MCX. The details shall be submitted by me / us on a periodical basis or as and when asked by MCX.

102. I/We shall execute, sign, subscribe to such other documents, papers, agreement, covenants, bonds, and/or undertakings as may be prescribed or required by MCX from time to time.

103. I/We shall not (a) Provide advice or recommendations related to securities unless registered with or expressly permitted by SEBI and (b) Make any claims about returns or performance related to securities unless expressly permitted by SEBI. A breach of this clause will allow MCX to terminate my/our empanelment immediately.

104. I/We agree that MCX has the right to withdraw my / our identification as "Algo Provider" or identification of my/our Product 'Registered Product' for any segment without giving any reason.

105. I/We undertake that any agreement entered into between Trading Members and Algo Providers shall be separate and independent of this Undertaking and I/We shall ensure that MCX shall not be liable for any claim arising out of such agreement entered into between Trading Members and Algo Providers.

106. I/We undertake that there is no conflict of interest with the business of MCX. I / We shall ensure continued compliance with this requirement. We also undertake that our group companies including holding or subsidiary companies are not engaged in a business which gives rise to conflict of interest with the business of MCX. I/We shall immediately inform MCX in case a conflict of interest arises in the future and in such an event, MCX may take such action as it may deem fit including withdrawal of identification of my/our Product.

107. In the event that the Undersigned wishes to dis-empanel itself, it shall provide MCX with at least 90 days' prior notice. The Undersigned agrees to extend full cooperation and support to the trading member(s) to ensure a smooth transition, including but not limited to assisting with the porting of services, data and any necessary technical or operational handover.

108. The Undersigned agrees and undertakes that MCX shall not be liable for any direct or indirect loss, damage, costs, claims and expenses whatsoever caused or contributed by any event of force majeure. For the purposes of this Clause, "Force Majeure" means and includes wars, insurrections, revolution, fires, floods, epidemic, quarantine restrictions, declared general strikes in relevant industries, act of God, act of the Government of India and any concerned State Government and such other acts or events beyond MCX's control and further the above is without prejudice to the rights already accrued to MCX due to failure of the Undersigned to perform either in full or in part, its obligations arising prior to the occurrence of events of Force Majeure.

109. I/We affirm to provide all support that is required for the conduct of any audit or investigation or process in respect of our Product, pursuant to any regulatory requirement.

110. I/We affirm to abide by all relevant Laws, Rules and Regulations applicable to me/us during the course of my/our empanelment with MCX for providing Algorithm/Tools to Trading Members of MCX for the purpose of algorithmic trading.

111. I/We affirm that this Undertaking is governed by the laws of India and any dispute arising from the same will be subject to the jurisdiction of courts of Mumbai.

112. We affirm that in the event of contravention of the above terms of the Undertaking, MCX shall have the absolute right to discontinue our empanelment without notice and without assigning any specific reasons whatsoever. We confirm that such a decision by MCX to discontinue our empanelment shall be final and binding on us.

IN WITNESS WHEREOF this Undertaking is executed by the undersigned on the day, month, year and the place first mentioned above.

SIGNED, SEALED AND DELIVERED BY

_____

for and on behalf of _____

_____

_____

Before me

In the presence of Witnesses

3. _____ (Name & Address) ……..

4. _____ (Name & Address) ……..

Annexure F

System Auditors' Certificate to be provided by Algo Provider
(On the letterhead of System Auditor)

System Auditors' Certificate

To

CTCL Department

Multi Commodity Exchange of India Limited
Exchange Square,
Suren Road, Chakala,
Andheri (East), Mumbai – 400 093.

It is hereby confirmed and certified that Algo Provider_____(Name of Algo Provider), has successfully completed the testing of all areas as laid down by the Exchange for the below mentioned 'CTCL Software' by participating for minimum time period as mandated by the Exchange. The software and system have the capacity to meet all requirements of the Exchange and SEBI as on date.

Algo Provider Code:	
Algo Provider Name:	
Type of the Product:	AT (Algo Trading) / User Interface
Product Category:	API
Name of the software	
Version No:	
Name of the Strategy/ies (For AT) with version no.:	
URL through which the Algo is being provided to clients:	

This is to certify that the above-mentioned product to be used by Clients of the Algo Provider for connecting to the members of the Exchange for the purposes of Algorithmic trading and real-time risk management, is in compliance with the various SEBI/Exchange circulars relevant at the time of the application, more specifically with respect to the following:

- Order Management
- Systems and Network
- Access and Security controls
- Cyber Security & Cyber Resilience framework
- Risk checks listed below

S.No	Pre Trade Risk Control	Requirement	Compliance Status (Complied/Non-Complied)
4.	Price Check at Individual Order Level	Orders shall not be released in breach of the price bands /dummy filters as defined by the Exchange.	

5.	Quantity Limit Check at Individual Order Level	Orders shall not be released in breach of order quantity limit per order as defined by the Exchange in respective segments. Quantity Limit check is also applicable for Spread Order being placed.	
6.	Order Value Check at Individual Order Level	Order should not exceed the limit specified by the Exchange. The order value check should be within the ranges as prescribed by Exchange circulars. Order value check is also applicable for Spread Order being placed.	
7.	Market Price Protection Check at Individual Order Level	The pre-set percentage of LTP shall necessarily be accompanied by a limit price. Members are required to adhere to the Market Price Protection check, by not placing any algorithmic orders on the Exchange as a market order. System Auditor shall refer relevant NSE circulars with respect to “Pre-Trade risk controls - Market Price Protection”. System auditor shall verify these checks which are designed to ensure that order placement is within the ranges as prescribed by Exchange circulars.	
8.	Automated Execution Check	Algo to account for all executed, unexecuted, and unconfirmed orders placed by the system before releasing further orders. Algo system to have pre-defined parameters for an automatic stoppage in event of Algo execution leading to a loop or a runaway situation.	
9.	Efficient Price Discovery and Fair Play Check	The algorithm strategy/ies are conducive to efficient price discovery and fair play and shall not take liquidity away from the market.	
10.	Open Authentication (OAuth) based authentication	Product shall have Open Authentication (OAuth) based authentication only and any other authentication mechanisms as prescribed by MCX/SEBI from time to time.	
11.	IOC and Market orders are not allowed	The algorithm strategy/ies should not place IOC and Market Orders	

It is hereby confirmed and certified that system audit of the software and systems used by _____ , a vendor of Multi Commodity Exchange of India Limited (‘Exchange’) has been conducted by me and have been found to be in compliance with the requirements stipulated by SEBI and Exchange and the above-mentioned software can be put to use.

We also certify that none of the current Directors / Partners / Promoters of the Algo Provider / Vendor are directly or indirectly related with any of the Directors / Promoters / Partners / Partners of

_____ (Name of Auditing Firm) and there is no conflict of interest with respect to the Algo Provider / Vendor being audited.

Signature

(Name of the Auditor & Auditing firm)

CISA / DISA / CISM / CISSP Reg. No. :

UDIN:

Date:

Place:

Stamp/Seal: (valid digital signature is acceptable)

Note -: Empanelled ISVs are required to submit Annexure F from circular MCX/CTCL/364/2025 dated July 24, 2025, for providing retail algo to members.

APPENDIX
Checklist for Documentation

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Part A: Checklist for Application for Empanelment & Approval by ISV for CTCL/IBT/WT/ATF/DMA solutions

A vendor seeking empanelment with Exchange as an ISV shall provide the following documents to the Exchange on Email ID ctcl@mcxindia.com::

Sr. No.	Particulars	Format
1.	Criteria for Empanelment as an ISV	Annexure 1
2.	Undertaking to be given by ISV - One time only	Annexure 3
3.	Personal Guarantee Letter	Annexure 4
4.	Certified true copy of board resolution	Annexure 12
5.	Guidelines for Undertaking	Annexure 5
6.	Checklist for software development	Annexure 6
7.	Application for approval CTCL/IBT/WT/ATF/DMACTCL/DMAATF Software (New/Addition)	Annexure 7
8.	**Algorithmic Trading (Algo) / DMAATF Strategy Write-up** (Should cover notes on Liquidity Infusion and controls built-in in the software to comply Exchange / SEBI guidelines)	--
9.	**CTCL/IBT/WT/DMACTCL Product Write-Up (Features)**	--

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Part B: Checklist for CTCL Facility from Empanelled ISV

A member seeking permission for CTCL facility shall submit documents through online CTCL Web portal to the Exchange:

Sr. No.	Particulars	Format
1.	**Application for availing CTCL facility**	Generate & submit online
2.	**Network Diagram** (Details of connectivity of CTCL server at member's office with MCX Central server in diagram to be provided by Member on letter head with software name & version).	Annexure 38
3.	**CTCL/IBT/ATF/WT Undertaking** (Required for first application only)	Annexure 13
4.	**Guidelines for Undertaking**	Annexure 5
5.	**Certified true copy of board resolution** (If the member is company. Required only once)	Annexure 12
6.	**System Audit Certificate**	Annexure 28

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Part C: Checklist for IBT / WT Facility from Empanelled ISV

A member seeking permission for IBT/WT facility shall submit documents through online CTCL Web portal to the Exchange:

Sr. No.	Particulars	Format
1.	**Application Form for availing Internet Based Trading (IBT) and or Wireless Trading (WT) Facility**	Generate & submit online
2.	**CTCL/IBT/ATF/WT Undertaking** (Required for first application only)	Annexure 13
3	**Guidelines for Undertaking**	Annexure 5
4	**Certified true copy of board resolution** (If the member is company. Required only once)	Annexure 12
5	**Network Diagram** (Details of connectivity of IBT / WT server with MCX Central server and distribution Connectivity in diagram to be provided by Member on letterhead with software name and version).	Annexure 38
6	**Annexure signed by vendor and countersigned by member.**	Annexure 16
7	**Contingency Plan**	Annexure 17
8	**Secured Socket Layer Certificate (SSL)** (Secured socket level security for server access through Internet to be provided by Member)	Submit online
9	**Print Screen of URL (home Page) or Login Screen** (URL / login screen which is created and shall be accessed by users over Internet / wireless for the purpose of trading, to be provided by the Member. (Required domain name in address bar of URL along with software name & version number on the login page)	Submit online
10	**System Audit Certificate**	Annexure 28
11	**System Audit Report**	Annexure 27
12	**Net Worth certificate (In case of IBT)**	-
13	**Screenshot of 2FA. Display of Brokerage, Statutory & Regulatory Levies, and display of last trading day**	Submit online

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Part D: Checklist for Version change of Existing approved Software from Empanelled ISV and In-house

A member seeking permission for the Version change of existing approved software shall submit documents through the online CTCL Web portal to the Exchange:

Sr. No.	Particulars	Format
1.	**Application Form modification in approved CTCL software**	Generate and submit online
2.	**System Audit Certificate (Version Change in-case modification in Software Feature/ Functionality of software / RMS / OMS)**	Annexure 28
3.	**Product /Strategy Write-Up** (On Members letterhead with Authorised Signatory signature and company stamp on all pages, valid digital signature is acceptable. Write up should have page no. on all the pages and should contain software name and version, OMS / RMS / Functions)	Submit Online
4.	**Screenshot of 2FA. Display of Brokerage, Statutory & Regulatory Levies, and display of last trading day should be part of writeup**	Submit online
5.	**No Change Letter**	Annexure 21
6.	**Auditor Report (Version Change in-case of modification in RMS / OMS Server of software)**	Annexure 27

Note: Exchange reserves the right to call for additional information / documents / demonstration at any time as it may deem fit.

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Part E: Checklist for CTCL for In-House Software Development Application by Member

A member seeking permission for In-House software development or procurement / development of software from non – empanelled vendor shall submit the following documents to the Exchange through online CTCL Web portal to the Exchange:

Sr. No.	Particulars	Format
1.	**Form for creation of in-house CTCL Software in CTCL online portal**	Annexure 22
2.	**Application form for In-House CTCL / IBT/WT software**	Generate & submit online
3.	**Network Diagram** (Details of connectivity of CTCL server at member's office with MCX Central server in diagram to be provided by Member on letter head with software name and version.)	Annexure 38
4.	**Software development team details / Non-empanelled vendor details/Profile**	Annexure 39
5.	**CTCL/IBT/ATF/WT Undertaking** (Required only once)	Annexure 20
6.	**Guidelines for Undertaking**	Annexure 5
7.	**Certified true copy of board resolution** (If the member is company. Required only once)	Annexure 12
8.	**Checklist for software testing**	Annexure 14
9.	**Product Write-up** (On Members letterhead with Authorised Signatory signature and company stamp on all pages, valid digital signature is acceptable. Write up should have page no. on all the pages and should contain software name and version, OMS / RMS / Functions)	Submit online
10.	**System Audit Certificate**	Annexure 28
11.	**Letter from Empanelled CTCL Vendor**	Annexure 18

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Part F: Checklist for Internet Based Trading (IBT)/Wireless Trading (WT) for In-house software development by Member

A member seeking permission for In-House IBT/WT software development submit documents through online CTCL Web portal to the Exchange:

Sr. No.	Particulars	Format
1.	**Form for creation of in-house IBT & WT Software in CTCL online portal**	Annexure 22
2.	**Application form for In-House CTCL / IBT/WT software**	Generate & submit online
3.	**Network Diagram** (Details of connectivity of CTCL server at member's office with MCX Central server in diagram to be provided by Member on letter head with software name and version.)	Annexure 38
4.	**Software development team details / non-empanelled vendor details**	Annexure 39
5.	**CTCL/IBT/ATF/WT Undertaking** (Required only once)	Annexure 20
6.	**Guidelines for Undertaking**	Annexure 5
7.	**Certified true copy of board resolution** (If the member is company. Required only once)	Annexure 12
8.	**Checklist for software testing**	Annexure 14
9.	**Letter from Empanelled CTCL Vendor**	Annexure 18
10.	**Product Write-up** (On Members letterhead with Authorised Signatory signature and company stamp on all pages, valid digital signature is acceptable. Write up should have page no. on all the pages and should contain software name and version, OMS / RMS / Functions)	Submit online
11.	**Contingency Plan**	Annexure 17
12.	**Secured Socket Layer Certificate (SSL)** (Secured socket level security for server access through Internet to be provided by Member)	Submit online
13.	**Print Screen of URL (home Page) or Login Screen** (URL / login screen which is created and shall be accessed by users over Internet / wireless for the purpose of trading, to be provided by the Member. (Required domain name in address bar of URL along with software name & version number on the login page)	Submit online
9.	**System Audit Certificate**	Annexure 28
10.	**System Audit Report**	Annexure 27

11.	**Screenshot of 2FA. Display of Brokerage, Statutory & Regulatory Levies, and display of last trading day, should be part of product writeup.**	----

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Part G: Checklist for In-House Internet Based Trading (IBT) & Wireless Trading (WT) Software Development Application by Member using API of Empanelled CTCL Vendor

A member seeking permission for In-House IBT/WT software development using API of the empanelled CTCL Vendor shall submit documents through online CTCL Web portal to the Exchange:

Sr. No.	Particulars	Format
1.	**Form for creation of in-house IBT & WT Software in CTCL online portal**	Annexure 22
2.	**Application form for In-House IBT/WT software using API of empanelled CTCL Vendor**	Generate & submit online
3.	**CTCL/IBT/ATF/WT Undertaking** (Required only once)	Annexure 20
4.	**Guidelines for Undertaking**	Annexure 5
5.	**Certified true copy of board resolution** (If the member is company. Required only once)	Annexure 12
6.	**Letter from Empanelled CTCL Vendor**	Annexure 18
7.	**Software development team details / non-empanelled vendor details**	Annexure 39
8.	**Network Diagram** (On Member letter head with software name & version)	Annexure 38
9.	**Contingency Plan**	Annexure 17
10.	**Product write-up** (On Members letterhead with Authorised Signatory signature and company stamp on all pages, valid digital signature is acceptable. Write up should have page no. on all the pages and should contain software name and version, OMS / RMS / Functions)	Submit Online
11.	**Print Screen of URL (home Page)** (URL / login screen which is created and shall be accessed by users over Internet / wireless for the purpose of trading, to be provided by the Member. and required domain name in address bar of URL along with software name & version number on the login page)	Submit Online
12.	**Secured Socket Layer Certificate (SSL) in case of IBT** (Secured socket level security for server access through Internet to be provided by Member)	Submit Online
12.	**System Audit Certificate**	Annexure 28
13.	**System Audit Report**	Annexure 27
14.	**Screenshot of 2FA. Display of Brokerage, Statutory & Regulatory Levies, and display of last trading day should be part of product writeup.**	----

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Part I: Checklist for Algorithmic Trading (Algo) Facility from Empanelled ISV

A member seeking permission for Algo shall submit below documents through online CTCL Web portal to the Exchange:

Sr. No.	Particulars	Format
1.	**Application Form for use of Algorithmic Trading (Algo) Facility**	Generate & submit online
2.	**Trading member's Undertaking for use of Algorithmic Trading Facility from Empanelled ISV**	Annexure 13
3.	**Guidelines for Undertaking**	Annexure 5
4.	**Network Diagram** (Provide network diagram for use of Algo through CTCL facility, on Member letter head with software name & version)	Annexure 38
5.	**System Audit Certificate**	Annexure 28
6.	**Compliance letter from Member**	Annexure 41
7.	**Base Minimum Capital requirement for Algo approval** (Master Circular – Membership, Circular no.: MCX/MEM/324/2016 dated September 29, 2016)	

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Part J: Checklist for Algorithmic Trading (Algo) Facility developed In-house

Sr. No.	Particulars	Format
1.	**Form for creation of in-house ATF facility in CTCL online portal**	Annexure 22
2.	**Application Form for use of Algorithmic Trading (Algo) Facility**	Generate & submit online
3.	**Trading member's Undertaking for use of Algorithmic Trading Facility for In-house software development**	Annexure 20
4.	**Guidelines for Undertaking**	Annexure 5
5.	**Network Diagram** (Provide network diagram for use of Algo through CTCL facility, on Member letter head with software name & version)	Annexure 38
6.	**Strategy Write-up in case of In-house developed on Members letterhead.** (Should cover notes on Liquidity Infusion and controls built-in in the software to comply Exchange / SEBI guidelines)	Submit online
7.	**Software development team details in case of In-house facility**	Annexure 39
8.	**In case of In-house software development by non empanelled vendor Member need to submit Vendor Profile**	Annexure 39
9.	**System Audit Certificate**	Annexure 28
10.	**Compliance letter from Member**	Annexure 41
11.	**Base Minimum Capital requirement for Algo approval** (Master Circular – Membership, Circular no.: MCX/MEM/324/2016 dated September 29, 2016)	

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Part K: Checklist for Application for Empanelment of ASP for CTCL/IBT/WT solutions

A vendor seeking empanelment with Exchange as an ASP shall provide the following to the Exchange:

Sr. No.	Particulars	Format
1.	Criteria for Empanelment as an ASP	Annexure 1
2.	Application for Empanelment as ASP	Annexure 19
3.	Undertaking to be given by ASP - One time only	Annexure 30
4.	Personal Guarantee Letter	Annexure 4
5.	Certified true copy of board resolution	----
6.	Guidelines for Undertaking	Annexure 5
7.	Checklist for software development	Annexure 6

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Part L: Application for API for EOBI or EMDI facility

Members of the Exchange or Empanelled ISVs (CTCL Vendors) desirous of developing software to use EOBI or EMDI shall provide the following to the Exchange:

Sr. No.	Particulars	Format
1.	**Application for enabling Tick by Tick Trading Market Data (EOBI) - Trading Member**	Annexure 31
2.	**Application for enabling Enhanced Market Data Interface (EMDI) - Trading Member**	Annexure 32

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Part M: Application for CTCL / IBT / WT Services through ASP

Members of the Exchange desirous for availing CTCL/IBT/WT/ services through APS shall provide the following to the Exchange:

Sr. No.	Particulars	Format
1.	**Application form for permission to provide CTCL/ IBT / WT services using an ASP**	Annexure 35
2.	**Undertaking to be submitted by member**	Annexure 36
3.	**Guidelines for submitting undertaking**	Annexure 5
4.	**Countersigned documents by ASP and member**	Annexure 37
5.	**Network Diagram (On Member letter head with software name & version)**	Annexure 38
6.	**Member to submit the copy of Undertaking executed with ASP Vendor for availing services**	----

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Part N: Member or Vendor DMA Software Application

1. Application for DMA Software from ISV

A member seeking permission for ISV DMA software development submits documents to the Exchange:

Sr. No.	Particulars	Format
1.	**Application Form for ISV / In-House DMA facility software registration of software details on letter head.**	Annexure 23
2.	**Trading member's Undertaking for use of Algorithmic Trading Facility for In-house software development** (Required only once)	Annexure 13
3.	**Guidelines for Undertaking**	Annexure 5
4.	**Certified true copy of board resolution (If the member is company. Required only once)**	Annexure 12
5.	**Network Diagram** (Provide network diagram for use of DMA through CTCL facility, on Member letter head with software name & version)	Annexure 38
6.	**Checklist for software testing**	Annexure 14
7.	**Annexure signed by vendor and countersigned by member.**	Annexure 16
8.	**Product/Strategy Write-up in case of In-house developed** (ATF software should cover notes on Liquidity Infusion and controls built-in in the software to comply Exchange / SEBI guidelines)	On Members letterhead with Authorised Signatory
9.	**Software development team details in case of In-house facility. In case of In-house software development by non empanelled vendor Member need to submit Vendor Profile**	Annexure 39
10.	**System Audit Certificate**	Annexure 28
11.	**System Audit Report**	Annexure 27
12.	**Compliance letter from Member (ALGO)**	Annexure 41
13.	**Contingency Plan**	Annexure 17
14.	**Terms and condition used by Client/Investment manager**	Annexure-33
15.	**Base Minimum Capital requirement for DMA-Algo approval** (Master Circular – Membership, Circular no.: MCX/MEM/324/2016 dated September 29, 2016)	

16.	**Secured Socket Layer Certificate (SSL)** (Secured socket level security for server access through Internet to be provided by Member, if applicable)	On Members letterhead with Authorised Signatory

Note:

- Members are requested to submit documents through e-mail **(ctcl@mcxindia.com)** till the online portal is available for DMA Facility, with Authorised Signatory signature and company stamp. (Valid digital signature is acceptable, except for Undertaking)

2. Application for DMA Software from In-House

A member seeking permission for In-House DMA software development submit documents to the Exchange:

Sr. No.	Particulars	Format
1.	**Application Form for ISV / In-House DMA facility software registration of software details on letter head.**	Annexure 23
2.	**Trading member's Undertaking for use of Algorithmic Trading Facility for In-house software development** (Required only once)	Annexure 20
3.	**Guidelines for Undertaking**	Annexure 5
4.	**Certified true copy of board resolution (If the member is company. Required only once)**	Annexure 12
5.	**Network Diagram** (Provide network diagram for use of DMA through CTCL facility, on Member letter head with software name & version)	Annexure 38
6.	**Checklist for software testing**	Annexure 14
7.	**Product/Strategy Write-up in case of In-house developed** (ATF software should cover notes on Liquidity Infusion and controls built-in in the software to comply Exchange / SEBI guidelines)	On Members letterhead with Authorised Signatory
8.	**Software development team details in case of In-house facility. In case of In-house software development by non empanelled vendor Member need to submit Vendor Profile**	Annexure 39
9.	**System Audit Certificate**	Annexure 28
10.	**System Audit Report**	Annexure 27
11.	**Compliance letter from Member (ALGO)**	Annexure 41
12.	**Contingency Plan**	Annexure 17
13.	**Terms and condition used by Client/Investment manager**	Annexure-33
14.	**Base Minimum Capital requirement for DMA-Algo approval** (Master Circular – Membership, Circular no.: MCX/MEM/324/2016 dated September 29, 2016)	
15.	**Secured Socket Layer Certificate (SSL)** (Secured socket level security for server access through Internet to be provided by Member, if applicable)	On Members letterhead with Authorised Signatory

Note:

- Members are requested to submit documents through e-mail **(ctcl@mcxindia.com)** till the online portal is available for DMA Facility, with Authorised Signatory signature and company stamp. (Valid digital signature is acceptable, except for Undertaking)

Annexures

Some of the Annexures have been omitted as same is merged with other annexures.

Annexure 1

CRITERIA FOR EMPANELMENT OF ISV / ASP

Sr. #	Criteria	Response to Criteria
1.	The vendor should be a LLP / Limited Company / Private Limited Company having its registered office in India.	Documentary proof of the same is to be submitted
2.	Vendor organization should be in existence and should be in business of software development for minimum of 2 years	Please provide necessary proof like certificate of Incorporation etc.
3.	Whether the Vendor has any affiliation with other entities like brokers / sub-brokers etc. including beneficial interests held by/ in such brokers / sub-brokers etc.	If Yes, please mention name of all such entities with required details
4.	Whether applicant is having previous experience in similar product development / implementation.	If yes, provide name and project / product details with reference
5.	Whether Applicant has requisite skills within the organization in relation to product development, system integration and maintenance	Please provide details with key personnel profile
6.	At least 2 designated directors should have a minimum of 5 years' experience in Information Technology and Finance Domain	
7.	Whether Applicant is certified for ISO 9001:2008 or CMMi	
8.	Whether the Applicant has adequate infrastructure in terms of: • Hardware & software facilities. • Communication & networking facilities within the organization • General office facilities in terms of office space and infrastructure • Staff	Please provide the existing and planned infrastructure.
9.	The vendor should have sound financial condition for continuous support having net worth of minimum Rs.1 Cr.	

10.	The vendor should have minimum 5 clients for the CTCL software in any other national level stock exchange or commodity exchange	
11.	At least 2 designated directors should provide Personal Guarantee to the Exchange to indemnify Exchange against any claims made by users of the said software due to any malfunction of the software provided by the vendor	
12.	The vendor must warrant that there are no legal actions being taken against it for any cause in legal jurisdiction of India. The vendor should not have been blacklisted by Stock Exchange / Commodity Exchange / SEBI / or any other Government agencies	
13.	Should have permanent location or office within India	

Annexure 2

APPLICATION FOR EMPANELMENT AS ISV
(To be executed on letter head of the ISV)

To
CTCL Department
Multi Commodity Exchange of India Limited
255, Exchange Square,
Suren Road, Chakala,
Andheri (East),
Mumbai – 400 093.

Sr. #	Particulars	Details
57.	Application for empanelment for: (CTCL / IBT / WT/ATF)	
58.	API required from Exchange: (Non-FIX API / FIX API)	
59.	Name of the ISV:	
60.	Registered Address:	
61.	Legal form of Organisation:	Certificate of Registration / Partnership deed to be enclosed
62.	Telephone No.:	
63.	Fax No.:	
64.	Name(s) & Designation of Authorised Signatory:	
65.	Contact details (Phone, Fax, Email) of Authorised Signatory:	
66.	Correspondence Address of Authorised Signatory:	
67.	Organisational structure:	To be enclosed
68.	Total Staff:	
69.	Directors:	
70.	Technical Staff - Hardware:	
71.	Technical Staff - Software:	
72.	Technical Staff - Support:	
73.	Technical Staff - Others:	
74.	No. of support offices across the country:	Complete details to be enclosed
75.	Details of promoters and their background:	To be enclosed
76.	No. of years in the IT Business:	
77.	IT Turnover for the last three years:	Complete details including audited balance sheets to be enclosed

78.	Technical Details – Hardware Infra Structure available within Organisation:	To be enclosed
79.	Technical Details – Software Infra Structure available within Organisation:	To be enclosed
80.	Technical Details – Communication / Networking Infra Structure available within Organisation:	To be enclosed
81.	Details of Empanelment as CTCL / IBT / WT software vendor with other Exchanges:	
82.	Complete details of Proposed Solution along with Platforms used:	Comprehensive write-up explaining features of the solution, programming language, OS platform, Database details and network diagram to be provided.
83.	Name and reference of Exchange (MCX) trading members where a solution is implemented, if any:	
84.	Proposed Price (indicative per user & site license fee) for providing the Solution to the Members of the Exchange: Price for Workgroup edition	(Give details)
85.	Networth Details	Amount to be mentioned

We certify that all the statements are true and correct to the best of our knowledge. We undertake to ensure continuous compliance with the requirements of the Exchange, Department of Technology (Government of India) policy and regulations with regard to levels of encryption, etc., and directives and other statutory requirements including tax and foreign exchange laws of the regulators in this regard, as may be issued from time to time.

Signed sealed and delivered by the Authorised signatory of the Vendor

Date:
Place:

Annexure 3

UNDERTAKING TO BE GIVEN BY ISV

To be executed on Rs. 1000/- stamp paper / applicable stamp duty of the state (whichever is higher), duly Notarized on all pages, signed, stamped & sealed by Authorized Signatory on all pages

I / We, _____, an individual /a firm registered under the Partnership Act, 1932 / a Company / body corporate incorporated under the Companies Act of 1956_and residing at / having our office/ registered office at _____ (hereinafter referred to as the 'Undersigned' which expression shall unless repugnant to the context include her/his/ its successors, assigns and legal representatives) give this Undertaking on this _____ day of _____20_____ at _____ IN FAVOUR of MULTI COMMODITY EXCHANGE OF INDIA LTD, a company incorporated under the Companies Act, 1956 and a Commodity Exchange duly recognized by the Central Government having its registered office at Exchange Square, Suren Road, Chakala, Andheri (East), Mumbai – 400 093, India (hereinafter referred to as "MCX", which expression shall unless repugnant to the context include its successors, assigns and legal representatives)

WHEREAS

a) MCX has provided the trading software to enable its Members of the Exchange to trade.

b) In addition, MCX provides a Computer to Computer Link (hereinafter referred to as the 'CTCL facility'), Internet Based Trading (hereinafter referred to as the 'IBT') facility, Algorithmic Trading (hereinafter referred to as the 'ATF') facility and Wireless Trading (hereinafter referred to as the 'WT') facility on CTCL/IBT/ATF/WT/DMA software provided by CTCL empanelled vendors designated by the Exchange and on CTCL/IBT/ATF/WT/DMA software procured from empanelled vendor, for order entry, receipt of order and trade confirmation and also for receipt of data relating to its trade quotations.

c) MCX has decided that it shall make the CTCL/IBT/ATF/WT/DMA Facility available to its Members of the Exchange / grant permission to Members of the Exchange to offer CTCL/IBT/ATF/WT/DMA facility on a case-to-case basis subject to such terms and conditions as MCX may impose from time to time.

d) The empanelled ISV's of MCX may facilitate CTCL/IBT/ATF/WT/DMA Trading through order routing system for trading for its members, after obtaining permission from MCX.

e) MCX has decided that the software vendors shall be identified for this purpose, based on the application received from them and subject to fulfillment of such criteria as may be stipulated by MCX from time to time, and subject to such software vendor executing an Undertaking in favour of MCX in the format prescribed by it and agreeing to abide by and be bound by the various terms and conditions which MCX may prescribe in this regard from time to time.

f) MCX has agreed to identify me / us as a software vendor for the above purpose and I / we am / are desirous of developing the software for the Trading Member to enable the Member to avail of the CTCL/IBT/ATF/WT/DMA facility and shall fulfill all the terms and conditions as may be prescribed by MCX from time to time at its discretion in this regard.

g) I / We had entered into an agreement dated ____ day of _____, 20__, (hereinafter referred to as 'Agreement') with the Member Mr. / Ms. / M/s. _____ (hereinafter referred to as Member) having their residence / registered office at

_____ for development of the software for the CTCL/IBT/ATF/WT/DMA facility (hereinafter referred to as 'Software') for the Member. The software was duly tested and found free of any errors / bugs has been put into operations. We are aware that the Member _____ has obtained necessary approvals, entered into the necessary undertaking etc. from/ with MCX before commissioning our services in this regard.

NOW THEREFORE IN CONSIDERATION OF MCX having agreed to identify / identified me / us as a software vendor for the aforesaid purposes, I / we hereby IRREVOCABLY AND UNCONDITIONALLY UNDERTAKE and agree to abide by and be bound by the following terms and conditions:

1. I/We shall ensure that the connectivity of the CTCL/IBT/ATF/WT/DMA facility is as per MCX and Department of Telecommunications (DOT) approved network diagram for the CTCL/IBT/ATF/WT/DMA facility.

2. I/We undertake to pay any such license fees/charges/royalties as may be levied by DOT/MTNL/MCX any other regulatory/statutory authorities from time to time.

3. I/We shall install the software only at the “Members of the Exchange” location only after duly ensuring that all the requirements stipulated by MCX in this regard have been complied with by the Member and that the Approved User shall not make the CTCL/IBT/ATF/WT/DMA facility available to any other unauthorized person.

4. I/We undertake to ensure that the connectivity between the Member and MCX shall be used only for application of the CTCL/IBT/ATF/WT/DMA facility.

5. I/We agree that the data communication link between MCX's equipment and the Member's equipment is on a computer-to-computer basis and that the link shall not be connected to my/our own telecommunication network.

6. I/We undertake to obtain the prior approval of MCX for any changes to be made to the existing network diagram **/** software.

7. I/We undertake to ensure that access shall be given only to the authorized individuals and also a method shall be established to ensure that non authorized persons cannot access the system.

8. I/We undertake that the software design shall use only the specified messages given by MCX and shall consider all the structures defined by MCX from time to time. The Deliverables shall be:

    i. Basic functionalities as and when required by MCX.
    ii. Customization of Members of the Exchange needs as approved by MCX.

9. I/We undertake that the Software developed by me / us, shall not resemble or result in duplication of the trading software of the Exchange. We also undertake that the Software should provide all the essential functions as may be stipulated by MCX from time to time.

10. I/We undertake that controls shall be inbuilt by me / us to ensure that the orders are matched by the central computer of MCX only and there is no scope for orders being matched with my / our own private network.

11. I / we shall not develop or use any software / program facility which shall either directly or indirectly facilitate automated trading without prior written approval of the Exchange. For the purpose of this clause the term ‘Algorithmic Trading’ shall mean any software or facility by the use of which, upon the fulfillment of certain specified parameters, without the necessity of manual entry of orders, buy/sell orders are automatically generated and entered by the software / program facility into the Trading System of MCX to be matched by the Exchange’s System.

12. I/We undertake that the following controls shall be inbuilt in the Software by me/us to detect loss of product integrity:

    i. Data validation routines to detect input errors.
    ii. Backup and recovery procedures.

13. I/We shall ensure that the Approved Persons shall not make the CTCL/IBT/ATF/WT/DMA facility available to any other person and that there shall be no provision in the Software to enable such persons to do so.

14. I/We shall ensure that position monitoring etc., shall be inbuilt in the CTCL/IBT/ATF/WT/DMA facility and it shall be flexible to change as per the requirements of the Exchange and the regulators.

15. I / We shall ensure that the CTCL/IBT/ATF/WT/DMA facility shall be developed so as to generate the following from the System for the purpose of verification during the inspection:

    i. Number of Users connected on to the Network.
    ii. Number of Dealers connected on to the Network including privileges to each Dealer.
    iii. All the systems log and audit trails of the Dealer and the Member.
    iv. Provision for entering complementary dummy orders.

16. I/We undertake that

    (i) MCX shall have the right and privilege of inspecting and testing the Software at my/our site and the Members of the Exchange site without any prior notice.
    (ii) The source code of the Software shall be available at both my/ our site as well as the Member's site for verification.
    (iii) I / We shall make available Prototype and the technical specifications of the Software to MCX for testing purposes.
    (iv) I / We shall be responsible to fix the bugs in the Software if any, found at the time of testing.

17. That I / We shall meet the criteria set to measure the expected level of performance.

18. That the terms of delivery and payment shall be agreed to by the Member and myself/us. I / We also undertake that the entire development, testing and installation process of the CTCL/IBT/ATF/WT/DMA facility shall not take more than six months from the ___ day of _____, 20___, being the date the Member has entered into an agreement with MCX.

19. I / We shall provide the documentation i.e. training manuals required to operate the product and use of system outputs as specified by the Member, with the Software. Further, such documentation shall include the potential error conditions and recommend action in the event of occurrence of error.

20. I / We undertake to provide User training first when the product is installed and thereafter whenever a major upgrade is released to the Member's Personnel for the following:

    (i) Use of Product
    (ii) Maintenance of the product.

Further, I / We also undertake that the frequency and caliber of the Vendor Personnel providing the training shall be as specified.

21. I / We undertake that:

    (i) All material and information which has or will come into my /our possession or knowledge in connection with the agreement or the performance hereof consists of confidential and proprietary

data, whose disclosure to or use by third parties will be damaging or cause loss to MCX. I / We agree to hold such material and information in strict confidence, not to make use thereof other than for the performance of the Agreement, to release it only to my/our employees requiring such information and that too only with the written consent of MCX, and not to release or disclose it to any other parties. I / We shall take appropriate action with respect to my / our employees to ensure that the obligations of non-use and non-disclosure of confidential information under the Agreement are fully satisfied and shall also ensure that my/our Employees are aware and comply with the above provisions. The provisions of this clause shall survive the termination of the agreement. For the purpose of this clause the term data shall include amongst other things, technical data which may be divulged by the Member during the normal course of development of the software and information relating to the operations of MCX.

(ii) I / We shall not in any way represent that the software developed is a part of the MCX Trading software.

(iii) I / We shall not advertise or publish any brochure, pamphlet, booklet, notice, or promotional material mentioning MCX or the services to be provided under the Agreement without the prior written consent of MCX.

(iv) I / We shall keep full security of MCX's programs, databases and computer records in accordance with the best computing practice.

22. I / We shall develop the software after considering the current and expected increase in workload, to ensure that the desired efficiency can be maintained with future workloads.

23. I / We shall develop the software and make it compatible to other Operating Systems, in case of any need to transfer the Software from one piece of hardware to another due to technological changes.

24. I / We shall provide an upgrade to the application software as and when the need for the same arises and in accordance with the requirements of MCX.

25. I / We undertake to make the Software compatible with the MCX Trading system, under intimation / (written consent) of MCX, in case any modification is made to the MCX Trading software by MCX and the same is required to be incorporated in the Software.

26. I / We am / are fully aware that MCX shall not be responsible for development, maintenance, updates, upgrades, error fixes and other support functions.

27. I / We undertake to provide the training and documentation as and when the Software is technically upgraded.

28. I / We undertake to provide such a warranty as required under the agreement.

29. I / We undertake to ensure as follows:

    (i) That in case of failure or malfunctioning of the Software, I/We shall resolve such first level trouble shooting and rectification of the Software problem to restore the Software in its proper operating condition at no cost to the Member.

    (ii) That I / We shall provide services for regular onsite maintenance of the Software in such manner and at such time intervals as specified by the Member. The fees for the same will be the amount mutually agreed upon by the Member and me/us and shall not at any point in time be unreasonable so as to put the Member in hardship. We are also aware that MCX shall in no way be responsible for non-fulfilment of either this or any other condition by the Member.

(iii) Shall supply and maintain the CTCL application software solution to any MCX Member at any location in the country, which the Member desires to operate from.

30. I / We confirm that the Software complies with all the requirements stipulated by MCX and DOT in this regard and undertake that I / we shall modify the Software, if necessary to ensure continued compliance with the requirements of MCX / DOT / any other authority as may be issued from time to time.

31. I / We hereby undertake to duly inform MCX in case of any cause, resulting in any change to my/our entity, or any change in any of the eligibility criteria based on which we have been identified as a software vendor for these purposes by MCX.

32. I / We hereby undertake to duly inform MCX of the list of Members of the Exchange who are using my/our CTCL / Internet trading application software.

33. That during the continuation of the Agreement if any modification/amendment is required by MCX/ Member, to be made by us, I/We agree and undertake to make the same.

34. I / We shall render all possible assistance and co-operation to MCX by providing access to any kind of information in any form as it may require and I/we hereby undertake to produce such documents, records, accounts, books, data howsoever stored including data stored in magnetic tapes, floppy diskettes, etc. and any other information as may be required by MCX at its discretion.

35. I / We agree and undertake that MCX shall not be liable for any direct or indirect loss, damage, costs, claims and expenses whatsoever caused or contributed by any event of force majeure. For the purposes of this Clause, "Force Majeure" means and includes governmental acts, regulatory changes, acts of God or forces of nature, landslides, earthquakes, floods, fire, lightening, explosions, major storm (hurricanes, typhoons, cyclones, tsunami etc.) or major storm warnings, tidal waves, shipwrecks, communication cable cutting/theft, major telephone exchange failure and perils of navigations, acts of war (declared or undeclared), insurrection, terrorism riots or public enemies, unavailability of public services, strikes, lockouts, acts or omission of sovereign states or those purporting to represent sovereign states, blockades, embargoes, epidemics, quarantines, public disorders, sabotages, accidents, and such other acts or events beyond MCX's control and further the above is without prejudice to the rights already accrued to MCX due to my/our failure to perform either in full or in part, my/our obligations prior to the occurrence of events of Force Majeure.

36. I / We shall indemnify and keep indemnified MCX harmless against every and all claims, demand, damages, liabilities, losses and expenses suffered by it directly by reason of my / our non-compliance, contravention with any of the provisions of this Undertaking or by reason of bugs or malfunctioning of the software provided by us to the Members of the Exchange.

37. I / We agree that no forbearance, delay or indulgence by MCX in enforcing the provisions of this Undertaking shall prejudice or restrict the rights of MCX nor shall any waiver of its rights operate as a waiver of any subsequent breach and no rights, powers, remedies herein conferred upon or reserved for MCX is exclusive of any other right, power or remedy available to MCX and each right, power or remedy shall be cumulative.

38. I / We undertake that any declaration or other notice to be given by me/us to MCX shall be sent by registered letter or telex/cable or facsimile transmission to the address first mentioned above.

39. That I / we shall produce all such necessary documents/papers to MCX in support of my claim that software is solely developed, and the intellectual property rights of the software is owned by me/us.

40. That I / we shall execute, sign, and subscribe to such other documents, papers, agreement, covenants, bonds, and/or undertakings as may be prescribed or required by MCX from time to time.

41. I/We also agree that in the event of my/our non-compliance with any of the provisions mentioned above, MCX shall take such action against us as it may deem fit in this regard.

Undertaking for Direct Market Facility

WHEREAS,

1. The Exchange has allowed its vendors providing Direct Market Access (DMA) facility to its clients (Members of the exchange) subject to submission of this Undertaking and fulfilling conditions prescribed by exchange / regulator time to time.

2. We are desirous of providing the Direct Market facility to our clients in compliance with relevant Circulars of the Exchange / Regulator.

3. MCX has decided that it shall make Direct Market Access (hereinafter referred to as the "DMA facility") facility available to its Vendors on case-to-case basis, subject to such terms and conditions as MCX may impose from time to time at its discretion.

NOW THEREFORE IN CONSIDERATION OF EXCHANGE having agreed to allow me / us to avail the Direct Market Access facility, I / we hereby IRREVOCABLY AND UNCONDITIONALLY UNDERTAKE and agree to abide by and be bound by the following terms and conditions

1. I / We undertake and agree to ensure that adequate measures shall be taken for user identification, authentication and access control using means such as user-id, passwords, smart cards, biometric devices or other reliable means, to prevent misuse of facility by unauthorised persons.

2. I / We shall not develop any software / program which shall either directly or indirectly facilitate orders to cross trades of clients with each other. All orders shall be offered to the market for matching.

3. I / We confirm and certify that the software has undergone tests by us. Further, we undertake to comply with and be bound by the Rules, Byelaws, Regulations of the Exchange, SEBI, any other statutory and regulatory body(ies) as may be applicable from time to time.

4. I / We undertake that any modifications / Change to the software to be affected only on prior approval of the Exchange.

5. I/We shall not make unauthorized changes to the approved software and only use the software which is approved by the Exchange.

6. I / We undertake that the risk management system considers overall positions of clients irrespective of the medium of undertaking and provides a system-based control facility on the trading limits of the clients and exposures taken by the clients.

7. I / We undertake to offer facility of DMA to client (member of the exchange) as prescribed by exchange, only after obtaining undertaking from the client that they are fully aware and agree for additional provisions specifying possible risks, responsibilities, obligations and liabilities associated with Trading as mentioned in this undertaking.

8. I / We undertake that order confirmation shall be provided to the user on submission of the order and on order modification / cancellation in the software. Trade confirmation shall be provided to the user, along with the history of trades for the day.

9. I / We undertake to ensure that Network security protocols and interface standards shall be as per prevalent industry standards and sound audit trails are available for all transactions conducted using devices.

10. I / We undertake to ensure that all DMA orders shall be routed to the exchange trading system through the broker's trading system. The broker's server routing DMA orders to the exchange trading system shall be in India.
11. I / We undertake to ensure a sound audit trial for all DMA orders and trades and be able to provide identification of actual user-id for all such orders and trades. The audit trail data should be available.
12. The authorized user and client details should be part of the order details received and authenticated at the DMA server of the software.
13. Software should follow the similar logic/priorities used by the Exchange to treat DMA client orders. Software should maintain all activities/ alerts log with audit trail facility. The DMA Server should have internally generated unique numbering for all order/trades.
14. I/We agree that I/We will take undertaking Software vendor will not incorporate features / functionalities which are against guidelines of the Exchange / any other regulatory body(ies)

IN WITNESS WHEREOF this Undertaking is executed by the undersigned on the day, month, year and the place first mentioned above.

SIGNED, SEALED AND DELIVERED BY

_____ for and on behalf of _____

_____

Before me

In the Presence of Witnesses

Sr. No.	Name	Address	Signature
1.			
2.			

Annexure 4

PERSONAL GUARANTEE

(to be executed on Rs.500 Stamp Paper)

I, …… residing at …….. …….. ……..... (hereinafter "Guarantor") do hereby personally guarantee the performance of ……. With regard to an undertaking dated …….. (hereinafter "Undertaking") given by M/s. ……..…… ……..…… (hereinafter "Company") in favour of Multi Commodity Exchange of India Ltd (hereinafter "MCX/Exchange") in reference to the circular no…….. dated ……. (copy of said undertaking is attached hereto as Exhibit A).

In the event that the Company fails to make payment to MCX, or fails to perform in any manner with regard to the said Undertaking given by Company in favour of MCX, I, hereby personally and solidarity guarantee:

i. All of the obligations of the Company and agree to be bound solidarity with MCX for the prompt performance of its' obligations under the said Undertaking.

ii. to comply with all such requirements, existing and future, with regard to and in connection with Vendor Empanelment for CTCL/IBT/WT/ATF/ DMA-CTCL/DMA-ATF of MCX.

iii. to abide by, comply with and be bound by the Bye- Laws, Rules and Regulations of MCX as in existence or in force from time to time and any modification through any circular, order, direction, direction, notice, notice, notice, instruction issued and in force from time to time.

iv. that the information provided in the application form for CTCL Vendor Empanelment of MCX is true and correct to the best of knowledge and belief and shall be binding on my successors and permitted assigns. That any defenses which Company might have been able to set up against MCX in respect of any claim by Company against MCX under the Undertaking or in law, including without limitation any claim of non-performance by Company of its obligations to MCX thereunder and any right of compensation or set-off which MCX might have had against Company under the Undertaking or in law, are expressly excluded and that I shall not be entitled to set up any such defense in the event of a claim by Company against me pursuant to this guarantee.

v. that (i) the essential stipulations of the present guarantee were not imposed by MCX and were negotiable, and that it is accordingly not a contract of adhesion within the meaning under the laws of India; (ii) the Undersigned has signed same in a free and enlightened manner, without error, fear or lesion, intending in good faith to be bound thereby, and the Undersigned had the benefit of independent legal counsel in connection therewith; (iii) the clauses of the present guarantee and of the Circular and all other contractual agreements between Company and MCX have been expressly brought to my attention; (iv) an adequate explanation of the nature and scope of the clauses thereof has given to me, and (v) the said clauses are not excessively or unreasonably detrimental to me and therefore are in good faith.

vi. Notwithstanding the foregoing, the Undersigned guarantees hereunder to pay any and all amounts including costs, expenses, fees, dues & penalties imposed, owing by Company to MCX

IN WITNESS WHEREOF, this personal guarantee is entered into this …….. day of ……(month), …… (year) at ……. (place of execution)

Name:
Signature:
Date:

Annexure 5

GUIDELINES FOR SUBMITTING UNDERTAKING

1. The Undertaking is to be executed on a non-judicial stamp paper/s or on paper franked from Stamp Office / authorised banks, for a value of INR 1000/-

2. Further the Undertaking (including all annexures / schedules) has to be notarised before a Notary Public.

3. Please use the format of respective undertaking as it is. **PLEASE DO NOT RETYPE THE UNDERTAKING**. The said Undertaking should not be modified without the consent of the Exchange (MCX).

4. All the pages of this Undertaking (including all annexures / schedules) have to be signed in full with company stamp. The persons signing should also sign in full at all places in the Undertaking where anything has been hand-written / any corrections have been made with company stamp.

   If the Member or Vendor is an individual, then the Undertaking has to be signed by the individual Member or Vendor himself. If the Member of Vendor is a firm, then ALL the partners are required to sign this Undertaking. If the Member or Vendor is a company, then the Undertaking has to be signed by the Managing Director, or any Director of the company named as an authorised signatory of the company.

5. If the Member or Vendor is a company, the Undertaking has to be accompanied with a certified copy of the resolution of the Board of Directors of the company authorising the person(s) executing the undertaking to do so. The Common Seal of the company has to be affixed by the company on this Undertaking in the presence of such persons as authorised by the Articles of Association of the company. The Board Resolution should clearly state that the affixation of common seal shall be made in the presence of such persons as authorised by the Articles of Association of the company and should also clearly state the names of such persons. The above persons should sign the undertaking as a token of their presence when the common seal is affixed.

6. Please type the following on the non-judicial stamp paper as the first page and sign.

   The non-judicial stamp paper of Rs._____ forms part and parcel of this Undertaking executed by me/us Mr. /Mrs. /M/s. _____ having my/our residence/office at _____ on this the _____day of _____ 20___at _____IN FAVOUR of Multi Commodity Exchange of India Limited.

Signature**
(**to be signed by the person(s) signing the Undertaking)

Annexure 6

Checklist/ Reference Points While Developing CTCL/IBT/AT/WT/DMA Software

Description	**Type of software and requirements**				
Application	CTCL	IBT	AT	WT	DMA
Availability of Secured Socket level security for server access through internet	NA	Yes	NA	Yes	NA
Display details of Software Name, Version Number	Yes	Yes	Yes	Yes	Yes

Description	Type of software and requirements				
Application	CTCL	IBT	AT	WT	DMA
Display of UMC Member Code / SEBI registration Code	Yes	Yes	Optional	Yes	Yes
Display of Useful Link to website – www.mcxindia.com and www.sebi.gov.in	Yes	Yes	Optional	Yes	Yes
Display of Strategy Name and Version Number	NA	Yes	Yes	Yes	Yes
Type of Strategy	NA	NA	Yes	NA	NA
Display of Exchange Time	Yes	Yes	Yes	Yes	Yes
Display of Login/ Log Off Status	Yes	Yes	Yes	Yes	Yes
Display of Market Status (eg: Open/Closed)	Yes	Yes	Yes	Yes	Yes
Display of Price Data in Ticker form (minimum Commodity Symbol, Expiry, Price (LTP))	Optional	Yes	Optional	Optional	Optional
Market Data/Watch – should contain minimum information of Segment, Contract Symbol, Expiry, Best Buy Quantity & Price, Best Sell Quantity & Price, Last traded time, Last updated time, Daily price range, Last Trading Day.	Yes	Yes	Optional	Yes	Yes
Contract Information to be provided - Contract Symbol, Expiry, Tick Size, Price Range, Min Lot Price Unit, Quantity Unit, Delivery Unit, Last traded price, Last Trading Day, etc.	Yes	Yes	Optional	Yes	Yes
Facility of one key stroke for Buy or Sell order entry & Contract Information	Yes	Yes	NA	Yes	Yes
Display of Brokerage	Optional	Yes	NA	Yes	Optional
Password Standards					
User should be able to login with valid user id and password	Yes	Yes	Yes	Yes	Yes
Minimum password length should be 8 and maximum 12 characters length	Yes	Yes	Yes	Yes	Yes
The password numeric values should not fully comprise of user id	Yes	Yes	Yes	Yes	Yes
Password should expire after minimum predefined period (eg: 15/ 30/ 45 days)	Yes	Yes	Yes	Yes	Yes
In case of multiple invalid password entries, the user id should be locked	Yes	Yes	Yes	Yes	Yes
Password should be alphanumeric and comprise one special character	Yes	Yes	Yes	Yes	Yes

Description	Type of software and requirements				
Application	CTCL	IBT	AT	WT	DMA
Appropriate message should be displayed while user login fails	Yes	Yes	Yes	Yes	Yes
Two factor authentication for login	Optional	Yes	Optional	Yes	Yes
Password help file can be provided	Optional	Optional	Optional	Optional	Optional
Message Broadcast					
Display of Exchange Messages/ Announcements & Response Messages for Failures.	Yes	Yes	Yes	Yes	Yes
Different Window for Internal Messages (Broker Messages)	Optional	Optional	Optional	Optional	Optional
Time sync with Exchange in Messages, LTT, LUT etc.	Yes	Yes	Yes	Yes	Yes
Vendors to provide details of any add-on provided on CTCL terminals, also notified in the product write-up.	Yes	Yes	Yes	Yes	Yes
Order Entry					
Order Entry at Market/Limit price with RL/SL type in both Normal & Spread contracts	Yes	Yes	Market Not Allowed	Yes	Yes (Market Not Allowed for ATF)
Order validity types provided i.e. GTC/GTD/Day/IOC/EOS	Yes	Yes	IOC Not Allowed	Yes	Yes (IOC Not Allowed for ATF)
User Types provide Pro & Client	Yes	Yes	Yes	Yes	Yes
Order Entry should follow SMPF Rule	Yes	Yes	Yes	Yes	Yes
In case of buying SL order, the trigger price should be less than limit price & vice versa for sell order	Yes	Yes	Yes	Yes	Yes
Order Modification from Order type RL to SL - Not Allowed	Yes	Yes	Yes	Yes	Yes
Order Modification from Order type SL to RL Allowed	Yes	Yes	Yes	Yes	Yes
If the orders are cancelled by Exchange or by Member Admin or by client, details of such information should be displayed in the Order Book and/or captured in logs.	Yes	Yes	Yes	Yes	Yes
Order Cancellation message should Contain Minimum-Order number, Order Type, Market type, Commodity name. Date & time, User id, Price Quantity & cancelled By.	Yes	Yes	Yes	Yes	Yes
Order Modification message should Contain Minimum-Order number, Order Type, Market type, Commodity name. Date & time,	Yes	Yes	Yes	Yes	Yes

Description	Type of software and requirements				
Application	CTCL	IBT	AT	WT	DMA
User id, Price Quantity & Modified By.					
Order Rejection message should Contain Minimum-Order number, Order Type, Market type, Commodity name. Date & time, User id, Price Quantity & Rejection Message.	Yes	Yes	Yes	Yes	Yes
Trade Confirmation message should Contain Minimum-Trade number, Trade Type, Market type, Commodity name. Date & time, User id, Price Quantity.	Yes	Yes	Yes	Yes	Yes
Order Entry with Disclosed Quantity below 25% not allowed	Yes	Yes	Yes	Yes	Yes
Market Price Protection Check. (Algo: Market orders are not allowed)	Yes	Yes	NA	Yes	NA (Yes for DMACTCL)
Order Entry during Halt session is not allowed	Yes	Yes	Yes	Yes	Yes
Tracing and mitigating the possibility of excessive and unnecessary order modification & Cancellation in the nature of order per second as per regulatory compliance.	Yes	Yes	Yes	Yes	Yes
RMS					
With every CTCL order, 15-digit terminal info should be provided (as per API)	Yes	Yes	Yes	Yes	Yes
With every Algo order, approved Strategy ID should be sent	NA	NA	Yes	NA	NA
DPR Updating in software during the market hours	Yes	Yes	Yes	Yes	Yes
Intraday Special/Additional Margin changes @ Exchange should get updated on respective CTCL terminals	Yes	Yes	Yes	Yes	Yes
Alerts of Maximum Sale Traded Value /Maximum Sale Traded Quantity	Yes	Yes	Yes	Yes	Yes
Limit breach for CTCL Terminal should be handled at CTCL Manager level	Yes	Yes	Yes	Yes	Yes
On Square-Off/Suspended mode/Segment disallow, also all pending orders should be rejected & order entry is not allowed	Yes	Yes	Yes	Yes	Yes
Trade Modification from OWN to CLI or vice versa for CTCL ID not allowed	Yes	Yes	Yes	Yes	Yes

Description	Type of software and requirements				
Application	CTCL	IBT	AT	WT	DMA
Complete Audit Trail like order book, order history, trade book etc.	Yes	Yes	Yes	Optional	Yes
Order Alerts while breaching the limits	Yes	Yes	Yes	Yes	Yes
The algorithmic system should have pre-defined parameters for an automatic stoppage in the event of algorithmic execution leading to a loop or runaway situation	Optional	Optional	Yes	Optional	Optional (Yes for ATF)
Checks are in place to ensure the maximum order per second does not exceed as prescribed by MCX from time to time.	Optional	Optional	Yes	Optional	Optional (Yes for ATF)
Checks are in place to ensure that OTR does not exceed the ratio prescribed by SEBI (i.e. for excessive modification and cancellation or orders)	Optional	Optional	Yes	Optional	Optional (Yes for ATF)
Algorithmic trading software accounts for all executed, unexecuted and unconfirmed orders, placed by it before releasing further order(s).	Optional	Optional	Yes	Optional	Optional (Yes for ATF)
Reports					
Trade Book, Order Book	Yes	Yes	Yes	Optional	Yes
Net Position should be accurate	Yes	Yes	Yes	Yes	Yes
System Logs/Reports					
All message logs maintained (order logs, trade logs, Client code modification log etc.)	Yes	Yes	Yes	Yes	Yes
Connection Logs to be maintained at CTCL Server	Yes	Yes	Yes	Yes	Yes
Backup Facility & Database Security	Yes	Yes	Yes	Yes	Yes
Activity/ System Log	Yes	Yes	Yes	Yes	Yes
Access Controls/remedies for misuse of log in id/ password	Yes	Yes	Yes	Yes	Yes
Alternate mode of connection in case of Link Failure	Optional	Yes	Optional	Yes	Optional
System Rollback functionality	Yes	Yes	Yes	Yes	Yes
Session Management- Logout after a system defined period of inactivity	Yes	Yes	Yes	Yes	Yes

Signed sealed and delivered by the Authorised Signatory of the Vendor

Signed Date: Place:

Annexure 7

Application for approval of CTCL/IBT/WT/ATF/DMA
(To be executed on letterhead of the Vendor)

To
CTCL Department
Multi Commodity Exchange of India Limited
255, Exchange Square,
Suren Road, Chakala,
Andheri (East),
Mumbai – 400 093.

We are desirous of making available CTCL/IBT/WT/ATF/DMA to members of the Exchange for the purpose of Trading. We hereby apply for the permission of the Exchange for approval of CTCL/IBT/WT/ATF/DMA software / strategies.

Sr. #	Particulars	Details
16.	Name of the ISV:	
17.	Registered Office/ Correspondence address :	
18.	Telephone No.:	
19.	Fax No.:	
20.	Name and Designation of the Authorised Signatory:	
21.	Contact details of the Authorised Signatory Telephone No. : Email :	
22.	API Type (FIX or Non-FIX)	
23.	Tick By Tick	Yes/No
24.	Technical Details c) Hardware d) Software	
25.	Name of the CTCL/IBT (Exe/Web) /WT/DMA-CTCL/DMA-ATF Software and Version Number	
26.	Name of the Algo Strategy Name and Version number	
27.	Detailed Write-up on CTCL/IBT/WT/ATF/DMA-CTCL/DMA-ATF (Algo Strategy- Should cover note on Liquidity Infusion and controls built-in in the software to comply Exchange / SEBI guidelines and to be provided on letterhead of the Vendor)	
28.	Details of Empanelment as CTCL/IBT/WT/ATF/DMA-CTCL/DMA-ATF Software/Strategy(ies) vendor with other Exchanges:	

Signed sealed and delivered by the Authorised Signatory of the Vendor

Date:

Place:

Annexure 11
Software confirmation by Vendor
(On letterhead of the Vendor)

To,
CTCL Department
Multi Commodity Exchange of India Limited
255, Exchange Square,
Suren Road, Chakala,
Andheri (East),
Mumbai – 400 093

Sub: CTCL / IBT /ATF/ WT/DMA software procurement confirmation

Dear Sir/Madam,

This is to state that M/s._____ (Name of the member), registered member (Member Id: _____ CTCL Id :_____) of MCX**,** has purchased CTCL/IBT/ATF/WT/ DMA-CTCL/DMA-ATF software from us for trading on MCX platform and same is installed at their premises.

Name of CTCL/ IBT/ATF/WT/ DMA-CTCL/DMA-ATF software: _____.

Software version number: _____.

In case of ATF Strategy Name & Version No.: _____.

Kindly enable them to start trading using CTCL / IBT / ATF / WT / DMA-CTCL/DMA-ATF software.

Thanking You,
Yours Sincerely,

For (Name of ISV)

Authorised Signatory
(Name and designation)

Date:
Place:

Annexure 12
(On Letter Head)

CERTIFIED TRUE COPY OF THE BOARD RESOLUTION PASSED BY THE BOARD OF DIRECTORS OF …….. (Name of the company) IN THEIR MEETING HELD ON …..…the (date of board meeting) at ……. (Office address)

"RESOLVED THAT the company can avail a Computer To Computer Link (CTCL)/ Internet based Trading (IBT) / Wireless Trading (WT) / Algo Trading (ATF) / Direct Market Access (DMA) facility on its own behalf

and on behalf of its clients in consonance with the Bye-Laws, Rules and Regulations laid down in this regard by Multi Commodity Exchange of India Limited.

"**RESOLVED FURTHER THAT** any one of the Directors (Name mentioned below) are hereby authorize to execute the Undertaking and all the necessary documents that may be required by the authority for the same."

Name	**Designation**	**Signature**
…….	Director	……
…….	Director	……
…….	Director	……

"**RESOLVED FURTHER THAT** the Common Seal of the company be affixed on such Undertaking to be provided to MCX, in the presence of

Mr.……., Director

of……..."

Certified True Copy

For …….

Director

Date:
Place:

Annexure 13

CTCL/IBT/ATF/WT/DMA Undertaking
(To be submitted by member)

PART I – CTCL/IBT Undertaking

To be executed on Rs. 1000/- stamp paper / applicable stamp duty of the state (whichever is higher), duly Notarized on all pages, signed, stamped & sealed by Authorized Signatory on all pages

I / We, _____, an individual /a firm registered under the Partnership Act, 1932 / a Company / body corporate incorporated under the Companies Act of 1956 /_____ Act, 19__, and residing at / having our office/ registered office at _____ (hereinafter referred to as the 'Undersigned' which expression shall unless repugnant to the context include her/his / its successors, assigns and legal representatives) give this Undertaking on this _____ day of _____20_____ at _____ IN FAVOUR of MULTI COMMODITY EXCHANGE OF INDIA LTD, a company incorporated under the Companies Act, 1956 and a Commodity Exchange duly recognized by the Central

Government having its registered office at Exchange Square, CTS No.255, Suren Road, Chakala, Andheri (East), Mumbai – 400 093, India (hereinafter referred to as “MCX”, which expression shall unless repugnant to the context include its successors, assigns and legal representatives)

WHEREAS,

a) MCX has provided the trading software to enable its Members to trade.
b) In addition, MCX provides a Computer to Computer Link (hereinafter referred to as the ‘CTCL facility’), Internet Based Trading (hereinafter referred to as the ‘IBT’) facility, Algorithmic Trading (hereinafter referred to as the ‘ATF’) facility, Direct Market Access (hereinafter referred to as the ‘DMA) facility and Wireless Trading (hereinafter referred to as the ‘WT’) facility on CTCL/IBT/ATF/DMA/WT (CTCL Facility) software provided by CTCL empanelled vendors designated by the Exchange and on CTCL/IBT/ATF/DMA/WT software procured from empanelled vendor, for order entry, receipt of order and trade confirmation and also for receipt of data relating to its trade quotations.
c) MCX has decided that it shall make the CTCL/IBT/ATF/DMA/WT facility available to its Members on case to case basis, subject to such terms and conditions as MCX may impose and one of the conditions is that they execute an undertaking in its favor in the format prescribed by it and agree to provide the said facility only to such persons (hereinafter referred to as the "Approved Persons") as MCX may permit and also agree to abide by and be bound by the various terms and conditions which it may prescribe in this regard from time to time.

d) I / We have admitted to the Membership of MCX and am/are desirous of availing the CTCL/IBT/ATF/DMA/WT facility by fulfilling all the terms and conditions as may be prescribed by MCX from time to time at its discretion in this regard.

NOW THEREFORE IN CONSIDERATION OF MCX having agreed to allow me / us to avail the CTCL/IBT/ATF/DMA/WT facility, I / we hereby IRREVOCABLY AND UNCONDITIONALLY UNDERTAKE and agree to abide by and be bound by the following terms and conditions.

1. That I / We shall make the CTCL/IBT/ATF/DMA/WT facility available to the Approved Persons only after obtaining the prior written consent of MCX and subject to such terms and conditions as may be prescribed by MCX from time to time.

2. That in addition to such terms and conditions as may be prescribed under clause (1) by MCX, all the provisions of the Byelaws, Rules, Regulations and Circulars relating to use and operation of the Trading System shall also mutatis mutandis become applicable to the use and operation of the CTCL/IBT/ATF/DMA/WT facility.

3. That notwithstanding anything contained in this Undertaking all my / our liabilities and obligations as a Member of MCX shall not be affected nor shall be prejudiced in any manner whatsoever.

4. That without prejudice to the generality of the clause (3) of this Undertaking, I / we shall be responsible to settle all the trades executed by the Approved Persons on my / our behalf whether such trades were executed with or without my permission / knowledge and that I shall be bound to complete / fulfill all my / our obligations / liabilities / commitments arising due to the trades executed by the Approved Persons on my / our behalf, including the trades executed by using CTCL/IBT/ATF/DMA/WT facility.

5. That I/We shall abide by, comply with and be bound by the Rules, Bye-laws, and terms and conditions as applicable for CTCL and/or Internet Based Trading and/or Wireless Trading facility /or Algorithmic Trading facility and/or Direct Market Access of MCX as in existence or as may be modified / amended by the relevant authority from time to time and any circular, order, direction, notice, instructions issued and / or as maybe modified or amended from time to time by the relevant authority.

6. That MCX, at its discretion, may make the CTCL/IBT/ATF/DMA/WT facility available to me / us at MCX address first mentioned above or at any other address as MCX from time to time may notify to me / us or approve as being the location.

7. That MCX shall be entitled to amend its Rules, Bye Laws, Regulations and terms and conditions for CTCL and/or Internet Based Trading and/or Wireless Trading /or Algorithmic Trading facility and/or Direct Market Access facility unilaterally and I/We shall be deemed to have consented to them, and accordingly be bound by the Rules, Bye-laws, Regulations and terms and conditions for CTCL and/or IBT and/or ATF and/or WT facility prevailing from time to time and MCX shall be entitled to all powers vested in them under the Rules, Bye-laws and Regulations, by which I/We unconditionally agree to be bound.

8. That I/We shall execute, sign, subscribe, to such documents, papers, agreements, covenants, bonds and / or undertakings whether legal or otherwise as maybe required by MCX from time to time.

9. That without prejudice to the rights, remedies whether legal or otherwise available to MCX upon my / our non-compliance with this Undertaking, I/We shall indemnify and keep indemnified MCX and its directors, managers, officers, employees and authorised representatives against any loss / damage suffered by it whether legal or otherwise arising due to non-compliance by me/us with the provisions of this Undertaking.

10. That I / We shall use the physical communication link (s) provided to me / us, for the purpose of having access to the CTCL / IBT / ATF / WT / DMA facility and TRADING SYSTEM Software.

11. That MCX, at its absolute discretion, may make the CTCL/IBT/ATF/DMA/WT facility available to me / us only from the date of my / our enablement on the CTCL/IBT/ATF/DMA/WT facility till such time as it may deem fit and further that the CTCL/IBT/ATF/DMA/WT facility may at any time be withdrawn by MCX at its discretion without giving me / us any notice or any reasons whatsoever.

12. That the CTCL/IBT/ATF/DMA/WT facility if made available to me / us by MCX will be made available to me / us by MCX on a non-exclusive basis only and that the same may be made available by MCX, at its discretion, to any other Trading cum Clearing Member whomsoever on such terms and conditions as it may deem fit.

13. That I / We may be entitled by giving one month's written notice to request MCX to withdraw from the CTCL/IBT/ATF/DMA/WT facility extended to me / us and such withdrawal shall be subject to such terms and conditions as may be prescribed by MCX including payment of such compensation to MCX as may be decided by MCX at its discretion.

14. That I / We shall be responsible and take all such steps, actions and proceedings to ensure and keep ensured that no Approved Persons in any way further makes the CTCL/IBT/ATF/DMA/WT facility available to any other person nor shall extend the CTCL/IBT/ATF/DMA/WT facility outside his/new premises / outside India and that in case I / We fail to ensure the same, MCX shall be empowered to take such action as it may deem fit, which action may include disabling me / us from having access to CTCL/IBT/ATF/DMA/WT facility, and taking of such disciplinary actions as it may deem fit.

15. I / we undertake that

    a. I / We shall at my / our own expenses provide all lines, cabling, software, hardware, equipment and other communication facilities required for transmission of the data between the Receiving Premises and my / our server at my / our office and also obtain the necessary approvals from relevant authorities.

    b. I / We shall ensure that the connectivity of the CTCL/IBT/ATF/DMA/WT facility is as per the MCX and Department of Telecommunications (DoT) and/or Mahanagar Telephone Nigam Limited

(MTNL) and/or any other appropriate governmental / statutory authority approved network diagram and that I/we shall produce the necessary approvals to MCX in order to meet one of its requirements for enabling me/us for having access to the CTCL/IBT/ATF/DMA/WT facility.

c. I / We undertake to ensure that access shall be given only to Approved persons and also a method shall be established to ensure that non-Approved persons cannot access the system.

d. I/We undertake to pay any such license fees/charges/royalties as may be levied by DoT/MTNL/MCX/any other regulatory/statutory authorities from time to time. MCX fees if any for using the CTCL/IBT/ATF/DMA/WT facility shall be paid in advance.

e. I / we shall ensure that data communication lines between the MCX equipment and my / our equipment will be connected to my / our own and further telecommunication network will be as per the MCX and DoT and/or MTNL and/or any other appropriate governmental / statutory authority approved network diagram.

f. I / We shall indemnify the Exchange against any loss or damage including liabilities arising out of failure to comply with Clause (e) above.

g. I / We shall provide MCX with the Network diagram as adopted by me / us for having access to the CTCL/IBT/ATF/DMA/WT facility between the Receiving Premises and my / our server at my / our office and that we shall also provide MCX with the new network diagram as and when any changes are made to the existing Network diagram with the prior written permission of MCX.

h. I / We shall notify MCX giving the details related to the Approved Persons as prescribed in Circular by the exchange from time to time, for prior approval of MCX and shall acquire the prior written permission from MCX for every additional Approved Person taken subsequently before letting him / her have access to the CTCL/IBT/ATF/DMA/WT facility. Further in case an Approved Person is disabled from acting in his / her capacity as such for any reason whatsoever, then I / we shall acquire prior written permission from MCX before appointing any other individual to act as an Approved Person in his / her place.

i. I / We shall make the necessary changes in the software used by me / us for accessing the CTCL/IBT/ATF/DMA/WT facility as per changes either technical or structural are made by MCX in the CTCL/IBT/ATF/DMA/WT facility.

j. I / We shall not develop / use any software for accessing the CTCL/IBT/ATF/DMA/WT facility, which software in the opinion of MCX shall resemble or result in duplication of TRADING SYSTEM software in any manner and further that no representation shall be made by me / us that the software developed by me / us for accessing the CTCL/IBT/ATF/DMA/WT facility is part of-the TRADING SYSTEM software.

k. I / We shall not assign or otherwise transfer the rights and obligations arising out of the use of the CTCL/IBT/ATF/DMA/WT facility and this undertaking whether in whole or in part without the prior written consent of MCX.

l. I/We shall not do unauthorized changes to the approved software and only use the software which is approved by the Exchange.

m. I / We agree not to use, without the express permission of MCX, the name of MCX to directly or indirectly promote my/ our business.

n. I / We shall not, either by myself / ourselves or through any person acting on my / our behalf, issue / release / publish any advertisement, brochure, pamphlet, booklet, notice or any other promotional material on any aspect relating to the CTCL/IBT/ATF/DMA/WT facility in any form, whether in writing or otherwise, in accordance to the Code of Advertisement as prescribed by the MCX except with the prior written approval of MCX.

o. I / We agree to obtain prior approval of MCX for change of its activities/operations from existing empanelled CTCL/IBT/ATF/DMA/WT vendor to another empanelled vendor.

p. I/We shall be solely responsible for the network infrastructure and connectivity for availing CTCL/IBT/ATF/DMA/WT facility made available to me.

q. I/We also confirm that I/We have not obtained nor applied for any other User ID in the names of the Approved Person/User/s and that the User ID allotted shall be utilized by the Approved Person/user/s only to access the MCX trading system.

r. I / We shall provide MCX with the Technical Specifications for the software used by me / us for accessing the CTCL/IBT/ATF/DMA/WT facility and shall also provide it with the new Technical Specifications for the software as and whenever any changes are made by me / us to the existing software used to access the CTCL/IBT/ATF/DMA/WT facility.

16. I / We agree that MCX does not warrant that the provision of the CTCL/IBT/ATF/DMA/WT facility will be error free or uninterrupted.

17. I / We undertake and agree that: -

a) I / We shall maintain all systems logs and make the same available for inspection by MCX at any time at its discretion.

b) I / We shall not under any circumstances match the respective orders entered in by my / our Approved Persons from their terminals by myself / ourselves by using any means whatsoever and that I / we shall route all the orders entered in by my / our Approved Persons to the Trading System of MCX so that they could be matched by the Central Computer of MCX only.

c) I/We shall ensure that the following guidelines on CTCL/IBT/ATF/DMA/WT and services would be adhered to:

i. The system used by me / us has provision for security, reliability and confidentiality of data through the use of encryption technology.

ii. I / We shall maintain adequate backup systems and data storage capacity and also arrange for alternative means of communications in case of Internet Link failure or any other software failure relating to the Trading System.

iii. Order/Trade confirmation shall be sent to the investor through email at client's discretion at the time period specified by the client in addition to the other mode of display of such confirmations on real time basis on my/our web site. The investor shall be allowed to specify the time interval on the web site itself within which he/she would like to receive this information through email. Facility for reconfirmation of orders which are larger than that specified by the member's risk management system shall be provided on the internet-based system.

iv. I / We shall ensure to have system-based control on the trading limits of clients and exposures taken by clients and also set pre-defined limits on the exposure and turnover of each client. The system will also be capable of assessing the client’s risk as soon as the order comes in. The client also needs to be informed of acceptance/rejection of the order within a reasonable period. Reports on margin requirements, payment and delivery obligations etc. to be informed to the clients through the system.

v. I/We shall ensure that the following security measures shall be in-built in the system:
- User Id
- First Level Password (Private Code)
- Automatic expiry of passwords at the end of reasonable duration. Reinitialize access on entering fresh passwords.

vi. All transaction logs with proper audit facilities to be maintained in the system.

vii. Secured Socket Layer Security for server access through the Internet.

viii. Suitable Firewalls between trading set-ups directly connected to an Exchange trading system and the Internet trading set up.

ix. Shall integrate any advanced level security as specified by MCX from time to time.

x. The following systems operations procedures will be adhered to:

- Shall follow similar logic/priorities used by the Exchange to treat client orders
- Shall maintain all activities / alerts log with audit trail facility
- The Webserver shall have internally generated unique numbering for all client orders/trades

d) I / We shall ensure that on-line surveillance and risk management features like trade-by-trade Position Monitoring etc., shall be inbuilt in the CTCL/IBT/ATF/DMA/WT facility and it shall be flexible to change as per MCX guidelines.

e) I / We shall not develop or use any software / program facility which shall either directly or indirectly facilitate program trading without prior written approval of the Exchange. For the purpose of this clause the term 'Algorithmic Trading' shall mean any software or program facility by the use of which, upon the fulfillment of certain specified parameters, without the necessity of manual entry of orders, buy/sell orders are automatically generated and entered by the software / program facility into the Trading System of MCX to be matched by the central computer.

f) I / We shall not develop or use any software / program which shall either directly or indirectly facilitate orders to cross trades of their clients with each other. All orders shall be offered to the market for matching.

g) MCX shall be possessed with the absolute right to inspect the internal software used / being utilised me / us at any time at its discretion.

h) I / We shall render all possible assistance and cooperation to MCX by providing access to any kind of information in any form as it may require and shall produce such documents, records, accounts, books, data howsoever stored including data stored in magnetic tapes, floppy diskettes, etc. and any other information as may be required by MCX at its discretion.

18. That after the completion of the necessary test and after completely satisfying myself / ourselves that the CTCL/IBT/WT/ATF/DMA facility is fault free, I / we shall submit an Acceptance Certificate in the format as specified by MCX in partial fulfillment of one of the conditions of MCX for my / our enablement for having access to the CTCL/IBT/ATF/DMA/WT facility.

19. I / We undertake that

a. will take all necessary steps to ensure that every new software and any change thereupon to the trading and/or risk management functionalities of the software will be tested as per the framework prescribed by SEBI / Exchange before deployment of such new / modified software in Commodity/Securities market.

b. We shall put in place an adequate mechanism to restore trading systems to 'production stat' at the end of the testing session so as to ensure an integrity trading system.

c. will ensure that approval of the Exchange is sought for all new/modified software and will comply with various requirements specified by SEBI or the Exchange from time to time with regard to usage, testing and audit of the software.

d. the absolute liability arising from failure to comply with the above provisions shall lie entirely with me/us.

20. That Member should arrange to provide a demonstration of the CTCL facility software (e.g. ATF/Algo facility) as per the Exchange's convenience. After successful demonstration of the software, MCX would grant permission to Member for the usage of CTCL facility.

21. That I/We cannot claim any direct or indirect damage, costs and expenses whatsoever arising from the following: -

    i. Arises from mechanical or electrical or telephone or network breakdown or power failure or malfunction of any computer and / or / our server and / or any other auxiliary equipment or any other cause beyond the reasonable control of MCX.

    ii. Based upon special indirect economic or consequential loss or damage including, but not limited to loss of profit, business revenue, opportunity costs, and goodwill or anticipated savings.

    iii. Caused or contributed to by any event of Force Majeure. For purposes of this Clause, "Force Majeure" means and includes governmental acts, regulatory changes, acts of God or forces of nature, landslides, earthquakes, floods, fire, lightening, explosions, major storm (hurricanes, typhoons, cyclones, tsunami etc.) or major storm warnings, tidal waves, shipwrecks, communication cable cutting/theft, major telephone exchange failure and perils of navigations, acts of war (declared or undeclared), insurrection, terrorism riots or public enemies, unavailability of public services, strikes, lockouts, acts or omission of sovereign states or those purporting to represent sovereign states, blockades, embargoes, epidemics, quarantines, public disorders, sabotages, accidents, and such other acts or events beyond MCX control, and further the above is without prejudice to the rights already accrued to MCX due to my / our failure to perform either in full or in part, my / our obligations prior to the occurrence of events of Force Majeure.

    iv. Or any other nature or type.

22. That MCX shall not be responsible for any development, maintenance, updates upgrades, error-fixes and any other support of my / our software for accessing the CTCL/IBT/ATF/DMA/WT facility and shall not be liable for any loss suffered by me / us due to the use of the software for accessing the CTCL/IBT/ATF/DMA/WT facility.

23. That neither MCX nor the directors, managers, officers, employees or agents of MCX, guarantee the functioning of the CTCL/IBT/ATF/DMA/WT facility. MCX and the directors, managers, officers, employees and agents of MCX shall not be liable in any way to me / us or to any of my / our Approved Persons or to any other person, for any non-performance or interruption of CTCL/IBT/ATF/DMA/WT facility or for any damages, consequential or otherwise, arising there from or occasioned thereby. No proceedings would be adopted by me / us or any third party neither against MCX nor against any individual officer or employee of MCX for any act done by such an officer or employee of MCX in their official capacity.

24. I / We shall indemnify and keep indemnified MCX harmless against every and all claims, demand, damages, liabilities, losses and expenses suffered by it directly by reason of the provision of the CTCL/IBT/ATF/DMA/WT facility to me / us or by reason of my / our noncompliance, contravention with the any of the provisions of this Undertaking.

25. That this Undertaking is applicable not only in respect of the information services and terminal equipment currently offered by me / us to Approved Persons but also in respect of any information services and terminal equipment developed by or for me / us in the future, even if I / we should at

any time alter my / our mode of supplying information to Approved Persons provided MCX approves in writing of such alteration with all details.

26. That without prejudice to any other right under any law for the time being in force or which may become applicable, MCX shall be vested with the exclusive right, upon my / our non-compliance with any of the terms and conditions of this Undertaking or upon the termination, suspension of my / our Membership or upon my / our ceasing to be a Member of MCX, to take, at its discretion, such actions, steps, proceedings, measures, decisions within such period of time and upon such terms and conditions as it may deem fit and that any such actions, steps, proceedings, measures, decisions may, inter alia, include denial of access to the CTCL/IBT/ATF/DMA/WT facility and / or take such disciplinary actions as it deems fit. I / we further undertake that I / we shall abide by and be bound by any actions, steps, proceedings, measures, decisions as may be taken by MCX.

27. That no forbearance, delay or indulgence by MCX in enforcing the provisions of this Undertaking shall prejudice or restrict the rights of MCX nor shall any waiver of its rights operate as a waiver of any subsequent breach and no right, power or remedy herein conferred upon or reserved for MCX is exclusive of any other right, power or remedy available to MCX and each such right, power or remedy shall be cumulative.

28. I / We shall treat as confidential all information obtained from MCX pursuant to the arrangement and shall not divulge such information to any person (except to my / our own employees and then only to those employees who need to know the same) without the MCX prior written consent and that I / we shall also ensure that my / our employees are aware of and comply with the provisions of this clause. The foregoing obligations as to confidentiality shall survive any termination of the availability of the CTCL/IBT/ATF/DMA/WT facility.

29. Any declaration or other notice to be given by me / us to MCX shall be sent by registered letter or telex / cable or facsimile transmission to the registered address of MCX.

30. This Undertaking will be binding on my / our successors / legal representatives and permitted assignees.

31. I / We shall execute, sign, and subscribe, to such other documents, papers, agreement, covenants, bonds, and / or undertakings as may be prescribed or required by MCX from time to time.

32. A Member shall not advertise or use any software/ program, which may directly or indirectly facilitate matching orders between or among two or more clients by way of grouping or otherwise. The CTCL/IBT/ATF/DMA/WT facility being used by a member shall have inbuilt feature of pushing in all the orders, entered by any of the approved persons only through CTCL/IBT/ATF/DMA/WT server of the member for which in turn will push such orders to the trading system of the Exchange, for the purpose of execution.

33. A member shall ensure to undertake periodic audit of their CTCL/IBT/ATF/DMA/WT Systems.

34. I /We hereby confirm that we are not directly/indirectly referring to any past or expected future return/performance of an algorithm trading services/strategies in any form of advertisements/business communication on publicly accessible platforms such as social media/websites/digital & print media etc. and are not associated with any platform providing such reference.

PART II - Algorithmic Trading Undertaking

WHEREAS

- MCX has provided the trading software to enable its members to trade.

- MCX provides a Computer – to –Computer Link (hereinafter referred to as the 'CTCL') facility for order entry, receipt of order and trade confirmation and also for receipt of data relating to its trade quotations by using their own trading front end software in order to trade on MCX trading system.

- MCX also decides to permit the users of CTCL, an ALGORITHMIC TRADING facility (hereinafter referred to as the "ATF facility") which mean any software or facility by the use of which, upon the fulfillment of certain specified parameters, without the necessity of manual entry of orders, buy/sell orders are automatically generated and entered by the software/program facility into the MCX trading system to be matched by the Exchange's system and such permission is subject to terms and conditions as may be specified by MCX from time to time.

- MCX allows to avail the ATF facility by fulfilling all the terms and conditions as may be prescribed from time to time at its discretion.

NOW THEREFORE IN CONSIDERATION OF MCX having agreed to allow me / us to avail the ATF facility, I / we hereby IRREVOCABLY AND UNCONDITIONALLY UNDERTAKE and agree to abide by and be bound by the following terms and conditions.

1. I / We shall use the Algorithmic Trading software approved by the Exchange and the data generated from the same exclusively for trading on MCX trading platform.

2. I / We shall use only those Software & strategies which are approved by the Exchange.

3. I / We confirm and certify that the software has undergone tests by us, and we are satisfied with the same. Further, we undertake to comply with and be bound by the Rules, Byelaws, Regulations of the Exchange, SEBI, any other statutory and regulatory body(ies) as may be applicable from time to time.

4. I / We undertake that any modifications / Change to the software to be effected only on prior approval of Exchange.

5. I/We shall not do unauthorized changes to the approved software and only use the software which is approved by the Exchange.

6. I / We are using the approved user IDs allotted by the Exchange under ATF in compliance to the details / documents of the strategy submitted to the Exchange.

7. I / We shall not modify the software/algorithm for ATF facility as approved by MCX without prior approval of MCX.

8. I / We agree that MCX shall be entitled to conduct audit / inspection of the ATF facility, at any time in its absolute discretion. MCX officials or MCX appointed auditors can visit our office without prior intimation for the purpose of audit / inspection.

9. I/We confirm that I/We have proper procedures and arrangements to safeguard algorithms from misuse or unauthorised access. I/We undertake to ensure that access shall be given only to authorised persons.

10. I/We agree and confirm that I/We have proper procedures, systems and technical capability to carry out trading through the use of algorithms.

11. I/We agree and confirm that we have real time monitoring systems to identify dysfunctional algorithms that may not behave as expected and will inform the Exchange immediately in case of

such incidents. Further, I/We confirm that we have a system to control to shut down such algorithms if identified on an immediate basis.

12. I/We shall maintain logs of all trading activities to facilitate audit trail for a minimum of 5 years and I/We agree to provide such logs to the Exchange / appointed auditors during inspection / audits.

13. I/We shall maintain a record of control parameters, orders, trades and data points emanating from trades executed through algorithmic trading for a minimum of 5 years and I/We agree to provide these information / data to the Exchange / appointed auditors during inspection / audits.

14. I/We shall provide details of algorithmic trading strategies to the Exchange wherever required for the purpose of inquiry, surveillance, investigation etc.

15. I/We shall be solely liable and responsible for any monetary losses, damage or other costs and consequences arising in any manner due to algo orders submitted to the Exchange on account of any inadvertent mistake or malfunctioning or failure of our system, including component failure, and shall always keep the Exchange and its official/s indemnified against any loss or damage or compensation etc. Further, I/We shall not hold MCX responsible in any manner whatsoever due to use of ATF Facility.

16. I/We shall adhere to the connectivity diagram approved by MCX and shall control in the same.

17. I/We shall be solely responsible and liable for the consequences in case of any breach of this undertaking and MCX shall be entitled to take such appropriate action as to deem fit against me/us.

18. That MCX, at its absolute discretion, shall make the ATF facility available to me / us only from the date of enabling the ATF facility, till such time as it may deem fit and further that the ATF facility may at any time be withdrawn by MCX at its discretion without giving me / us any notice or any reasons whatsoever.

19. I / We shall adhere to SEBI circular CIR/CDMRD/DEICE/03/2015 dated December 11, 2015 and / or undertakings / circulars as may be prescribed or required by MCX / Regulator from time to time.

20. I / We shall also ensure to undertake System Audit of ATF facility by System Auditors empanelled by the Exchange and submit the report as per the timeline specified by the Exchange.

21. I / We shall also ensure to undertake that Algorithmic Trading Terminals will not be provided to my clients for placing Algorithmic orders directly to the Exchange.

22. I/We shall also ensure to participate in periodic mock trading sessions conducted by the Exchange using all User Ids approved for Algorithmic trading on an ongoing basis, irrespective of the algorithm having undergone change or not.

23. I/ We will not directly or indirectly make any reference to the past or expected future return/performance of the algorithm trading services/strategies in any form of advertisements/business communication on publicly accessible platforms such as social media/websites/digital & print media, SMS, what's app messages and telegram services etc.; and/or

24. I/ We are not directly or indirectly associated with any platform providing any reference to the past or expected future return/performance of the algorithm.

25. I/ We shall not make any reference to the past performance or expected return out of algorithmic trading services/strategies, during any presentations/account opening forms/pamphlets/banners/forums/gatherings organised to onboard new clients/pitching new

segment/product to existing clients including, exhibiting of past performance, or expected return on any of the platforms used by Authorized Persons/Vendor/associated entities of the member.

26. I/ We hereby confirm that, we have adhered to the provisions of SEBI circular no. SEBI/HO/MIRSD/DOP/P/CIR/2022/117 dated September 02, 2022, and Exchange circular MCX/CTCL/521/2022 dated September 08, 2022.

PART III – Wireless Trading Undertaking

WHEREAS,

- The Exchange has also allowed its trading members providing/using IBT facility to offer the facility of Trading using Wireless Technology (hereinafter referred to as the 'Wireless Trading'), to its clients subject to submission of this Undertaking.
- We are desirous of providing the Wireless Trading facility to our clients in compliance with the relevant Circulars of the Exchange.

NOW THEREFORE IN CONSIDERATION OF EXCHANGE having agreed to allow me / us to avail the Wireless Trading facility,

1. I / We undertake and agree to ensure that adequate measures shall be taken for user identification, authentication and access control using means such as user-id, passwords, smart cards, biometric devices or other reliable means, to prevent misuse of facility by unauthorised persons.
2. I / We shall ensure that alternative means of communication for placing orders shall be made to our clients available in case of failure of the wireless network.
3. I / We undertake that access for order routing is permitted only through the user of client specific User Ids.
4. I / We undertake that the risk management system takes into account overall positions of clients irrespective of the medium of undertaking and provides a system-based control facility on the trading limits of the clients and exposures taken by the clients.
5. I / We undertake to offer the facility of Wireless Trading to any client only after obtaining undertaking from the client that they are fully aware and agree for additional provisions specifying possible risks, responsibilities, obligations and liabilities associated with Wireless Trading as mentioned time to time by the Exchange in its circulars.
6. I / We shall ensure that the addresses of the Internet web site/web page where detailed information would be available, along with the minimum information shall be available on handheld device, as it may not be possible to give detailed information to the investor on a handheld device.
7. I / We undertake that order confirmation shall be provided to the user on submission of the order and also on order modification / cancellation in the handheld device. Trade confirmation shall be provided to the user, along with the history of trades for the day.
8. I / We undertake and agree to ensure that Session login details are not stored on the devices used for Wireless Trading.
9. I / We undertake to ensure that Network security protocols and interface standards shall be as per prevalent industry standards and sound audit trails are available for all transactions conducted using wireless devices.
10. I / We shall ensure that server routing orders placed through Wireless Trading System to the exchange trading system shall be located in India.
11. I / We shall ensure to undertake a periodical System audit of the Wireless Trading system and software as specified by the Exchange and to submit certificate/report to the Exchange.

PART IV – Trading Member's Undertaking for Direct Market Access Facility

WHEREAS,

- The Exchange has also allowed its trading members providing/using DMA facility to offer the facility of Direct Market Access, to its clients subject to submission of this Undertaking and fulfilling conditions prescribed from time to time.

- We are desirous of providing the Direct Market Access facility to our clients in compliance with relevant Circulars of the Exchange. . DMA facility is being permitted only to FPI's (Foreign Portfolio Investors) as specified in SEBI/Exchange circular from time to time.

- MCX has provided the trading software to enable its members to trade.

- MCX also decides to permit the users of CTCL, with Direct Market Access facility (hereinafter referred to as the "DMA facility")

- MCX also decided to permit the users of CTCL,with Direct Market Access (hereinafter referred to as the "DMA facility")with an ATF/Without ATF which mean any software or facility by the use of which, upon the fulfillment of certain specified parameters, without the necessity of manual entry or without incase of Non-ATF of orders, buy/sell orders are automatically generated and entered by the software/program facility into the MCX trading system to be matched by the Exchange's system and such permission is subject to terms and conditions as may be specified by MCX from time to time.

- Members are required to use designated User Id for the purpose of DMA facility and the said User Id should not be used for any other purpose.

- MCX allows you to avail the DMA facility by fulfilling all the terms and conditions as may be prescribed from time to time at its discretion.

NOW THEREFORE IN CONSIDERATION OF EXCHANGE having agreed to allow me / us to avail the Direct Market Access facility, I / we hereby IRREVOCABLY AND UNCONDITIONALLY UNDERTAKE and agree to abide by and be bound by the following terms and conditions

1. I / We shall ensure that alternative means of communication for placing orders shall be made to our clients available in case of failure of the network.
2. I / We shall not develop or use any software / program which shall either directly or indirectly facilitate orders to cross trades of their clients with each other. All orders shall be offered to the market for matching.
3. I / We shall adhere to CTCL facility and ATF facility / Algorithmic guidelines issued by the regulator and exchanges from time to time.
4. I / We confirm and certify that the software has undergone tests by us, and we are satisfied with the same. Further, we undertake to comply with and be bound by the Rules, Byelaws, Regulations of the Exchange, SEBI, any other statutory and regulatory body(ies) as may be applicable from time to time.
5. I / We undertake that any modifications / Change to the software to be effected only on prior approval of Exchange.
6. I/We shall not do unauthorized changes to the approved software and only use the software which is approved by the Exchange.
7. I / We undertake that the risk management system takes into account overall positions of clients irrespective of the medium of undertaking and provides a system-based control facility on the trading limits of the clients and exposures taken by the clients.

8. I / We undertake to offer facility of DMA to clients as prescribed by exchange, only after obtaining undertaking from the client that they are fully aware and agree for additional provisions specifying possible risks, responsibilities, obligations and liabilities associated with DMA Trading as mentioned in this undertaking.

9. I / We undertake that order confirmation shall be provided to the user on submission of the order and also on order modification / cancellation in the handheld device. Trade confirmation shall be provided to the user, along with the history of trades for the day.

10. I / We undertake to ensure that Network security protocols and interface standards shall be as per prevalent industry standards and sound audit trails are available for all transactions conducted using devices.

11. I / We undertake to ensure that all DMA orders shall be routed to the exchange trading system through the broker's trading system. The broker's server routing DMA orders to the exchange trading system shall be located in India.

12. I / We shall ensure to undertake a periodical System audit of the DMA Trading system and software as specified by the Exchange and to submit certificate/report to the Exchange.

13. I / We undertake to ensure a sound audit trial for all DMA orders and trades and be able to provide identification of actual user-id for all such orders and trades. The audit trail data shall be available for at least five years.

14. I / We undertake to ensure where the clients access our DMA server through a third-party service provider, the password maintenance and authentication can be done either by us or by third party network service provider and I / we shall also ensures secured access and an also shall maintain audit trail for all DMA orders/ trades.

15. The authorized user and client details shall be part of the order details received and authenticated at the DMA server.

16. Brokers should follow the similar logic/priorities used by the Exchange to treat DMA client orders. Brokers should maintain all activities/ alerts log with audit trail facility. The DMA Server should have internally generated unique numbering for all such client order/trades.

17. I/We hereby confirm that we are not directly/indirectly referring to any past or expected future return/performance of an algorithm trading services/strategies in any form of advertisements/business communication on publicly accessible platforms such as social media/websites/digital & print media etc. and are not associated with any platform providing such reference.

18. I/We agree that I/We will take undertaking from our non-empanelled software vendor on the following points

    1) Software vendors will not implement any software change or modification in the software already installed at Member's end without the change being approved by the Exchange.
    2) Software vendor will not incorporate features / functionalities which are against guidelines of the Exchange / any other regulatory body(ies)

19. I / We undertake to ensure to execute an agreement with such clients who are availing of the DMA facility. The model agreement is specified in SEBI circular. Members shall ensure that the agreement entered into with their clients for DMA facility should not have any clause that is less stringent/contrary to the conditions in the above proposed model agreement.

IN WITNESS WHEREOF this Undertaking is executed by the undersigned on the day, month, year and the place first mentioned above.

SIGNED, SEALED AND DELIVERED BY

_____ for and on behalf of _____

_____

Before me

In Presence of Witnesses

Sr. No.	Name	Address	Signature
1.			
2.			

Annexure 14

Checklist/ Reference Points While Developing CTCL/IBT/AT/WT/DMA Software

Description	Software and requirements				
Application	**CTCL**	**IBT**	**AT**	**WT**	**DMA**
Availability of Secured Socket level security for server access through internet	NA	Yes	NA	Yes	NA
Display of UMC Member Code / SEBI registration Code	Yes	Yes	Optional	Yes	Yes
Display of Useful Link to website – www.mcxindia.com and www.sebi.gov.in/	Yes	Yes	Optional	Yes	Yes
Display details of Software Name, Version Number	Yes	Yes	Yes	Yes	Yes
Display of Strategy Name and Version Number	NA	Yes	Yes	Yes	NA
Type of Strategy	NA	NA	Yes	NA	NA
Display of Exchange Time	Yes	Yes	Yes	Yes	Yes
Display of Login/ Log Off Status	Yes	Yes	Yes	Yes	Yes

Description	Software and requirements				
Application	**CTCL**	**IBT**	**AT**	**WT**	**DMA**
Display of Market Status (eg: Open/Closed)	Yes	Yes	Yes	Yes	Yes
Display of Price Data in Ticker form (minimum Commodity Symbol, Expiry, Price (LTP))	Optional	Yes	Optional	Optional	Optional
Market Data/Watch – should contain minimum information of Segment, Contract Symbol, Expiry, Best Buy Quantity & Price, Best Sell Quantity & Price, Last traded price, Last traded time, Last updated time, Daily price range, Last Trading Day.	Yes	Yes	Optional	Yes	Optional
Contract Information to be provided - Contract Symbol, Expiry, Tick Size, Price Range, Min Lot Price Unit, Quantity Unit, Delivery Unit, Last traded price, Last Trading Day. etc.	Yes	Yes	Optional	Yes	Yes
Facility of one key stroke for Buy or Sell order entry & Contract Information	Yes	Yes	NA	Yes	Yes
Display of Brokerage	Optional	Yes	NA	Yes	Yes
Password Standards					
User should be able to login with valid user id and password	Yes	Yes	Yes	Yes	Yes
Minimum password length should be 8 and maximum 12 characters length	Yes	Yes	Yes	Yes	Yes
The password numeric values should not fully comprise of user id	Yes	Yes	Yes	Yes	Yes

Description	Software and requirements				
Application	**CTCL**	**IBT**	**AT**	**WT**	**DMA**
Password should expire after a minimum predefined period (eg: 15/ 30/ 45 days)	Yes	Yes	Yes	Yes	Yes
In case of multiple invalid password entries, the user id should be locked	Yes	Yes	Yes	Yes	Yes
Password should be alphanumeric and comprise one special character	Yes	Yes	Yes	Yes	Yes
Appropriate message should be displayed while user login fails	Yes	Yes	Yes	Yes	Yes
Two-factor authentication for login	Optional	Yes	Optional	Yes	Yes
Password help file can be provided	Optional	Optional	Optional	Optional	Optional
Broadcast					
Display of Exchange Messages/ Announcements & Response Messages for Failures.	Yes	Yes	Yes	Yes	Yes
Different Window for Internal Messages (Broker Messages)	Optional	Optional	Optional	Optional	Optional
Time sync with Exchange in Messages, LTT, LUT etc.	Yes	Yes	Yes	Yes	Yes
Order Entry					
Order Entry at **Market/Limit price** with RL/SL type in both Normal & Spread contracts	Yes	Yes	Market Not Allowed	Yes	Yes (Market Not Allowed for ATF)
Order validity types provided i.e. GTC/GTD/Day/IOC/EOS	Yes	Yes	IOC Not Allowed	Yes	Yes (IOC Not Allowed ATF)
User Types provide Pro & Client	Yes	Yes	Yes	Yes	Yes
Order Entry should follow SMPF Rule	Yes	Yes	Yes	Yes	Yes

Description	Software and requirements				
Application	**CTCL**	**IBT**	**AT**	**WT**	**DMA**
In case of buying SL order, the trigger price should be less than limit price & vice versa for sell order	Yes	Yes	Yes	Yes	Yes
Order Modification from Order type RL to SL - Not Allowed	Yes	Yes	Yes	Yes	Yes
Order Modification from Order type SL to RL Allowed	Yes	Yes	Yes	Yes	Yes
If the orders are cancelled by Exchange or by Member Admin or by client, details of such information should be displayed in Order Book and/or captured in logs.	Yes	Yes	Yes	Yes	Yes
Order Cancellation message should Contain Minimum-Order number, Order Type, Market type, Commodity name. Date & time, User id, Price Quantity & cancelled By.	Yes	Yes	Yes	Yes	Yes
Order Modification message should Contain Minimum-Order number, Order Type, Market type, Commodity name. Date & time, User id, Price Quantity & Modified By.	Yes	Yes	Yes	Yes	Yes
Order Rejection message should Contain Minimum-Order number, Order Type, Market type, Commodity name. Date & time, User id, Price Quantity & Rejection Message.	Yes	Yes	Yes	Yes	Yes
Tracing and mitigating the possibility of excessive and	Yes	Yes	Yes	Yes	Yes

Description	Software and requirements				
Application	**CTCL**	**IBT**	**AT**	**WT**	**DMA**
unnecessary order modification & Cancellation in the nature of order per second as per regulatory compliance.					
Trade Confirmation message should Contain Minimum-Trade number, Trade Type, Market type, Commodity name. Date & time, User id, Price Quantity.	Yes	Yes	Optional	Yes	Yes
Order Entry with Disclosed Quantity below 25% not allowed	Yes	Yes	Yes	Yes	Yes
Market Price Protection check (Algo: Market orders are not allowed)	Yes	Yes	NA	Yes	NA (Yes for DMACTCL)
Order Entry during Halt session is not allowed	Yes	Yes	Yes	Yes	Yes
RMS					
With every CTCL order, 15-digit terminal info should be provided (as per API)	Yes	Yes	Yes	Yes	Yes
With every Algo order approved Strategy ID should be sent	NA	NA	Yes	NA	NA
DPR Updating in software during the market hours	Yes	Yes	Yes	Yes	Yes
Intraday Special/Additional Margin changes @ Exchange should get updated on respective CTCL terminals	Yes	Yes	Optional	Yes	Yes
Alerts for Maximum Sale Traded Value /Maximum Sale Traded Quantity	Yes	Yes	Yes	Yes	Yes

Description	Software and requirements				
Application	**CTCL**	**IBT**	**AT**	**WT**	**DMA**
Limit breach for CTCL Terminal should be handled at CTCL Manager level	Yes	Yes	Yes	Yes	Yes
On Square-Off/Suspended mode/Segment disallow, also all pending orders should be rejected & order entry is not allowed	Yes	Yes	Yes	Yes	Yes
Trade Modification from OWN to CLI or vice versa for CTCL ID not allowed	Yes	Yes	Yes	Yes	Yes
Order Alerts while breaching the limits	Yes	Yes	Yes	Yes	Yes
The algorithmic system should have pre-defined parameters for an automatic stoppage in the event of algorithmic execution leading to a loop or runaway situation	Optional	Optional	Yes	Optional	Optional
Checks are in place to ensure the maximum order per second does not exceed that as prescribed by MCX from time to time.	Optional	Optional	Yes	Optional	Yes
Checks are in place to ensure that OTR does not exceed the ratio prescribed by SEBI (i.e. for excessive modification and cancellation or orders)	Optional	Optional	Yes	Optional	Optional (Yes Incase of ATF)
Algorithmic trading software accounts for all executed, unexecuted and unconfirmed orders, placed by it before releasing further order(s).	Optional	Optional	Yes	Optional	Optional (Yes In case of ATF)

Description	Software and requirements				
Application	**CTCL**	**IBT**	**AT**	**WT**	**DMA**
Complete Audit Trail like order book, order history, trade book etc.	Yes	Yes	Yes	Optional	Yes
Reports					
Trade Book, Order Book	Yes	Yes	Yes	Optional	Yes
Net Position should be accurate	Yes	Yes	Yes	Yes	Yes
System Logs/Reports					
All message logs maintained (order logs, trade logs, Client code modification log etc.)	Yes	Yes	Yes	Yes	Yes
Connection Logs to be maintained at CTCL Server	Yes	Yes	Yes	Yes	Yes
Backup Facility & Database Security	Yes	Yes	Yes	Yes	Yes
Activity/ System Log	Yes	Yes	Yes	Yes	Yes
Access Controls/remedies for misuse of log in id/ password	Yes	Yes	Yes	Yes	Yes
Alternate mode of connection in case of Link Failure	Optional	Yes	Optional	Yes	Optional
System Rollback functionality	Yes	Yes	Yes	Yes	Yes
Session Management- Logout after a system defined period of inactivity	Yes	Yes	Yes	Yes	Yes

Signed sealed and delivered by the Authorised Signatory of the Member
Date:
Place:

Annexure 16
(To be executed on letterhead of the Vendor)

I / We ----------, having our registered office at ----------and represented by ----------and hereinafter referred to as VENDOR have sold to M/s. ----------, having their registered office at ----------who are members of Multi Commodity Exchange of India Limited, and hereinafter referred to as MEMBER, a software for internet based trading services.

NOTWITHSTANDING the generality of the above, the software provided by us complies with the following provisions, in particular as directed by MCX.

Access for order routing is permitted only through the use of client specific User ids the access is permitted only through the use of client specified password (private code)

The system provides for automatic expiry of passwords at the end of a reasonable duration and re-initialising of access on entering fresh passwords. All transaction logs are maintained with proper audit facilities (a write-up in this regard shall be enclosed) Secured socket level security for server access through the Internet is available.

Suitable firewalls between trading set-up and Internet trading set up are available. The optional advanced security products used for e-commerce, including SMART cards, dynamic password and 128-bit encryption, and second level passwords are available. If so, details of the same, between the trading web server and trading client terminals, interfaces standards as per recommendations of IETF and W3C (e.g. HTTP ver. 4 or above, HTM ver 4/XML) are adopted.

Logic/priorities similar to those used by the MCX is used to treat client orders. Provision for maintenance of all activities / alerts log with audit trail available the member's web server internally generates unique numbering for all client orders/ trades. Adequate provisions for maintaining backup systems and data storage capacity are available. An alternative means of communication is arranged for in case of Internet link failure (A write-up shall be provided in this regard)

The web site providing the Internet based trading facility contains information meant for investor protection such as rules and Business Rules affecting client broker relationship, arbitration rules, investor protection rules, etc. The web site also provides and displays prominently hyper link to the web site/page on the web site of the MCX displaying rules/Business Rules/circulars. The web site displays the ticker/quote/order book of the MCX along with the time stamp.

The software provides for sending of the order/trade confirmation through email at clients' discretion at the time period specified by the client in addition to the other mode of display of such confirmations on real time basis on the web site. The web site allows for specifying the time interval on the web site itself by the client.

The software provides for reconfirmation of orders, which are larger than that as specified by the member's risk management system. In this regard the system is capable of assessing the risk of the client as soon as the order comes in and shall inform the client of acceptance/rejection of the order within a reasonable period.

The software provides a system-based control facility for the trading limits of the clients and exposures taken by the clients. All orders entered into the internet-based trading system are offered to the market for matching and no cross trades are generated. The software has the facility of providing reports on margin requirements, payment and delivery obligations etc. to the clients through the system.

Signed sealed and delivered by the Authorised representative of the VENDOR

Date
Place:

We, ----------having our registered office at ----------and represented by ---------- are members of the Exchange. We confirm and certify that the software provided by the vendor for internet-based trading has undergone tests by us and we are satisfied that it complies with the stipulations of the Exchange. We also undertake to get the software modified, if necessary to continue compliance with the requirements of the Exchange, DoT policy and regulations with regard to levels of encryption, etc. and Exchange / any other regulatory body(ies) directives and other statutory requirements etc. as may be issued in this regard from time to time.

Countersigned, sealed and delivered by the Authorised representative of the MEMBER

Date:
Place:

Annexure 17
Contingency Plan

(On Letterhead of the Member)

The Company is providing Internet Trading through an Order Routing System to its Registered Clients and in case of any failure of the system the Registered Client would be given an option to execute his trade through the dealers at the various existing branches / locations.

As a measure of contingency, it has been worked out that in case the investor is not able to establish the link to their site or in case the link is missed the investor can contact the following persons at the respective places as mentioned below: -

LOCATION	CONTACT PERSON	ADDRESS	TEL. NO.	FAX NO.

In the process of giving further links the authorised person _____ will make certain questions to the clients & if satisfied about the authenticity of the client he will again allot new Password to him.

If you have any contingency plan for server, kindly mention.

(Authorised signatory)
Name & Designation
Company Stamp
(valid digital signatures are acceptable)

Date:
Place:

Annexure 18

Letter from Exchange empanelled CTCL vendor
(On letterhead of the vendor)

To,
CTCL Department
Multi Commodity Exchange of India Limited
255, Exchange Square,
Suren Road, Chakala,
Andheri (East),
Mumbai – 400 093

Sub : Application Program Interface (API) to _____ (Member Name)

I/We_____ (Name of the Exchange empanelled CTCL vendor) hereby confirm that, we have provided API version _____ to the Member _____ for In-house development of IBT / WT software for their own use.

I/We undertake the responsibility that whenever there is any change in the API or a new version of the API is released, we will inform the same to the aforesaid member in advance and will ensure that the member is informed about the date of implementation of the software.

Sr. No	Particulars	Details
1	Registered Office address	
2	Telephone no	
3	E-mail ID	

I / We declare that the information so furnished is true and correct

For
(Name of the empanelled vendor)

Authorised signatory
(Name and designation)
Date:
Place:

Annexure 20
(To be submitted by member)

Undertaking for In-house software development by Member for CTCL/IBT/WT/ATF/DMA

To be executed on Rs. 1000/- stamp paper / applicable stamp duty of the state (whichever is higher), duly Notarized on all pages, signed, stamped & sealed by Authorized Signatory on all pages

I / We, _____, an individual /a firm registered under the Partnership Act, 1932 / a Company / body corporate incorporated under the Companies Act of 1956 /_____ Act, 19__, and residing at / having our office/ registered office at _____ (hereinafter referred to as the 'Undersigned' which expression shall unless repugnant to the context include her/his / its successors, assigns and legal representatives) give this Undertaking on this _____ day of _____20_____ at _____ IN FAVOUR of MULTI COMMODITY EXCHANGE OF INDIA LTD, a company incorporated under the Companies Act, 1956 and a Commodity Exchange duly recognized by the Central Government having its registered office at Exchange Square Suren Road, Chakala, Andheri (East), Mumbai – 400 093, India (hereinafter referred to as "MCX", which expression shall unless repugnant to the context include its successors, assigns and legal representatives)

WHEREAS,

- MCX has provided the trading software to enable its members to trade.

- In addition, MCX provides a Computer – to –Computer Link (hereinafter referred to as the 'CTCL facility') Internet Based Trading (hereinafter referred to as the 'IBT') facility, Algorithmic Trading (hereinafter referred to as the 'ATF') facility, Wireless Trading (hereinafter referred to as the 'WT') facility and Direct Market Access (hereinafter referred to as the 'DMA) on CTCL/IBT/ATF/WT/DMA (CTCL Facility) software developed in-house by the member / procured from non-empanelled vendor, for order entry, receipt of order and trade confirmation and also for receipt of data relating to its trade quotations.

- MCX has decided that it shall make the CTCL/IBT/ATF/WT/DMA facility available to its Members on case to case basis, subject to such terms and conditions as MCX may impose and one of the conditions is that they execute an undertaking in its favor in the format prescribed by it and agree to provide the said facility only to such persons (hereinafter referred to as the "Approved Persons") as MCX may permit and also agree to abide by and be bound by the various terms and conditions which it may prescribe in this regard from time to time.

- I / We have admitted to the Membership of MCX and am/are desirous of availing the CTCL/IBT/ATF/WT/DMA facility by fulfilling all the terms and conditions as may be prescribed by MCX from time to time at its discretion in this regard.

NOW THEREFORE IN CONSIDERATION OF MCX having agreed to allow me / us to avail the CTCL/IBT/ATF/WT/DMA facility, I / we hereby IRREVOCABLY AND UNCONDITIONALLY UNDERTAKE and agree to abide by and be bound by the following terms and conditions.

1. That I / We shall make the CTCL/IBT/ATF/WT/DMA facility available to the Approved Persons only after obtaining the prior written consent of MCX and subject to such terms and conditions as may be prescribed by MCX from time to time.

2. That in addition to such terms and conditions as may be prescribed under clause (1) by MCX, all the provisions of the Byelaws, Rules, Regulations and Circulars relating to use and operation of the Trading System shall also mutatis mutandis become applicable to the use and operation of the CTCL/IBT/ATF/WT/DMA facility.

3. That notwithstanding anything contained in this Undertaking all my / our liabilities and obligations as a Member of MCX shall not be affected nor shall be prejudiced in any manner whatsoever.

4. That without prejudice to the generality of the clause (3) of this Undertaking, I / we shall be responsible to settle all the trades executed by the Approved Persons on my / our behalf whether such trades were executed with or without my permission / knowledge and that I shall be bound to

complete / fulfill all my / our obligations / liabilities / commitments arising due to the trades executed by the Approved Persons on my / our behalf, including the trades executed by using CTCL/IBT/ATF/WT/DMA facility.

5. That I/We shall abide by, comply with and be bound by the Rules, Bye-laws, Regulations and terms and conditions as applicable for CTCL and/or Internet Based Trading and/or Wireless Trading /or Algorithmic Trading facility and/or Direct Market Access of MCX as in existence or as may be modified / amended by the relevant authority from time to time and any circular, order, direction, notice, instructions issued and / or as maybe modified or amended from time to time by the relevant authority.

6. That MCX, at its discretion, may make the CTCL/IBT/ATF/WT/DMA facility available to me / us at MCX address first mentioned above or at any other address as MCX from time to time may notify to me / us or approve as being the location.

7. That MCX shall be entitled to amend its Rules, Bye Laws, Regulations and terms and conditions for CTCL and/or Internet Based Trading and/or Wireless Trading /or Algorithmic Trading facility and/or Direct Market Access facility unilaterally and I/We shall be deemed to have consented to them, and accordingly be bound by the Rules, Bye-laws, Regulations and terms and conditions for CTCL/IBT/ATF/WT/DMA facility prevailing from time to time and MCX shall be entitled to all powers vested in them under the Rules, Bye-laws and Regulations, by which I/We unconditionally agree to be bound.

8. That I/We shall execute, sign, subscribe, to such documents, papers, agreements, covenants, bonds and / or undertakings whether legal or otherwise as maybe required by MCX from time to time.

9. That without prejudice to the rights, remedies whether legal or otherwise available to MCX upon my / our non-compliance with this Undertaking, I/We shall indemnify and keep indemnified MCX and its directors, managers, officers, employees and authorised representatives against any loss / damage suffered by it whether legal or otherwise arising due to non-compliance by me/us with the provisions of this Undertaking.

10. That I / We shall use the physical communication link (s) provided to me / us, for the purpose of having simultaneous access to the CTCL/IBT/ATF/WT/DMA facility and TRADING SYSTEM Software.

11. That MCX, at its absolute discretion, may make the CTCL/IBT/ATF/WT/DMA facility available to me / us only from the date of my / our enablement on the CTCL/IBT/ATF/WT/DMA facility till such time as it may deem fit and further that the CTCL/IBT/ATF/WT/DMA facility may at any time be withdrawn by MCX at its discretion without giving me / us any notice or any reasons whatsoever.

12. That the CTCL/IBT/ATF/WT/DMA facility if made available to me / us by MCX will be made available to me / us by MCX on a non-exclusive basis only and that the same may be made available by MCX, at its discretion, to any other Member whomsoever on such terms and conditions as it may deem fit.

13. That I / We may be entitled by giving one month's written notice to request MCX to withdraw the CTCL/IBT/ATF/WT/DMA facility extended to me / we and such withdrawal shall be subject to such terms and conditions as may be prescribed by MCX including payment of such compensation to MCX as may be decided by MCX at its discretion.

14. That I / We shall be responsible and take all such steps, actions and proceedings to ensure and keep ensured that no Approved Persons in any way further makes the CTCL/IBT/ATF/WT/DMA facility available to any other person nor shall extend the CTCL/IBT/ATF/WT/DMA facility outside his/new premises and that in case I / We fail to ensure the same, MCX shall be empowered to take such

action as it may deem fit, which action may include disabling me / us from having access to CTCL/IBT/ATF/WT/DMA facility, and taking of such disciplinary actions as it may deem fit.

15. I / we undertake that
    a) I / We shall at my / our own expenses provide all lines, cabling, software, hardware, equipment and other communication facilities required for transmission of the data between the Receiving Premises and my / our server at my / our office and also obtain the necessary approvals from relevant authorities.
    b) I / We shall ensure that the connectivity of the CTCL/IBT/ATF/WT/DMA facility is as per the MCX and Department of Telecommunications (DoT) and/or Mahanagar Telephone Nigam Limited (MTNL) and/or any other appropriate governmental / statutory authority approved network diagram and that I/we shall produce the necessary approvals to MCX in order to meet all of its requirements for enabling me/us for having access to the CTCL/IBT/ATF/WT/DMA facility.
    c) I/We shall be solely responsible for the network infrastructure and connectivity for availing CTCL/IBT/ATF/WT/DMA facility made available to me
    d) I / We undertake to ensure that access shall be given only to Approved persons and also a method shall be established to ensure that non-Approved persons cannot access the system.
    e) I/We also confirm that I/We have not obtained nor applied for any other User ID in the names of the Approved Person/User/s and that the User ID allotted shall be utilized by the Approved Person/user/s only to access the MCX trading system.
    f) I/We undertake to pay any such license fees/charges/royalties as may be levied by DoT/MTNL/MCX/any other regulatory/statutory authorities from time to time. MCX fees, if any for using the CTCL/IBT/ ATF/ WT/DMA facility shall be paid in advance.
    g) I / we shall ensure that data communication lines between the MCX equipment and my / our equipment will be connected to my / our own and further telecommunication network will be as per the MCX and DoT and/or MTNL and/or any other appropriate governmental / statutory authority approved network diagram.
    h) I / We shall indemnify the Exchange against any loss or damage including liabilities arising out of failure to comply with this circular.
    i) I / We shall provide MCX with the Network diagram and as adopted by me / us for having access to the CTCL/IBT/ATF/WT/DMA facility between the Receiving Premises and my / our server at my / our office and that we shall also provide MCX with the network diagram.
    j) I / We shall notify MCX giving the details related to the Approved Persons as per circular format issued by the exchange from time to time, for prior approval of MCX and shall acquire the prior written permission from MCX for every additional Approved Person taken subsequently before letting him / her have access to the CTCL/IBT/ATF/WT/DMA facility. Further in case an Approved Person is disabled from acting in his / her capacity as such for any reason whatsoever, then I / we shall acquire prior written permission from MCX before appointing any other individual to act as an Approved Person in his / her place.
    k) I / We shall make the necessary changes in the software used by me / us for accessing the CTCL/IBT/ATF/WT/DMA facility as per the changes either technical or structural are made by MCX in the CTCL/IBT/ATF/WT/DMA facility.
    l) I / We shall provide MCX with the Technical Specifications for the software used by me / us for accessing the CTCL/IBT/ATF/WT/DMA facility and shall also provide it with the new Technical Specifications for the software as and whenever any changes are proposed to be made by me / us to the existing software used to access the CTCL/IBT/ATF/WT/DMA facility. I /We shall make such changes only after receipt of prior written consent from MCX.

m) I / We shall not develop / use any software for accessing the CTCL/IBT/ATF/WT/DMA facility, which software in the opinion of MCX shall resemble or result in duplication of TRADING SYSTEM software in any manner and further that no representation shall be made by me / us that the software developed by me / us for accessing the CTCL/IBT/ATF/WT/DMA facility is part of-the TRADING SYSTEM software.

n) I / We shall not assign or otherwise transfer the rights and obligations arising out of the use of the CTCL/IBT/ATF/WT/DMA facility and this undertaking whether in whole or in part without the prior written consent of MCX.

o) I / We agree not to use, without the express permission of MCX, the name of MCX to directly or indirectly promote my/ our business.

p) I / We shall not, either by myself / ourselves or through any person acting on my / our behalf, issue / release / publish any advertisement, brochure, pamphlet, booklet, notice or any other promotional material on any aspect relating to the CTCL/IBT/ATF/WT/DMA facility in any form, whether in writing or otherwise, in accordance to the Code of Advertisement as prescribed by the MCX except with the prior written approval of MCX.

q) I / We agree to obtain prior approval of MCX for change of its activities/operations from existing approved CTCL/IBT/ATF/WT/DMA vendor to another.

r) I/We shall not do unauthorized changes to the approved software and only use the software which is approved by the Exchange.

16. I/We agree that MCX does not warrant that the provision of the CTCL/IBT/ATF/WT/DMA facility will be error free or uninterrupted.
17. I / We undertake and agree that

a) I/We shall maintain logs of all trading activities to facilitate audit trail for a minimum of 5 years and I/We agree to provide such logs to the Exchange / appointed auditors during inspection / audits.

b) I / We shall not under any circumstances match the respective orders entered in by my / our Approved Persons from their terminals by myself / ourselves by using any means whatsoever and that I / we shall route all the orders entered in by my / our Approved Persons to the Trading System of MCX so that they could be matched by the Central Computer of MCX only.

c) I/We undertake that the CTCL/IBT/WT facility shall be developed so as to generate the following from the System for the purpose of verification during the inspection:

    a) Number of Users connected on to the Network.
    b) Number of Dealers connected on to the Network including privileges to each dealer.
    c) All the systems logs and audit trails of the Dealer and the Member.
    d) Provision for entering complementary dummy orders

d) I/We shall ensure that the following guidelines on CTCL/IBT/ATF/WT/DMA and services would be adhered to:

    i. The system used by me / us has provision for security, reliability and confidentiality of data through the use of encryption technology.

    ii. I / We shall maintain adequate backup systems and data storage capacity and also arrange for alternative means of communications in case of Internet Link failure or any other software failure relating to the Trading System.

    iii. I/We undertake that the following controls shall be inbuilt in the Software to detect any loss of product integrity:

    - Data validation routines to detect input errors.
    - Backup and recovery procedures.

iv. Order/Trade confirmation shall be sent to the investor through email at client's discretion at the time period specified by the client in addition to the other mode of display of such confirmations on real time basis on my/our web site. The investor shall be allowed to specify the time interval on the web site itself within which he/she would like to receive this information through email. Facility for reconfirmation of orders which are larger than that specified by the member's risk management system shall be provided on the internet-based system.

v. I / We shall ensure to have system-based control on the trading limits of clients and exposures taken by clients and also set pre-defined limits on the exposure and turnover of each client. The system will also be capable of assessing the client's risk as soon as the order comes in. The client also needs to be informed of acceptance/rejection of the order within a reasonable period. Reports on margin requirements, payment and delivery obligations etc. to be informed to the clients through the system.

vi. I/We shall ensure that the following security measures shall be in-built in the system:

- User Id
- First Level Password (Private Code)
- Automatic expiry of passwords at the end of reasonable duration. Reinitialize access on entering fresh passwords.

vii. All transaction logs with proper audit facilities to be maintained in the system.

viii. Secured Socket Layer Security for server access through the Internet.

ix. Suitable Firewalls between trading set-ups directly connected to an Exchange trading system and the Internet trading set up.

x. Shall integrate any advanced level security as specified by MCX from time to time.

xi. The following systems operations procedures will be adhered to:

- Shall follow similar logic/priorities used by the Exchange to treat client orders
- Shall maintain all activities / alerts log with audit trail facility
- The Webserver shall have internally generated unique numbering for all client orders/trades

e) I / We shall ensure that on-line surveillance and risk management features like trade-by-trade Position Monitoring etc., shall be inbuilt in the CTCL/IBT/ATF/WT/DMA facility and it shall be flexible to change as per MCX guidelines.

f) I / We shall not develop or use any software / program facility which shall either directly or indirectly facilitate program trading without prior written approval of the Exchange. For the purpose of this clause the term 'Algorithmic Trading' shall mean any software or program facility by the use of which, upon the fulfillment of certain specified parameters, without the necessity of manual entry of orders, buy/sell orders are automatically generated and entered by the software / program facility into the Trading System of MCX to be matched by the central computer.

g) I / We shall not develop or use any software / program which shall either directly or indirectly facilitate orders to cross trades of their clients with each other. All orders shall be offered to the market for matching.

h) MCX shall be possessed with the absolute right to inspect the internal software used / being utilised me / us at any time at its discretion without prior notice. The source code of the Software shall be available on the Member's site.

a) The Member undertakes to make available the prototype and the technical specifications of the software to MCX for testing purposes.

b) The Members undertakes the responsibility to fix the bugs in the software, if any, found at the time of testing.

i) I / We shall render all possible assistance and cooperation to MCX by providing access to any kind of information in any form as it may require and shall produce such documents, records, accounts, books, data howsoever stored including data stored in magnetic tapes, floppy diskettes, etc. and any other information as may be required by MCX at its discretion.

18. That after the completion of the necessary test and after completely satisfying myself / ourselves that the CTCL/IBT/ATF/WT/DMA facility is fault free, I / we shall submit an Acceptance Certificate in the format as specified in circular by MCX in partial fulfillment of one of the conditions of MCX for my / our enablement for having access to the CTCL/IBT/ATF/WT/DMA facility.

19. I / We undertake that

a) will take all necessary steps to ensure that every new software and any change thereupon to the trading and/or risk management functionalities of the software will be tested as per the framework prescribed by SEBI / Exchange before deployment of such new / modified software in Commodity/Securities market.

b) We shall put in place adequate mechanism to restore trading systems to 'production state' at the end of testing session so as to ensure integrity trading system

c) will ensure that approval of the Exchange is sought for all new/modified software and will comply with various requirements specified by SEBI or the Exchange from time to time with regard to usage, testing and audit of the software.

d) the absolute liability arising from failure to comply with the above provisions shall lie entirely with me/us.

e) I / We shall maintain all systems logs and make the same available for inspection by MCX at any time at its discretion.

20. That Member should arrange to provide a demonstration of the CTCL facility software (e.g. ATF/Algo facility) as per the Exchange's convenience. After successful demonstration of the software, MCX would grant permission to Member for the usage of CTCL facility.

21. That I/We cannot claim for any direct or indirect damage, costs, and expenses whatsoever arising from the following: -

Notwithstanding anything contained in this undertaking or elsewhere MCX shall not be liable:

a) for any claim, damage, losses, costs, claims, expenses and responsible for any liability arising out of this Undertaking or otherwise or because of supply of API.

b) Arising from mechanical or electrical or telephone or network breakdown or power failure or malfunction of any computer and, / or / our server and / or any other auxiliary equipment or any other cause beyond the reasonable control of MCX.

c) Based upon special indirect economic or consequential loss or damage including, but not limited to loss of profit, business revenue, opportunity costs, and goodwill or anticipated savings.

d) Caused or contributed to by any event of Force Majeure. For purposes of this Clause, "Force Majeure" means and includes governmental acts, regulatory changes, acts of God or forces of nature, landslides, earthquakes, floods, fire, lightening, explosions, major storm (hurricanes, typhoons, cyclones, tsunami etc.) or major storm warnings, tidal waves, shipwrecks, communication cable cutting/theft, major telephone exchange failure and perils of navigations, acts of war (declared or undeclared), insurrection, terrorism riots or public enemies, unavailability of public services, strikes, lockouts, acts or omission of sovereign states or those purporting to represent sovereign states, blockades, embargoes, epidemics, quarantines, public disorders, sabotages, accidents, and such other acts or events beyond MCX control, and further the above is without prejudice to the rights already accrued to MCX due to my / our failure to perform either in full or in part, my / our obligations prior to the occurrence of events of Force Majeure.

e) Or any other nature or type.

22. That MCX shall not be liable for any development, maintenance, updates and, upgrades, error-fixes and any other support of my / our software for accessing the CTCL/IBT/ATF/WT/DMA facility and shall not be liable for any loss suffered by me / us due to the use of the software for accessing the CTCL/IBT/ATF/WT/DMA facility.

23. That neither MCX nor the directors, managers, officers, employees or agents of MCX, guarantee the functioning of the CTCL/IBT/ATF/WT/DMA facility. MCX and the directors, managers, officers, employees and agents of MCX shall not be liable in any way to me / us or to any of my / our Approved Persons or to any other person, for any non-performance or interruption of CTCL/IBT/ATF/WT/DMA facility or for any damages, consequential or otherwise, arising there from or occasioned thereby. No proceedings would be adopted by me / us or any third party either against MCX nor against any individual officer or employee of MCX for any act done by such officer or employee of MCX in their official capacity.

24. I / We shall indemnify and keep indemnified MCX harmless against every and all claims, demand, damages, liabilities, losses and expenses suffered by it directly by reason of the provision of the CTCL/IBT/ATF/WT/DMA facility to me / us or by reason of my / our noncompliance, contravention with the any of the provisions of this Undertaking.

25. That this Undertaking is applicable not only in respect of the information services and terminal equipment currently offered by me / us to Approved Persons but also in respect of any information services and terminal equipment developed by or for me / us in the future, even if I / we should at any time alter my / our mode of supplying information to Approved Persons provided MCX approves in writing of such alteration with all details.

26. That without prejudice to any other right under any law for the time being in force or which may become applicable, MCX shall be vested with the exclusive right, upon my / our non-compliance with any of the terms and conditions of this Undertaking or upon the termination, suspension of my / our Membership or upon my / our ceasing to be a Member of MCX, to take, at its discretion, such actions, steps, proceedings, measures, decisions within such period of time and upon such terms and conditions as it may deem fit and that any such actions, steps, proceedings, measures, decisions may, inter alia, include denial of access to the CTCL/IBT/ATF/WT/DMA facility and / or take such disciplinary actions as it deems fit. I / we further undertake that I / we shall abide by and be bound by any actions, steps, proceedings, measures, decisions as may be taken by MCX.

27. That no forbearance, delay or indulgence by MCX in enforcing the provisions of this Undertaking shall prejudice or restrict the rights of MCX nor shall any waiver of its rights operate as a waiver of any subsequent breach and no right, power or remedy herein conferred upon or reserved for MCX

is exclusive of any other right, power or remedy available to MCX and each such right, power or remedy shall be cumulative.

28. I / We shall treat as confidential all information obtained from MCX pursuant to the arrangement and shall not divulge such information to any person (except to my / our own employees and then only to those employees who need to know the same) without the MCX prior written consent and that I / we shall also ensure that my / our employees are aware of and comply with the provisions of this clause. The foregoing obligations as to confidentiality shall survive any termination of the availability of the CTCL/IBT/ATF/WT/DMA facility.

29. Any declaration or other notice to be given by me / us to MCX shall be sent by registered letter or telex / cable or facsimile transmission to the registered office address of MCX.

30. This Undertaking will be binding on my / our successors, legal representatives and permitted assignees.

31. I / We shall execute, sign, and subscribe, to such other documents, papers, agreement, covenants, bonds, and / or undertakings as may be prescribed or required by MCX from time to time.

32. A Member shall not advertise or use any software/ program, which may directly or indirectly facilitate matching orders between or among two or more clients by way of grouping or otherwise. The CTCL/IBT/ATF/WT/DMA facility being used by a member shall have inbuilt feature of pushing in all the orders, entered by any of the approved persons only through CTCL/IBT/ATF/WT/DMA server of the member for which in turn will push such orders to the trading system of the Exchange, the purpose of execution.

33. A member shall ensure to undertake periodic audit of their CTCL/IBT/ATF/WT/DMA systems.

34. The Member undertakes to make any modification / amendment as required by MCX to be made from time to time by the Member during the continuation of the Agreement, if any.

35. I/We hereby confirm that we are not directly/indirectly referring to any past or expected future return/performance of an algorithm trading services/strategies in any form of advertisements/business communication on publicly accessible platforms such as social media/websites/digital & print media etc. and are not associated with any platform providing such reference.

Trading member's undertaking applicable for members using CTCL/ IBT / WT procuring API from Exchange Empanelled vendor

WHEREAS,

1. MCX allows their trading members to develop a Computer – to – Computer Link (hereinafter referred to as the 'CTCL facility'), Internet Based Trading (herein after referred to as the 'IBT') and Wireless Trading (herein after referred to as the "WT") software in-house for their internal use after procuring API from Exchange empanelled vendor and after duly complying with the requirements as may be stipulated by the exchange in this regard.

2. The Member undertakes to receive the latest API version from the vendor, on any change in the API version, and incorporate necessary changes in the software as per the requirement of the Exchange. The Member is required to give a comprehensive demonstration of the CTCL/IBT/WT software on any modification/change in the CTCL/IBT/WT software.

Trading member's undertaking for use of Algorithmic Trading Facility (ATF)

WHEREAS

A. MCX also decides to permit the users of CTCL, an ALGORITHMIC TRADING facility (hereinafter referred to as the "ATF facility") which mean any software or facility by the use of which, upon the fulfilment of certain specified parameters, without the necessity of manual entry of orders, buy/sell orders are automatically generated and entered by the software/program facility into the MCX trading system to be matched by the Exchange's system and such permission is subject to terms and conditions as may be specified by MCX from time to time.

B. MCX allows to avail the ATF facility by fulfilling all the terms and conditions as may be prescribed from time to time at its discretion.

NOW THEREFORE IN CONSIDERATION OF MCX having agreed to allow me / us to avail the ATF facility, I / we hereby IRREVOCABLY AND UNCONDITIONALLY UNDERTAKE and agree to abide by and be bound by the following terms and conditions.

1. I / We shall use the Algorithmic Trading software approved by the Exchange and the data generated from the same exclusively for trading on MCX trading platform.

2. I / We shall use only those software / strategies which are approved by the Exchange.

3. I / We confirm and certify that the software has undergone tests by us and we are satisfied about the same. Further, we undertake to comply with and be bound by the Rules, Byelaws, Regulations of the Exchange, SEBI, any other statutory and regulatory body(ies) as may be applicable from time to time.

4. I / We undertake that any modifications / Change to the software to be effected only on prior approval of Exchange.

5. I/We shall not do unauthorized changes to the approved software and only use the software which is approved by the Exchange.

6. I / We are using the approved user IDs allotted by the Exchange under ATF in compliance to the details / documents of the strategy submitted to the Exchange.

7. I/We shall not modify the software/algorithm for ATF facility as approved by MCX without prior approval of MCX.

8. I/We shall obtain prior approval of the Exchange on any modification or change to the approved strategy or software used for ATF facility. I/We shall ensure conformance of such modified strategy or algorithmic trading system to the requirements specified by the Exchange / any other regulatory body (ies) from time to time.

9. I/We agree that I/We will take undertaking from our non-empanelled software vendor on the following points
    a. Software vendors will not implement any software change or modification in the software already installed at Member's End without the change being approved by the Exchange.
    b. Software vendor will not incorporate features / functionalities which are against guidelines of the Exchange / any other regulatory body(ies)

10. I/We agree that MCX shall be entitled to conduct audit / inspection of the ATF facility, at any time in its absolute discretion. MCX officials or MCX appointed auditors can visit our office without prior intimation for the purpose of audit / inspection.

11. I/We confirm that I/We have proper procedures and arrangements to safeguard algorithms from misuse or unauthorised access. I/We undertake to ensure that access shall be given only to authorised persons.

12. I/We agree and confirm that I/We have proper procedures, systems and technical capability to carry out trading through the use of algorithms.

13. I/We agree and confirm that we have real time monitoring systems to identify dysfunctional algorithms that may not behave as expected and will inform the Exchange immediately in case of such incidents. Further, I/We confirm that we have a system to control to shut down such algorithms if identified on an immediate basis.

14. I/We shall maintain a record of control parameters, orders, trades and data points emanating from trades executed through algorithmic trading for a minimum of 5 years and I/We agree to provide this information / data to the Exchange / appointed auditors during inspection / audits.

15. I/We shall provide details of algorithmic trading strategies to the Exchange wherever required for the purpose of inquiry, surveillance, investigation etc.

16. I/We shall be solely liable and responsible for any monetary losses, damage or other costs and consequences arising in any manner due to algo orders submitted to the Exchange on account of any inadvertent mistake or malfunctioning or failure of our system, including component failure, and shall always keep the Exchange and its official/s indemnified against any loss or damage or compensation etc. Further, I/We shall not hold MCX responsible in any manner whatsoever due to the use of ATF Facility.

17. I/We shall ensure that there is no interlink with any system or User ID located / linked outside India.

18. I/We shall be solely responsible and liable for the consequences in case of any breach of this undertaking and MCX shall be entitled to take such appropriate action as deem fit against me/us.

19. I/We shall not extend ATF facility to any other person/entity and/or premises unless I/We obtain prior written permission from MCX.

20. That MCX, at its absolute discretion, shall make the ATF facility available to me / us only from the date of enabling the ATF facility, till such time as it may deem fit and further that the ATF facility may at any time be withdrawn by MCX at its discretion without giving me / us any notice or any reasons whatsoever.

21. I / We shall adhere to SEBI circular CIR/CDMRD/DEICE/03/2015 dated December 11, 2015, and / or undertakings / circulars as may be prescribed or required by MCX / Regulator from time to time.

22. I / We shall also ensure to undertake System Audit of ATF facility by System Auditors as mentioned in this circular and submit the report as per the timeline specified by the Exchange from time to time.

23. I / We shall also ensure to undertake that Algorithmic Trading Terminals will not be provided to my clients for placing Algorithmic orders directly to the Exchange.

24. I/ We will not directly or indirectly make any reference to the past or expected future return/performance of the algorithm trading services/strategies in any form of advertisements/business communication on publicly accessible platforms such as social media/websites/digital & print media, SMS, what's app messages and telegram services etc.; and/or

25. I/ We are not directly or indirectly associated with any platform providing any reference to the past or expected future return/performance of the algorithm.

26. I/ We shall not make any reference to the past performance or expected return out of algorithmic trading services/strategies, during any presentations/account opening forms/pamphlets/banners/forums/gatherings organized to onboard new clients/pitching new segment/product to existing clients including, exhibiting of past performance, or expected return on any of the platforms used by Authorized Persons/Vendor/associated entities of the member.

27. I/ We hereby confirm that, we have adhered to the provisions of SEBI circular no. SEBI/HO/MIRSD/DOP/P/CIR/2022/117 dated September 02, 2022, and Exchange circular MCX/CTCL/521/2022 dated September 08, 2022.

Trading Member's Undertaking for Wireless Trading Facility

WHEREAS,

1. The Exchange has also allowed its trading members providing/using IBT facility to offer the facility of Trading using Wireless Technology (hereinafter referred to as the 'Wireless Trading'), to its clients subject to submission of this Undertaking.

2. We are desirous of providing the Wireless Trading facility to our clients in compliance with relevant Circulars of the Exchange.

NOW THEREFORE IN CONSIDERATION OF EXCHANGE having agreed to allow me / us to avail the Wireless Trading facility, I / we hereby IRREVOCABLY AND UNCONDITIONALLY UNDERTAKE and agree to abide by and be bound by the following terms and conditions

We agree and acknowledge that the Exchange has allowed the offering of Wireless Trading facility at its discretion and that it may at any time and at its sole discretion withdraw the privilege offering wireless trading facility.

1. I / We undertake and agree to ensure that there shall be secure access, encryption and security of communication for IBT and wireless trading, in accordance with DOT policy and regulation regarding the level of encryption.

2. I / We undertake and agree to ensure that adequate measures shall be taken for user identification, authentication and access control using means such as user-id, passwords, smart cards, biometric devices or other reliable means, to prevent misuse of facility by unauthorised persons.

3. I / We shall ensure that alternative means of communication for placing orders shall be made to our clients available in case of failure of the wireless network.

4. I / We shall not develop or use any software / program which shall either directly or indirectly facilitate orders to cross trades of their clients with each other. All orders shall be offered to the market for matching.

5. I / We undertake that access for order routing is permitted only through the user of client specific User Ids.

6. I / We undertake that the risk management system takes into account overall positions of clients irrespective of the medium of undertaking and provides a system-based control facility on the trading limits of the clients and exposures taken by the clients.

7. I / We undertake to offer Wireless Trading facility to any client only after obtaining undertaking from the client that they are fully aware and agree for additional provisions specifying possible risks,

responsibilities, obligations and liabilities associated with Wireless Trading as mentioned in this undertaking.

8. I / We shall ensure that the addresses of the Internet web site/web page where detailed information would be available, along with the minimum information shall be available on handheld device, as it may not be possible to give detailed information to the investor on a handheld device.

9. I / We undertake that order confirmation shall be provided to the user on submission of the order and also on order modification / cancellation in the handheld device. Trade confirmation shall be provided to the user, along with the history of trades for the day.

10. I / We undertake and agree to ensure that Session login details are not stored on the devices used for Wireless Trading.

11. I / We undertake to ensure that Network security protocols and interface standards shall be as per prevalent industry standards and sound audit trails are available for all transactions conducted using wireless devices.

12. I / We shall ensure that server routing orders placed through Wireless Trading System to the exchange trading system shall be located in India.

13. I / We shall ensure to undertake a periodical System audit of the Wireless Trading system and software as specified by the Exchange and to submit certificate/report to the Exchange.

14. I/We hereby confirm that we are not directly/indirectly referring to any past or expected future return/performance of an algorithm trading services/strategies in any form of advertisements/business communication on publicly accessible platforms such as social media/websites/digital & print media etc. and are not associated with any platform providing such reference.

Trading Member's Undertaking for Direct Market Facility (DMA)

WHEREAS,

1. The Exchange has also allowed its trading members providing/using DMA facility to offer the facility of Direct Market Access, to its clients subject to submission of this Undertaking and fulfilling conditions prescribed time to time.

2. We are desirous of providing the Direct Market facility to our clients in compliance with relevant Circulars of the Exchange. DMA facility is being permitted only to FPI's (Foreign Portfolio Investors) as specified in SEBI/Exchange circular from time to time.

3. MCX has provided the trading software to enable its members to trade.

4. MCX provides a Computer – to –Computer Link (hereinafter referred to as the 'CTCL') facility for order entry, receipt of order and trade confirmation and also for receipt of data relating to its trade quotations by using their own trading front end software in order to trade on MCX trading system.

5. MCX also decided to permit the users of CTCL, with Direct Market Access (hereinafter referred to as the "DMA facility") with an ATF/Without ATF which mean any software or facility by the use of which, upon the fulfillment of certain specified parameters, without the necessity of manual entry or without incase of Non-ATF of orders, buy/sell orders are automatically generated and entered by the software/program facility into the MCX trading system to be matched by the Exchange's system and such permission is subject to terms and conditions as may be specified by MCX from time to time.

6. Members are required to use designated User Id for the purpose of DMA facility and the said User Id should not be used for any other purpose.

7. MCX allows to avail the DMA facility by fulfilling all the terms and conditions as may be prescribed from time to time at its discretion.

NOW THEREFORE IN CONSIDERATION OF EXCHANGE having agreed to allow me / us to avail the Direct Market Access facility, I / we hereby IRREVOCABLY AND UNCONDITIONALLY UNDERTAKE and agree to abide by and be bound by the following terms and conditions

1. I / We shall ensure that alternative means of communication for placing orders shall be made to our clients available in case of failure of the network.
2. I / We shall not develop or use any software / program which shall either directly or indirectly facilitate orders to cross trades of their clients with each other. All orders shall be offered to the market for matching.
3. I / We confirm and certify that the software has undergone tests by us and we are satisfied about the same. Further, we undertake to comply with and be bound by the Rules, Byelaws, Regulations of the Exchange, SEBI, any other statutory and regulatory body(ies) as may be applicable from time to time.
4. I / We undertake that any modifications / Change to the software to be effected only on prior approval of Exchange.
5. I/We shall not do unauthorized changes to the approved software and only use the software which is approved by the Exchange.
6. I / We undertake that the risk management system takes into account overall positions of clients irrespective of the medium of undertaking and provides a system-based control facility on the trading limits of the clients and exposures taken by the clients.
7. I / We undertake to offer facility of DMA to client as prescribed by exchange, only after obtaining undertaking from the client that they are fully aware and agree for additional provisions specifying possible risks, responsibilities, obligations and liabilities associated with Trading as mentioned in this undertaking.
8. I / We shall ensure that the addresses of the Internet web site/web page where detailed information would be available, along with the minimum information shall be available on held device, as it may not be possible to give detailed information to the client on a held device.
9. I / We undertake that order confirmation shall be provided to the user on submission of the order and also on order modification / cancellation in the handheld device. Trade confirmation shall be provided to the user, along with the history of trades for the day.
10. I / We undertake to ensure that Network security protocols and interface standards shall be as per prevalent industry standards and sound audit trails are available for all transactions conducted using devices.
11. I / We undertake to ensure that all DMA orders shall be routed to the exchange trading system through the broker's trading system. The broker's server routing DMA orders to the exchange trading system shall be located in India.
12. I / We shall ensure to undertake a periodical System audit of the DMA Trading system and software as specified by the Exchange and submit certificate/report to the Exchange.
13. I / We undertake to ensure a sound audit trial for all DMA orders and trades and be able to provide identification of actual user-id for all such orders and trades. The audit trail data should be available for at least five years and specified by Exchange from time to time.

14. I / We undertake to ensure where the clients access the DMA server of the broker through a third-party service provider, the password maintenance and authentication can be done either by the broker of by third party network service provider, so long as the exchange/broker ensures secured access and communication and a sound audit trail for all DMA orders/ trades.

15. The authorized user and client details should be part of the order details received and authenticated at the DMA server of the broker.

16. Brokers should follow the similar logic/priorities used by the Exchange to treat DMA client orders. Brokers should maintain all activities/ alerts log with audit trail facility. The DMA Server should have internally generated unique numbering for all such client order/trades.

17. I/We hereby confirm that we are not directly/indirectly referring to any past or expected future return/performance of an algorithm trading services/strategies in any form of advertisements/business communication on publicly accessible platforms such as social media/websites/digital & print media etc. and are not associated with any platform providing such reference.

18. I/We agree that I/We will take undertaking from our non-empanelled software vendor on the following points:
    1. Software vendors will not implement any software change or modification in the software already installed at Member's end without the change being approved by the Exchange.
    2. Software vendor will not incorporate features / functionalities which are against guidelines of the Exchange / any other regulatory body(ies)

19. I / We undertake to ensure to execute an agreement with such clients who are availing of the DMA facility. The model agreement as specified in SEBI circular. Members shall ensure that the agreement entered into with their clients for DMA facility should not have any clause that is less stringent/contrary to the conditions in the above proposed model agreement.

IN WITNESS WHEREOF this Undertaking is executed by the undersigned on the day, month, year and the place first mentioned above.

SIGNED, SEALED AND DELIVERED BY

_____ for and on behalf of _____

_____

Before me

In Presence of Witnesses

Sr. No.	Name	Address	Signature
1.			
2.			

Annexure 19

Application of Empanelment as an Application Service Provider (ASP)
(to be provided on letter head of the ASP)

BASIC DETAILS:

Sr. #	Particulars	Details
1.	Applicant Name	
2.	Application for empanelment for: (CTCL / IBT / WT)	
3.	API required from Exchange: (Non-FIX API / FIX API)	
4.	Registered Address	
5.	Telephone No.	
6.	Fax No	
7.	Name(s) & Designation of Authorised Signatory	
8.	Telephone No. of Authorised Signatory	
9.	Correspondence Address	
10.	Telephone No.	
11.	Fax No	

ORGANISATION DETAILS

Sr. #	Particulars	Details
1.	Organizational Structure	
2.	Promoters / Directors and their brief profile	
3.	Total Staff	
4.	No. of offices	

5.	ASP solution hosting location (Primary)	
6.	ASP solution hosting location (DR Site)	
7.	ASP Solution used for any other Exchange	

TECHNICAL DETAILS:

Complete details of IT Infra Hardware: - Software:- Network: -	
Solution Architecture Diagram	
Solution details with brief write-up on the following area • Functionality of the system • Details on Risk Management System of the Solution • Provisions for system redundancy, fault tolerance and load balancing • Database redundancy and standby databases (hot standby / cold standby) • Provisions to monitor system capacity and scalability of system on capacity utilisation • Provisions for back-up systems and data storage • Contingency planning in case of technical failure and capacity planning (including periodic evaluation of capacity based on historical and anticipated volumes) should be documented and be available for inspection • Alternate means of communication with the Exchange in case of primary mode of connectivity failure	
Security Requirements with brief write-up on the following area • Physical security of hardware / systems at hosting location and controls on admission of personnel into location. • Access control of staff to system. Audit trial of all access by staff. • Maker – Checker for critical functions. • Authentication Mechanism • Password Policy and Encryption of passwords. • Security, reliability and confidentiality of data related to members and clients. Provisions to ensure that a member / client can see data only	

pertaining to himself and no other members / clients. • Integrity of the data - records maintained in electronic form should not be susceptible to manipulation • Logs of all activities / transaction to be maintained with proper audit facilities • Secured Socket Layer access through Internet – certified by an approved Certifying Authority • Firewalls between Internet and trading set-up • Other security provisions, if any	
Facilities for call center / Help Desk	

We certify that all the statements are true and correct to the best of our knowledge. We undertake to ensure continuous compliance with all the requirements, rules and regulations of the Government, Regulator and Exchange in this regard, as may be issued from time to time.

Signed sealed and delivered by the Authorised representative of the Applicant.

Date

Place:

Annexure 21

No Change Letter
(to be provided on letter head)

Member ID & Name / Vendor Name	
Address	
Software Name and Version No.:	
Strategy Name and Version No.:	
Already Approved software Application ID	

Sr. No.	Particulars	Changes Done (Yes/No)
A	**Does not result in change in OMS or RMS:**	
1	Fix the bugs in the Software	
2	Modifications - 'Look and feel'	
3	Changes pertaining other Exchange's Trading System	
B	**Results in change in OMS or RMS:**	
1	Modification in existing feature/functionalities	
2	Addition/Introduction of New feature/functionalities	
C	**Others:**	
1	Member insisting on version change for Uniformity with other Exchanges	
D	**Description on change made:**	

We certify that all the statements are true and correct to the best of our knowledge. We are aware that in case any of the statements are found to be incorrect or false, we are liable for disciplinary action."

Signed sealed and delivered by the Authorised Signatory of the Member/Vendor (valid digital signature is acceptable)

Signed: Date: Place:

Annexure 22
(to be provided on Member letter head)

Form for creation of in-house CTCL / IBT / WT / ATF Software in CTCL online portal

To
CTCL Department
Multi Commodity Exchange of India Limited
CTS No.255, Exchange Square, Suren Road, Chakala,
Andheri (East), Mumbai – 400 093

I / We _____ (Name of the Member) hereby wish to apply for the following in-house software. Kindly create the same in CTCL online portal to submit online application to the Exchange.

Sr. #	Particulars	Details
1.	Member ID	
2.	Member Name	
3.	API Procured from	Exchange / Vendor
4.	If API is procured from Vendor, name of Empanelled Vendor from whom API is Procured	
5.	Type of API	FIX / Non-FIX
6.	Type of facility	CTCL / IBT (Exe/Web) / WT / ATF
7.	Tick By Tick	Yes/No
8.	Software Name	
9.	Software Version No.	
10.	ATF Strategy Name (applicable only for Algo facility)	
11.	ATF Strategy Version No. (applicable only for Algo facility)	
12.	Algo (ATF) Strategy Category (applicable only for Algo facility)	1. Execution 2. Arbitrage 3. Alpha Seeking 4. High Frequency 5. Scalping 6. Others [provide brief description]
13.	Operating System	WINDOWS / LINUX / UNIX / MACOS
14.	Software Developed by	In-House Team / Non-Empanelled vendor
15.	Details of non-empanelled vendor from whom the software is developed	Name: E-Mail ID:

Signed by the Authorised Signatory

Signed

Date:
Place:

Annexure 23
(to be provided on Member letter head)

Application form for in-house / ISV Vendor DMA - CTCL / DMA – ATF Software Approval

To
CTCL Department
Multi Commodity Exchange of India Limited
CTS No.255, Exchange Square, Suren Road, Chakala,
Andheri (East), Mumbai – 400 093

I / We _____ (Name of the Member) hereby wish to apply for the following in-house software. Kindly create the same in CTCL online portal to submit online application to the Exchange.

Sr. #	Particulars	Details
17.	Member ID	
18.	Member Name	
19.	API Procured from	Exchange / Vendor
20.	If API is procured from Vendor, name of Empanelled Vendor from whom API is Procured	
21.	Type of API	FIX / non-FIX
22.	Type of facility	**DMA - CTCL / DMA – ATF**
23.	Tick By Tick	Yes/No
24.	Software Name	
25.	Software Version No.	
26.	ATF Strategy Name (applicable only for Algo facility)	
27.	ATF Strategy Version No. (applicable only for Algo facility)	
28.	Algo (ATF) Strategy Category (applicable only for Algo facility)	7. Execution 8. Arbitrage 9. Alpha Seeking 10. High Frequency 11. Scalping 12. Others [provide brief description]
29.	Operating System	WINDOWS / LINUX / UNIX / MACOS
30.	Software Developed by	In-House Team / Non-Empanelled vendor / Empanelled vendor
31.	Details of Non-Empanelled / Empanelled vendor from whom the software is developed	Name: E-Mail ID:

Signed by the Authorised Signatory

Signed
Date:
Place:

Annexure 27

System Audit Report – Format

(On the letterhead of system auditor)

Date:

Name of Trading Member:

Member Id:

1. **IBT Audit Checklist (Part I & Part II)**
2. **Wireless Trading Audit Checklist (Part I & Part III)**
3. **DMA Audit Checklist (Part I & Part IV)**

Part I

<table>
<tr><th>Sr. No.</th><th>Area of Audit</th><th>Results & Observations</th><th>Auditor's Remark</th></tr>
<tr><td>A.</td><td>System Features & Functionality</td><td>Results</td><td>Opinions</td></tr>
<tr><td>78.</td><td>Software Details
<table>
<tr><td>Particulars</td><td>Name</td><td>Version No.</td></tr>
<tr><td>Application Software</td><td></td><td></td></tr>
<tr><td>Software developed by</td><td></td><td>---</td></tr>
<tr><td>Gateway</td><td>FIX / Non-FIX</td><td>---</td></tr>
<tr><td>Risk Administration / Manager</td><td></td><td></td></tr>
<tr><td>Algo Strategy(ies)</td><td></td><td></td></tr>
<tr><td>Exe/Browser (in case of IBT):</td><td></td><td>---</td></tr>
<tr><td>Database details</td><td></td><td></td></tr>
</table></td><td></td><td></td></tr>
<tr><td>79.</td><td>The installed system features are as prescribed by MCX.

The Member ensures that the software version number is used to identify the system being approved by the Exchange.

Price Broadcast
The system has a feature for receipt of price broadcast data

Order Processing:
The system has a feature:
d) Which allows order entry and confirmation of orders
e) Which allows for modification or cancellation of orders</td><td></td><td></td></tr>
</table>

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	placed f) Order modification/ cancellation facility and trade history provided to clients Trade Confirmation: The system has a feature which enables confirmation of trades.		
80.	**The installed system provides a system based control facility over the order input process** Order Entry The system has order placement controls that allow only orders matching the system parameters to be placed. Order Modification The system allows for modification of orders placed. Order Cancellation The system allows for cancellation of orders placed Order Outstanding Check The system has a feature for checking the outstanding orders i.e. the orders that have not yet been traded or partially traded. Ticker/quote/order book displayed on website also display the time stamp as well as the source of such information against the given information Website of the TM contains information for investor protection such as rules and regulations affecting client broker relationship, arbitration rules, investor protection rules etc. and hyperlink to exchange website providing such information.		
81.	**The installed system provides a system-based control facility over the trade confirmation process** Trade Confirmation and Reporting Feature Should allow confirmation and reporting of the orders that have resulted in trade		
82.	**The installed system provides a system-based control facility over the order input process** Order Matching Does the System pass all the Orders to the trading platform of the Exchange for execution and not allow any crossing of orders that are routed through it?		
83.	The System generates appropriate audit logs and trails so as to facilitate tracking of events such as orders and trades with timestamp.		
84.	**The installed system allows for placing orders only for authorized clients**		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	Client ID Verification Only duly authorized client's orders are allowed to be placed. Proprietary order entry mechanism Order entry for Pro types of orders is executed through specific User Ids. The system should not in any manner suggest to the user by default the name of Exchange, Scrip and Segment etc. It is the user who should have the option to select the same.		
85.	**The installed system has a User Management system as per the requirements of MCX.** Approved Users: Only users approved by MCX are allowed to access the system and documentation regarding the same is maintained in the form of c) User Approval Application d) Copy of User Qualifications User Creation: New User IDs are created as per the CTCL guidelines. User ID: All users are uniquely identified through the issue of unique CTCL ids. User Disablement: Users not compliant with the Exchange Requirements are disabled and event logs maintained User Deletion: Users are deleted as per the MCX guidelines Reissue of User Ids: User Ids are reissued as per the MCX guidelines. Locked User Accounts: Users whose accounts are locked are unlocked only after documented unlocking requests are made.		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
86.	User management and authentication mechanism h) Whether user management, password policy and procedures are documented? i) Whether registration and de-registration of user IDs are carried out as per the approved policy? j) Whether system has facility to manage users and roles assigned to them? k) Whether system allows access to only authorised users? l) Whether system has User ID and Password combination authentication mechanism which allows access only after providing valid details? m) Whether system requests for identification and new password before login into the system? n) Whether system allows access to functionality / module for which they are authorised?		
87.	Whether all successful and failed login attempts are logged with details like IP address and other data to enable traceability (optional)		
88.	Order/ Trade confirmation displayed on website/ application on real time basis		
B	**Risk Management System**	Results	Opinions
89.	**The installed system is capable of assessing the risk of the client as soon as the order comes in and informs the client of acceptance/rejection of the order within a reasonable period.** Should allow for risk management of the orders placed and online risk monitoring of the orders being placed. Order Parameters There is online risk assessment of all orders placed through the system.		
90.	Whether the system carries out appropriate validations of the following risk parameters including Credit checks before the orders are released to the Exchange: i) Exposure limit j) Margin limit k) Order Quantity Limits l) Order Value Limits m) Daily Price Range Checks n) Cumulative limit on value of unexecuted orders o) Order Price Checks p) Security wise limit check		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
91.	**The installed system provides a system-based event logging and system monitoring facility which monitors and logs all activities / events arising from actions taken on the gateway / database server, authorized user terminal and transactions processed for clients or otherwise and the same is not susceptible to manipulation.** The installed systems have a provision for On-line surveillance and risk management as per the requirements of MCX and includes Number of Users Logged In / hooked on to the network incl. privileges of each The installed systems have a provision for offline monitoring and risk management as per the requirements of MCX and include reports / logs on f) Number of Authorized Users g) Activity logs h) Systems logs i) Number of active clients		
92.	**The installed system provides a system-based control facility on the trading limits of the clients and exposures taken by the clients include set pre-defined limits on the exposure and turnover of each client.** Only orders that are within the parameters specified by the risk management systems are allowed to be placed.		
93.	System-based control over the pre-defined trading limits set by the Member.		
94.	**The installed system provides for reconfirmation of orders which are larger than that as specified by the members' risk management system.** Whether system has a manual override facility for allowing orders that do not fit the system-based risk control parameters?		
95.	Facility to prompt the user when he puts in orders that are over and above the normal limits set by the Member.		
96.	Review and release facility for orders which got rejected because of clients having exceeded limits etc.		
97.	Internally generated unique numbering for all client order/trades		
98.	To capture IP address for all orders		
99.	System doesn't have any functionality for matching of cross trades and all orders are offered to exchange trading system for matching		
C	**Session Security**	Results	Options
100	Whether system has secure end-to-end encryption for all data transmission between the client and the member system		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	through a Secure Standardized Protocol. A procedure of mutual authentication between the client and the member server is implemented?		
101	Session login details are not stored on the devices used for internet-based trading and securities trading using wireless technology.		
102	**The installed system provides session security f o r all sessions established with the server by the front-end application.** c) The system uses session identification and authentication measures to restrict sessions to authorized users only. d) The system uses session security measures like encryption to ensure confidentiality of sessions initiated.		
103	**The installed system has provision for security, reliability and confidentiality of data through use of encryption technology, SSL or similar session confidentiality protection mechanisms** d) The system uses SSL or similar session confidentiality protection mechanisms e) The system uses a secure storage mechanism for storing of usernames and passwords f) The system adequately protects the confidentiality of the user's trade data.		
D	**Password Security**	Results	Options
104	**The installed system Authentication mechanism is as per the guidelines of the MCX** d) The installed system uses passwords for authentication. e) The system requests identification and a new password before logging into the system. f) The Password is masked at the time of entry.		
105	System authenticates users with a Username and password as first level of security.		
106	System mandates changing of password when the user logs in for the first time?		
107	Automatic disablement of the user on entering erroneous password on five consecutive occasions.		
108	The system provides for automatic expiry of passwords at the end of a reasonable duration (maximum 6 months) and re-initialisation of access on entering fresh passwords.		
109	Prior intimation is given to the user before such expiry?		
110	System controls to ensure that the password is alphanumeric (preferably with one special character), instead of just being alphabets or just numerical.		
111	System controls to ensure that the changed password cannot be the same as of the last 6 passwords.		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
112	System controls to ensure that the Login id of the user and password should not be the same.		
113	System controls to ensure that the password should be of minimum six characters and maximum 8 characters.		
114	User/Client is deactivated if the same is not used for a continuous period of 12 (Twelve) months from date of last use of the account.		
115	System allows users to change their passwords at their discretion and frequency.		
116	System controls to ensure that the password is encrypted at the member's end so that employees of the member cannot view the same at any point of time.		
117	Two-factor authentication for login session - (mandatory for IBT & STWT) In case of Biometric authentication additional one more factor out of 1.Knowledge factor (password, PIN) 2.Possession factor (OTP, Security token) to be implemented. In case of non-biometric case		
118	2 factor authorization for login session and these 2 factors can't be the same		
E	**Infrastructure & Capacity Management**	Results	Options
119	System has built-in high system availability to address any single point failure.		
120	Service has adequate bandwidth and multiple links to ensure reliability and redundancy.		
121	Are the resources monitored, tuned and calculations made for future capacity requirements to ensure the required performance.		
122	Adequate un-interrupted power supply for smooth operation of the System is available at the Site?		
123	Whether backup network link is available in case of failure of the primary link to the MCX?		
124	Adequate data backup & data storage capacity.		
125	**Firewall** Whether suitable firewalls are implemented? Suitable Firewalls between trading set-up directly connected to an Exchange trading system and the Internet trading set-up Is specific port / services access granted on firewall by following a proper approval process?		
126	Network security protocols & interface standards are as per prevalent industry standards		
127	**Anti-virus** Is Anti-virus system is installed and updated on regular basis?		
128	**Additional Access Control Security** **The installed system provides a dual factor**		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	authentication system for access to the various components. Extra Authentication Security The systems use additional authentication measures like smart cards, biometric authentication or tokens etc. The system has a second level of password control for critical features. Whether adequate controls have been implemented for admission of personnel into the server rooms / place where servers are located and whether audit trails of all the entries / exits at the server room / locations are maintained?		
F	**Backup & Recovery Procedures**	Results	Options
129	Does the organization's documented policy include a backup policy and procedures?		
130	The back-up and restore systems implemented by the member is adequate to deliver sustained performance and high availability. Whether the member system has on-site as well as remote site back-up capabilities?		
131	**The Installed systems backup capability is adequate as per the requirements of the MCX for overcoming loss of product integrity.** Are backups of the following system generated files maintained as per the MCX guidelines? e) At the server/gateway level f) Database g) Audit Trails Reports At the user level g) Market Watch h) Logs i) History j) Reports k) Audit Trails Are backup procedures documented, and backup logs maintained? Are the backup logs maintained and are the backups verified and tested?		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	Are the backup media stored safely in line with the risk involved? Are there any recovery procedures and have the same been tested?		
G	**Business Continuity & Disaster Recovery Procedures**	Results	Options
132	**Does the Organisation have a suitable documented Business Continuity or Disaster Recovery or Incident Response process commensurate with the organization size and risk profile to ensure a high degree of availability of the installed system** Is there any documentation on Business Continuity / Disaster Recovery / Incident Response? Does a BCP / DRP plan exist? If a BCP/DRP plan exists, has it been tested on regular basis? Are there any documented incident response procedures? Are there any documented risk assessments? Does the installation have a Call List for emergencies maintained? Whether redundancy is built at all level of infrastructure? Whether all critical systems / infrastructure are in HA mode?		
133	**How will the organization assure customers prompt access to their funds and securities in the event the organization determines it is unable to continue its business in the primary location - Network / Communication Link Backup** Is the backup network link adequate in case of failure of the primary link to the MCX? Is the backup network link adequate in case of failure of the primary link connecting the users? Whether detailed network diagram is prepared and available for verification? Is network and network diagram in line with the one submitted to the Exchange?		
134	Location of all servers is within India		
135	Security, reliability & confidentiality of data through encryption		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
136	Suitably qualified & Adequate personnel to handle communication including trading instruction & back-office work		
137	**How will the organization assure customers that prompt access to their funds and securities in the event the organization determines it is unable to continue its business in the primary location - System Failure Backup** Are there suitable backups for failure of any of the critical system components like d) Gateway / Database Server e) Router f) Network Switch Infrastructure breakdown backup Are there suitable arrangements made for the breakdown in any infrastructure components like d) Power Supply e) Water f) Air Conditioning Primary Site Unavailability Have any provision for alternate physical location of employees been made in case of non-availability of the primary site Disaster Recovery Are there suitable provisions for Books and records backup and recovery (hard copy and electronic). Have all mission-critical systems been identified and provision for backup for such systems been made?		
138	In case of failure of the IBT or wireless network, alternative means of communication for placing orders for client with identification and authentication. are available		
H	**Operational Integrity**	Results	Options
139	Does the organization's policy and procedure document have an access control policy for users of the service?		
140	**The installed system provides a system based access control over the server as well as the risk management and front-end dealing applications while providing for security** Access controls c) The system allows access to only authorized users d) The system has a password mechanism which restricts access to authenticate users.		
141	**Physical Security**		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	Whether adequate controls have been implemented for admission of personnel into the server rooms / place where servers / hardware / systems are located and whether audit trails of all the entries/exits at the server room / location are maintained?		
142	**To ensure information security for the Organisation in general and the installed system in particular policy and procedures as per the MCX requirements must be established, implemented and maintained.** Does the organization's documented policy and procedures include the following policies and if so are they in line with the MCX requirements? n) Information Security Policy o) Password Policy / Standards p) User Management and Access Control Policy q) Network Security Policy r) Application Software Policy s) Change Management Policy t) Incident Management Policy u) Version & Patch Management Policy v) Backup & Restoration Policy w) BCP and Response Management Policy x) Audit Trail Policy Does the organization follow any other policy or procedures or documented practices that are relevant? o Whether member has proper procedures, systems and technical capability to carry out trading though CTCL software? o Whether member has proper procedure in place to report any abnormal incident to the Exchange on an immediate basis? o Whether system has sufficient security features including password protection for User ID, automatic expiry of password at the end of a reasonable duration and re-initialisation of access on entering fresh password? o Whether any changes / upgrades done to the CTCL software and system only after approval by the Exchange o Whether version and patch management controls in place? o Whether approvals are in place for all the changes during the audit period? o Whether all backup is available for a minimum period of 3 years o Whether backup logs are maintained? o Have backup been verified and tested? o Are there any recovery procedures and have the same been tested? o Whether backup media is stored safely?		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	○ Whether Members have defined and implemented recovery procedures to recover system and data from any unforeseen events / disaster? ○ Whether recovery procedures are tested regularly?		
143	The Member ensures that the persons supporting the service possess requisite skills for technical support, System administration and other related functions pertaining to the System.		
144	**Are documented practices available for various system processes** Day Begins Day Ends Other system processes i) Audit Trails j) Access Logs k) Transaction Logs l) Backup Logs m) Alert Logs n) Activity Logs o) Retention Period p) Data Maintenance		
145	**In case of failure, is there an escalation procedure implemented?** Day Begin Day End Other system processes Details of the various response procedures including for e) Access Control failure f) Day Begin Failure g) Day End Failure h) Other System Processes Failure		
146	**To ensure system integrity and stability all changes to the installed system are planned, evaluated for risk, tested, approved and documented.** Planned Changes e) Are changes to the installed system made in a planned manner? f) Are they made by duly authorized personnel? g) Risk Evaluation Process h) Is the risk involved in the implementation of the changes duly factored in? Change Approval Is the implemented change duly approved, and process		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	documented? Pre-implementation process Is the change request process documented? Change implementation process Is the change implementation process supervised to ensure system integrity and continuity Post implementation process Is user acceptance of the change documented? Unplanned Changes In case of unplanned changes, are the same duly authorized and the manner of change documented later? In case of members self-developed system SDLC documentation and procedures if the installed system is developed In-House.		
I	**Approvals, Undertaking, Policies and Other Area**	Results	Options
147	**Insurance (optional)** The insurance policy of the Member covers the additional risk of usage of the system and probable losses in case of software malfunction.		
148	**Settlement of Trades** **The installed system provides system-based reports on contracts, margin requirements, payment and delivery obligations** Margin Reports feature Should allow for the reporting of client wise / user wise margin requirements as well as payment and delivery obligations.		
149	**Database Security** g) The installed system has sufficient control over the access to and integrity of the database. h) The access to the database is allowed only to authorized users / applications. i) The database is hosted on a secure platform. j) The database stores the usernames / passwords securely. k) Whether database is hardened with the latest security guidelines.		
150	Whether system has adequate safety features to ensure it is not susceptible to internal / external attacks?		
151	Is there any other area/aspect which in the auditor's opinion is not complied with and which is significant and material in relation to the size and the nature of the operations?		
152	Whether the required details of all the ids created in the server of the trading member, for any purpose (viz. administration, branch administration, mini-administration, surveillance, risk		

<table>
<tr><th>Sr. No.</th><th>Area of Audit</th><th>Results & Observations</th><th>Auditor's Remark</th></tr>
<tr><td></td><td>management, trading, view only, testing, etc.) and any changes therein, have been uploaded as per the requirement of the Exchange?
If no, please give details</td><td></td><td></td></tr>
<tr><td>153</td><td>Whether all the user ids created in the server of the trading member have been mapped to 12-digit codes on a one-to-one basis and a record of the same is maintained?
If no, please give details</td><td></td><td></td></tr>
<tr><td>J.</td><td>Software Testing Verification</td><td>Results</td><td>Options</td></tr>
<tr><td>154</td><td>Verification of software testing done by Member in Exchange provided Test environment

Whether member has tested the Software in Exchange provided Test Environment

Details
c) No. of days software has been tested by member in Exchange provided Test environment
d) Member Id & User Id used by member for testing in the Exchange provided Test environment

Whether any abnormalities observed in the verification of Logs, Reports, Audit Trail and Database of the tests performed by member in Exchange provided Test environment</td><td></td><td></td></tr>
<tr><td>155</td><td>Verification of participation by Member in Periodic Mock Session / Simulated Trading Environment conducted by Exchange

Whether members have participated in Mock Trading sessions / Simulated Trading Environment conducted by Exchange (Minimum 1 before approval)

Details
<table>
<tr><th>Mock/Simulated Trading Date</th><th>Test Duration</th><th>Segment</th><th>User ID</th><th>CTCL / IBT / WT / ATF / DMACTCL / DMAATF</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
</table>
Whether any abnormalities observed in the verification of Logs, Reports, Audit Trail and Database of the tests performed by members while participating in Periodic Mock Trading session conducted by Exchange</td><td></td><td></td></tr>
</table>

PART II

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
A.	**System Features & Functionality**	Results	Opinions
1.	View Order status i.e. the orders that have not yet been traded or partially traded or cancelled Order Confirmation		
2.	Acceptance / rejection of an order / trade is communicated to the IBT client.		
3.	**Order Capture / Status** should capture the following information: Order Id generated by the Exchange IBT Client ID and type of IBT Client Date and Time of order placement Scrip name / code / symbol Action (Buy/Sell) Quantity (ensure market lot) Order type (Regular Lot / Stop Loss or such orders as allowed by Exchange) Order validity (type as permitted by exchange such as Day, EOS, IOC) Price (Ensure DPR -price band / circuit limit and minimum tick size as allowed by Exchange) Execution status System captures the IP address (from where the orders are originating) for all IBT orders		
4.	Is the trade confirmation sent to the client via SMS/e-mail?		
5.	Can the IBT client choose the interval of receiving the e-mail?		
6.	Whether a unique identification number as prescribed by Exchange (i.e. 111111111111 in CTCL Unique number) is sent with each IBT Order?		
7.	Has two-factor authentication for login session been implemented for all IBT orders emanating using Internet Protocol?		
8.	Members ensure that a specific email id to receive emails is communicated to all clients.		
9.	Members have documented and implemented a procedure to escalate the issue if the email is not responded within one working day.		
B.	**Risk Management System**	Results	Opinions
10.	Whether System-based control is implemented by the Member for the Margin, Order Quantity and Value?		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
11.	IBT Member shall ensure that logic / priorities used by the Exchange are followed by the System for treating IBT Client Orders.		
C.	**Session Security**	Results	Opinions
12.	In case of no activity by the IBT client, the system provides for automatic trading session logout after a configurable time period (as determined by the system).		
13.	Whether system use session identification and authentication measures to restrict sessions to authorized user only?		
D.	**Password Security**	**Results**	**Opinions**
14.	Does the organization's policy and procedure document have an access control policy for users of the service?		
15.	Whether all successful and failed login attempts are logged with details like IP address, MAC address and other data to enable traceability		
E.	**Network Security**	**Results**	**Opinions**
16.	Whether the web server is kept separate of the application and database server?		
17.	Whether suitable firewalls are present between the member trading setup and internet?		
18.	Records are temper-proof		
F.	**Operational Integrity**	**Results**	**Opinions**
19.	The IBT member ensures that a specific email id to receive mails from IBT Clients is communicated to all clients.		
20.	Members have documented and implemented a procedure to escalate the issue if the email is not responded within one working day.		
G.	**Approvals, Undertaking, Policies and Other Area**	**Results**	**Opinions**
21.	Display of Investor protection rule, Arbitration rule and rules effecting member - client relationship on approved IBT member's website.		
22.	The web site of IBT approved member provides and displays prominently hyper link to the web site/page on the web site of the MCX displaying rules/Business Rules/circulars.		

PART III

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
A.	**System Features & Functionality**	Results	Opinions
1.	The installed Wireless Trading system provides a system-based control facility over the trade confirmation process Trade Confirmation and Reporting Feature Should allow confirmation and reporting of the orders that have resulted in trade		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	As it may not be possible to give detailed information about the order status on a handheld device e.g. mobile phones, it should be ensured that minimum information may be given with addresses of the Internet web site / web page where detailed information would be available.		
2.	The installed Wireless Trading system provides a system-based control facility over the order input process Order Identification Methodology A unique identification number for each Wireless Trading System captures the IP address (from where the orders are originating) for all Wireless Trading orders?		
3.	Whether a unique identification number as prescribed by Exchange (i.e. 333333333333 in CTCL Unique number) is sent with each Order originating from a wireless device?		
4.	Whether audit trails are provided to the user on the wireless device?		
5.	WT Member shall ensure that logic / priorities used by the Exchange are followed by the System for treating IBT Client Orders.		
6.	Is the order / trade confirmation sent to the client via SMS/e-mail?		
7.	Minimum information provided to investors on a hand held device along with address of website/ webpage where detailed information is available (Applicable for STWT only)		
B.	**Session Security**	Results	Opinions
8.	In case of no activity by the Wireless Trading client, the system provides for automatic trading session logout.		
9.	In the case of Wireless Trading whether provision has been made to lock the trading application in case of loss of the hand held device?		
10.	It must be ensured that the session login details should not be stored on the devices used for Wireless Trading.		
11.	Other forms of access controls such as smart cards, biometric devices etc.		

PART IV

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	System Features & Functionality	Results	Opinions
1.	**The installed DMA system is capable of assessing the risk of the client as soon as the order comes in and informs the client of acceptance/rejection of the order within a reasonable period.** Order Parameters based on the respective risk profile of the client. • Spread order value and quantity limit per order should not		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	exceed as specified in RMS. • Order value limit at client level. • Order value limit at branch level. • Security-wise order limits at client level. Are there provisions for setting - trading limits, - exposure limits, - position limits, - order quantity limits order value limits, - price range checks, - Net Position limits for all DMA clients based on risk assessment, credit quality and available margins of the client. (Net outstanding position to fully cover the emanating risk with client's available margin) - Also, appropriate limits for securities which are subject to FPI limits as specified as regulator.		
2.	**Order Management** - DMA orders are routed through electronic/automated RMS of the TM - All DMA orders are routed to the exchange trading system through the broker's trading system - Similar logic/priorities used by the SE to treat DMA client orders - Internally generated unique numbering for all client order/trades - DMA facility shall be offered only to those categories of investors which have been specified by Stock Exchange - The system doesn't have any functionality for matching of cross trades and all orders are offered to exchange trading system for matching		
3.	**The installed DMA system provides a system-based control facility over the order input process.** Whether Broker is using similar logic/ priorities as used by Exchange to treat DMA client orders. • The system has appropriate authority levels to ensure that the limits can be setup only by persons authorized by the risk / compliance manager. • Frequency of antivirus patch updation. • TM maintains logs for all activities to facilitate audit trail for all DMA orders and is able to provide identification of actual user-id for all such orders and trades		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
4.	**The installed DMA system provides a system-based event logging and system monitoring facility which monitors and logs all activities / events arising from actions taken on the gateway / database server, authorized user terminal and transactions processed for clients or otherwise and the same is not susceptible to manipulation.** • Review of logs (activity/system/alert/incident)		
5.	**The installed DMA system parameters are as per MCX norms** • Market Segment • IP Address		
6.	**To ensure information security for the Organization in general and the installed DMA system in particular policy and procedures as per the MCX requirements must be established, implemented and maintained.** Whether installed systems & procedures are adequate to handle DMA orders/ trades? Whether details of users activated for DMA facilities is maintained along with username, unique identification of user, authorization levels. Whether all the documents are classified as per CIA (Confidentiality, Integrity and Availability)		
7.	**How will the organization assure customers prompt access to their funds and securities in the event the organization determines it is unable to continue its business in the primary location.** Are there suitable backups for failure of any of the critical system components like. • Gateway / Database Server / web server • CTCL router • Network Switch		
8.	**Firewall** Are all servers placed in a DMZ and segregated from other zones by using a firewall? Is there segregation between application and database servers? Are user and server zones segregated?		
9.	**Physical Security** Server Room/Network Room Security (UPS)		

Summary Sheet

Sr. No.	Area of Audit	Control / Processes	Compliance S / M / W	Report Reference
1.	System Features & Functionality	Gateway & System Parameters		
		Application Features		
		Order Management / Identification		
2.	Risk Management System	Application Features		
		System Parameters		
		Monitoring System		
3.	Session Security	Session Security Parameters		
		Encryption Technologies		
4.	Password Security	Policies & Procedures		
		Password Management		
5.	Infrastructure & Capacity Management	Network & Redundant Connectivity		
		Scalability		
		Dependability		
6.	Backup & Recovery Procedures	Policies & Procedures		
		Backup & Archival process		
7.	Business Continuity & Disaster Recovery	Policies & Procedures		
		System Failure Backup		
		Disaster Recovery		
8.	Operational Integrity	Server Room / Network Room / Information Security		
		Qualified Personnel & Problem Escalation		
		Change Management		
		Audit Trail Management		
		Software Access Management		
9.	Vulnerability Assessment	Database		
		Operating System		
10.	Software Testing	Testing in Exchange provided Test environment		
		Testing & participation in Exchange conducted Mock Trading		

Sr. No.	Area of Audit	Control / Processes	Compliance S / M / W	Report Reference
11.	Any Other area/aspect which in the auditor's opinion is not complied with and which is significant and material in relation to the size and the nature of the operations			

Overall rating for the Member's software and system:
(Strong / Medium / Weak)

It is hereby confirmed and certified that system audit of the software and systems used by _____ , a member of Multi Commodity Exchange of India Limited ('Exchange') has been conducted by me and have been found to be in compliance with the requirements stipulated by SEBI and Exchange. The software and system have capacity to meet all requirements of the SEBI and Exchange as on date.

We certify that none of the current Directors / Partners / Promoters of the member are directly or indirectly related with any of the Directors / Promoters / Partners of _____(Name of Auditing Firm) and there is no conflict of interest with respect to the member being audited.

_____

Signature

(Name of the Auditor & Auditing firm)

CISA / DISA / CISM / CISSP Reg. No.:

UDIN:

Date:

Place:

Stamp/Seal:

(valid digital signatures are acceptable)

Note: Process Area Controls Evaluation Criteria

Control Evaluation Criteria	**Description**
Strong (S)	The controls are defined as Strong if the following criteria are met Implemented controls fully comply with the stated objectives and no material weaknesses are found.
Medium (M)	The controls are defined as Medium if the following criteria are met Implemented controls substantially comply with the stated objectives and no material weakness result in substantial risk exposure due to the non-compliance with the criteria Compensatory controls exist which reduce the risk exposure to make it immaterial vis-à-vis the non-compliance with the criteria.
Weak (W)	The controls are defined as Weak if the following criteria are met Implemented controls materially fail to comply with the stated control objectives. Compensating controls fail to reduce the risk so as to make it immaterial vis-à-vis the non-compliance with the compliance criteria.

Annexure 28

System Auditors' Certificate
(On the letterhead of System Auditor)

1. **CTCL – Part I, Part II**
2. **IBT / WT – Part I, Part II & Part IV**
3. **Algo Trading Facility (ATF)– Part I, Part III**
4. **DMA – CTCL – Part I, Part II & Part V**
5. **DMA – Algo – Part I, Part III & Part V**

Part – I: System Auditors' Certificate

To

CTCL Department

Multi Commodity Exchange of India Limited
Exchange Square,
Suren Road, Chakala,
Andheri (East), Mumbai – 400 093.

It is hereby confirmed and certified that Trading Member ID_____Member Name_____, and member of Multi Commodity Exchange of India Limited ('Exchange') has successfully completed the testing of all areas as laid down by the Exchange for the below mentioned 'CTCL Software' by participating for minimum time period as mandated by the Exchange. The software and system have the capacity to meet all requirements of the Exchange and SEBI as on date.

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Details</th></tr>
<tr><td>12.</td><td>Category</td><td>(New / Modification)</td></tr>
<tr><td>13.</td><td>Verification of software testing done by Member in Exchange provided Test environment

No. of days software has been tested by members in Exchange provided Test environment

Member Id & User Id used by member for testing in the Exchange provided Test environment

Whether any abnormalities observed in the verification of Logs, Reports, Audit Trail and Database of the tests performed by members in Exchange provided Test environment</td><td></td></tr>
<tr><td>14.</td><td>Verification of participation by Member in Mock Trading or in the simulated environment session conducted by Exchange
Tested in Mock or Simulated Environment:

<table>
<tr><td>Mock / Simulated</td><td>Test Duration</td><td>Segment</td><td>User ID</td><td>CTCL/IBT/WT/ATF/DMA-CTCL/DMA-ATF</td></tr>
</table>
</td><td></td></tr>
</table>

	Trading Date	(Time in Hrs.)				
	Whether any abnormalities observed in the verification of Logs, Reports, Audit Trail and Database of the tests performed by members while participating in Mock/Simulated Environment Trading session conducted by Exchange					
15.						

Particulars	Name	Version No
Application software		
Software developed by		---
Gateway	FIX / Non-FIX	---
Risk Administration / Manager		
Algo Strategy(ies)		
Exe/Browser/ (in case of IBT):		---
Database details		

Part II - CTCL / IBT / WT /DMA-CTCL Checklist:

Sr. No.	Area of Audit	Complied (Yes/No)	Auditor's Remark
1.	Display details of Software Name, Version Number		
2.	Display Login/ Log off Status		
3.	Display Market Status (Open/Closed)		
4.	Display of UMC Member Code / SEBI registration Code		
5.	Password policy: m) User should be able to login with valid user id and password n) Password length meets Exchange guidelines o) The password numeric values should not fully comprise of User ID p) In case of multiple invalid password entries the user id should be locked q) Password should be alphanumeric and comprise one special character (mandatory for CTCL) r) Two factor authentication for login (mandatory for IBT / WT) s) Appropriate message is displayed for login		

Sr. No.	Area of Audit	Complied (Yes/No)	Auditor's Remark
	attempt failure		
6.	Contract Information displays the minimum following details: a) Symbol & Expiry b) Product and Tender Start & End date c) Delivery Unit d) Market lot and Max order size e) Price tick & Price Quotation f) Daily Price Range (DPR)		
7.	Market Picture displays minimum following details: a) Symbol & Expiry b) Last Traded Price (LTP) & Last Traded Quantity (LTQ) c) Open Interest (OI) & Volume d) Open, High, Low & Close. e) Daily Price Range (DPR) f) Turnover Value		
8.	Message window with Exchange & Internal Messages / Announcements is displayed		
9.	Order validity types provided – GTC, GTD, Day, IOC & EOS (write-up should contain details of validity which is not provided)		
10.	Order Entry at Market / Limit price with Regular / Stop Loss type in both Normal & Spread contracts		
11.	Order Modification from Order type Regular to Stop loss is not allowed.		
12.	Orders Modified / Cancelled / Rejected by Exchange / Member Admin - such information must be displayed in Message bar / Log, Order Book with reasons for cancellation / rejection.		

Sr. No.	Area of Audit	Complied (Yes/No)	Auditor's Remark
13.	Order book / Trade book contains minimum following details: a) Market / Limit b) Order number & Order type c) Trade Number d) Symbol & Expiry e) Date and Time f) Price & Quantity g) Validity, Status & Reason		
14.	CTCL terminal info sent along with the orders placed via software complies with the guidelines laid by the Exchange		
15.	Order Entry for Disclosed Order below 25% is not allowed		
16.	Maximum order per second does not exceed 120 order per second (should be mentioned in write-up)		
17.	Order Entry during Halt session is not allowed		
18.	Alerts of Maximum Single Transaction Value / Maximum Single Transaction Quantity / Limit breach for CTCL Terminal is handled by CTCL Manager (application) level.		
19.	MTM Calculation in Software is accurate.		
20.	Trade Modification from OWN to CLI or vice versa for CTCL ID is not allowed		
21.	Activity/ System Logs are maintained		
22.	Whether member has implemented access controls for IT systems & databases		
23.	Whether Member has implemented back-up and recovery policy and controls		
24.	Whether Member does Vulnerability Assessment and Penetration Testing for its critical assets & Application Security Assessments for all critical applications		
25.	Display of Brokerage statutory Regulatory Levies on terminal.		
26.	Display of Last Trading Day on CTCL/IBT/WT/DMA-CTCL front-end		
27. **A**	**At Individual Order Level**		
1.	**Price Check** Orders shall not be released in breach of the price bands /dummy filters as defined by the Exchange in respective segments. Additionally, Orders should not be placed at unrealistic price that are far away from the fair price at the relevant point of time. Appropriate internal systems/ checks in place to restrict placing orders at unrealistic prices.		

Sr. No.	Area of Audit	Complied (Yes/No)	Auditor's Remark
2.	**Quantity Limit Check** Orders shall not be released in breach of order quantity limit per order as defined by the Exchange in respective segments.		
3.	**Order Value Check** Orders are not released in breach of the "value per order" (combination of price and quantity checks) as defined by the Exchange for the security in respective segments.		
4.	**Regulator Violation Check for FPI Restricted Commodity Contracts** Orders shall not be released for security restricted by regulator from time to time. Appropriate limits for securities which are subjected to FPI limits as specified by regulator.		
28. **B**	**At Client Level**		
1.	**Cumulative Open Order Value Check** Orders shall not be released in breach of Individual client level cumulative open order value check at the client level. An open order value for a client is the total value of its unexecuted orders released from the trading members system. System shall not permit the user to set "Unlimited values".		
2.	**Net Position Vs. Available Margin Check** Orders shall not be released in breach of Net positions as against the available margin defined by the trading member for the client		
3.	**Position Limit Check** Provision to generate and monitor alerts on position limits at client level / member level as defined in the contract specifications. Further, Orders shall not be released in breach / violation of position limit at client level / member level and the same is validated with necessary risk mitigation checks / controls in the CTCL system of the member.		

Sr. No.	Area of Audit	Complied (Yes/No)	Auditor's Remark
4.	**Exposure Limit Check at individual client level and at overall level for all clients.** Orders shall not be released in breach of exposure limit as defined by the trading member for the client.		
5.	**Trading Limit Check & Security Wise Limit Check** Orders shall not be released in breach of security-wise value limit & **Trading Limit** as defined by the trading member for individual security.		
6.	**Turnover limits**		
7.	**Credit Check**		

Part III – ATF / DMA-ATF Checklist

Sr. No.	Area of Audit	Complied (Yes / No)	Auditor's Remark
12.	Product write-up of the software contains detailed strategy(ies) write-up with comprehensive note for the following points: m) Algo Software/strategy will not take liquidity away from market and is conducive to efficient price discovery/ fair play. n) The member has a system to identify dysfunctional algorithms. Further, the algorithmic system has pre-defined parameters for an automatic stoppage in the event of algorithmic execution leading to a loop or a runaway situation. o) Checks are in place to ensure the Maximum order per second does not exceed 120 orders per second. p) Checks are in place to ensure that OTR does not exceed the ratio prescribed by SEBI (i.e. for excessive modification and cancellation of orders). q) An Algorithmic trading software accounts for all executed, unexecuted and unconfirmed orders, placed by it before releasing further order(s). r) Automated Execution Check: An algo shall account for all executed, unexecuted and unconfirmed orders placed by it before releasing any further order/s.		
13.	Maker checker facility available for defining parameters in strategy		

Sr. No.	Area of Audit	Complied (Yes / No)	Auditor's Remark
14.	CTCL terminal info sent along with the orders placed complies with the guidelines laid by the Exchange. The orders generated by Automated Trading software are identified as Algorithm orders while being released to the Exchange.		
15.	IOC and Market orders are not allowed		
16.	Orders Modified / Cancelled / Rejected by Exchange / Member Admin - such information is displayed in Message bar / Log, Order Book with reasons for cancellation/rejection.		
17.	If Order book / Trade book is provided in software it must contain at least Order number, Order type, Symbol, Expiry, strike price and option type (for options), Date and Time, Price, Quantity, Validity, Reasons, Status, Market / Limit.		
18.	Order Entry during Halt session is not allowed		
19.	Strategy is behaving as expected while partial execution of orders and after DPR relaxation.		
20.	The members shall have the capability to set up and apply the necessary following risk control checks at the individual order level and client level before each order is generated: **Daily Price Limit**: Orders are not released in violation of the daily price limit defined in the contract specification or any other limit which may be prescribed by the Exchange. Additionally, Orders should not be placed at unrealistic price that are far away from the fair price at the relevant point of time. Appropriate internal systems/ checks in place to restrict placing orders at unrealistic prices. **Maximum Order Size / Position Limits**: (Maximum Single Transaction Value / Maximum Single Transaction Quantity): Order is not released in violation of the maximum order size limit / position limits at client / member level defined in the contract specification. *Alerts of Maximum Single Transaction Value / Maximum Single Transaction Quantity / DPR Limit breach for CTCL Terminal is handled at CTCL Manager level itself.		
21.	**Position Limits**: Provision to generate and monitor alerts on position limits at client level / member level as defined in the contract specifications. Further, Orders shall not be released in breach / violation of position limit at client level / member level and the		

Sr. No.	Area of Audit	Complied (Yes / No)	Auditor's Remark
	same is validated with necessary risk mitigation checks / controls in the algorithmic / CTCL trading system of the member.		
22.	MTM Calculation in Software is accurate (optional)		
23.	The algorithm strategy/ies are conducive to efficient price discovery and fair play and shall not take liquidity away from the market		
24.	Market price protection check		
25.	Whether member has implemented access controls for IT systems & databases		
26.	Whether Member does Vulnerability Assessment and Penetration Testing for its critical assets & Application Security Assessments for all critical applications		
27. **A**	**At Individual Order Level**		
16.1	**Price Check** Orders shall not be released in breach of the price bands /dummy filters as defined by the Exchange in respective segments. Additionally, Orders should not be placed at unrealistic price that are far away from the fair price at the relevant point of time, to ensure that the trades resulting from the execution of such orders are not in the nature of abnormal / manipulative trades. Appropriate internal systems/ checks in place to restrict placing orders at unrealistic prices.		
16.2	**Quantity Limit Check** Orders shall not be released in breach of order quantity limit per order as defined by the Exchange in respective segments.		
16.3	**Order Value Check** Orders are not released in breach of the "value per order" (combination of price and quantity checks) as defined by the Exchange for security in respective segments.		
16.4	**Regulator Violation Check for FPI Restricted Commodity Contracts** Orders shall not be released for security restricted by regulator from time to time. Appropriate limits for securities which are subjected to FPI limits as specified by regulator.		
15. **B**	**At Client Level**		
16.5	**Cumulative Open Order Value Check** Orders shall not be released in breach of Individual client level cumulative open order value check at the		

Sr. No.	Area of Audit	Complied (Yes / No)	Auditor's Remark
	client level. The open order value for a client is the total value of its unexecuted orders released from the trading members system. System shall not permit the user to set "Unlimited values".		
16.6	**Net Position Vs. Available Margin Check** Orders shall not be released in breach of Net positions as against the available margin defined by the trading member for the client		
16.7	**Position Limit Check** Provision to generate and monitor alerts on position limits at client level / member level as defined in the contract specifications. Further, Orders shall not be released in breach / violation of position limit at client level / member level and the same is validated with necessary risk mitigation checks / controls in the algorithmic / CTCL trading system of the member.		
16.8	**Exposure Limit Check at individual client level and at overall level for all clients.** Orders shall not be released in breach of exposure limit as defined by the trading member for the client.		
16.9	**Trading Limit Check & Security Wise Limit Check** Orders shall not be released in breach of security-wise value limit & Trading Limit as defined by the trading member for individual security.		
16.10	Turnover limits		
16.11	Credit Check		

Part IV IBT / WT – All check points are mandatory.

Sr. no.	Area of Audits		Complied (Yes/No)
I	**Risk Management**		
1	**Individual orders**	**Price check -** The price quoted by the order shall not violate the price bands defined by the exchange for security. For securities that do not have price bands, dummy filters shall be brought into effective use to serve as an early warning system to detect sudden surge in prices.	
2		**Quantity limit check -** The quantity quoted in the order shall not violate the maximum permissible quantity per	

Sr. no.	Area of Audits		Complied (Yes/No)
		order as defined by the exchange for the security.	
3		**Order value check -** The individual client level cumulative open order value check may be prescribed by the broker for the clients. Cumulative Open Order Value for a client is the total value of its unexecuted orders released from the stockbroker system.	
4	**Client Level**	**Exposure limits -** The broker shall ensure that trading limits/ exposure limits/ position limits are set for all clients based on risk assessment, credit quality and available margins of the client.	
5		**Turnover limits –** The Broker must set pre-defined limits on the turnover of each client.	
6		**Trading limits –** The broker have a system-based control on the trading limits of clients.	
7		**Cumulative open order value check -** Orders shall not be released in breach of Individual client level cumulative open order value check at the client level. An open order value for a client is the total value of its unexecuted orders released from trading members system. System shall not permit the user to set "Unlimited values".	
8		**Security wise limit check -** Orders shall not be released in breach of security-wise value limit as defined by the trading member for individual security.	
9	System is capable of assessing the risk of the client as soon as order comes in		
10	Margin requirements, payment & delivery obligations etc. informed to clients through system		
11	Review and release facility for orders which got rejected because of clients having exceeded limits etc.		
II	**Order Management**		
12	Order modification/ cancellation facility and trade history provided to clients		
13	Orders/ trades placed through either fixed Internet or wireless system should be accessible from both systems.		
14	TM follows similar logic/priorities used by the Exchange to treat client orders		
15	Internally generated unique numbering for all client order/trades		
16	To capture IP address for all orders		

Sr. no.	Area of Audits	Complied (Yes/No)
17	Order/ Trade confirmation sent to investor	
18	Order/ Trade confirmation displayed on website/ application on real time basis	
19	Reconfirmation of orders which are larger than that specified by TM's risk management system provided on the internet based system	
20	System doesn't have any functionality for matching of cross trades and all orders are offered to exchange trading system for matching	
21	In case of failure of the IBT or wireless network, alternative means of communication for placing orders are available	
III	**Systems, Infrastructure and Network**	
22	Location of all routing servers is within India	
23	Security, reliability & confidentiality of data through encryption	
24	Records are temper-proof	
25	Adequate data backup, data storage and data transfer capacity	
26	High system availability to ensure there is no single point failure.	
27	Adequate back-up (on-site as well as remote site) and restore systems in place to deliver sustained performance and high availability.	
28	Suitably qualified & Adequate personnel to handle communication including trading instruction & back-office work	
29	Ticker/quote/order book displayed on website also display the time stamp as well as the source of such information against the given information	
30	Website of the TM contains information for investor protection such as rules and regulations affecting client broker relationship, arbitration rules, investor protection rules etc. and hyperlink to exchange website providing such information	
31	Minimum information provided to investors on a handheld device along with address of website/ webpage where detailed information is available (Applicable for STWT only)	
IV	**Access and Security controls**	
32	User id	
33	First Level password (Private code)	
34	Other forms of access controls such as smart cards, biometric devices etc. (Applicable for STWT only)	
35	Automatic expiry of passwords at the end of a reasonable duration. Reinitialize access on entering fresh passwords	
36	2 factor authorization for login session and these 2 factors can't be the same	
37	Session login details are not stored on the devices used for internet-based trading and securities trading using wireless technology	
38	In case of no activity by the client, the system provides for automatic trading session logout	

Sr. no.	Area of Audits	Complied (Yes/No)
39	All transaction/activities/alert logs with proper audit facilities maintained in the system	
40	Secured Socket Level (SSL) Security for server access through Internet	
V	**Cyber Security & Cyber Resilience framework**	
41	Suitable Firewalls between trading set-up directly connected to an Exchange trading system and the Internet trading set-up	
42	Network security protocols & interface standards are as per prevalent industry standards	
43	Transactions are digitally signed to ensure client authentication and to support non-repudiation	
44	Adequate safety features to ensure it is not susceptible to internal/ external attacks	

Part V – DMA check, – All points are mandatory.

Sr. no.	Area of Audits		Complied (Yes/No)
I.	**Risk Management**		
1	**Individual orders**	**Price check -** The price quoted by the order shall not violate the price bands defined by the exchange for security. For securities that do not have price bands, dummy filters shall be brought into effective use to serve as an early warning system to detect sudden surge in prices.	
2		**Quantity limit check -** The quantity quoted in the order shall not violate the maximum permissible quantity per order as defined by the exchange for the security.	
3		**Order value check -** The individual client level cumulative open order value check may be prescribed by the broker for the clients. Cumulative Open Order Value for a client is the total value of its unexecuted orders released from the stockbroker system.	

Sr. no.	Area of Audits		Complied (Yes/No)
4		Appropriate limits for securities which are subjected to FII limits as specified by regulator / exchange	
5	Client Level	**Exposure limits -** The broker shall ensure that trading limits/ exposure limits/ position limits are set for all clients based on risk assessment, credit quality and available margins of the client.	
6		**Turnover limits –** The Broker must set pre-defined limits on the turnover of each client.	
7		**Trading limits –** The broker have a system-based control on the trading limits of clients.	
8		**Cumulative open order value check -** Orders shall not be released in breach of Individual client level cumulative open order value check at the client level. An open order value for a client is the total value of its unexecuted orders released from the trading members system. System shall not permit the user to set “Unlimited values”.	
9		**Credit Check -** The broker shall ensure that all DMA orders are routed through electronic/automated risk management systems of the broker to carry out appropriate validations of all risk parameters including Credit Checks before the orders are released to the Exchange.	
10		**Position Limits specified in derivative segment -** The broker shall ensure that trading limits/ exposure limits/ position limits are set for all DMA	

Sr. no.	Area of Audits		Complied (Yes/No)
		clients based on risk assessment.	
11		Net outstanding position to fully cover the emanating risk with client's available margin	
II.	**Order management**		
12	DMA orders are routed through electronic/automated RMS of the TM		
13	All DMA orders are routed to the exchange trading system through the broker's trading system		
14	Similar logic/priorities used by the SE to treat DMA client orders		
15	Internally generated unique numbering for all client order/trades		
16	DMA facility shall be offered only to those categories of investors which have been specified by Stock Exchange		
17	System doesn't have any functionality for matching of cross trades and all orders are offered to exchange trading system for matching		
III.	**Systems, Infrastructure and Network**		
18	Location of all servers is within India		
19	TM maintains logs for all activities to facilitate audit trail for all DMA orders and is able to provide identification of actual user-id for all such orders and trades		
20	TM systems have appropriate authority levels to ensure that the Risk Management limits can be set up only by persons authorized by the risk / compliance manager.		
IV	**Access and Security controls for clients**		
21	User id		
22	First Level password protection (Private code)		
23	Automatic expiry of passwords at the end of a reasonable duration.		
24	Reinitialization of access on entering fresh passwords		

It is hereby confirmed and certified that system audit of the software and systems used by _____ , a member of Multi Commodity Exchange of India Limited ('Exchange') has been conducted by me and have been found to be in compliance with the requirements stipulated by SEBI and Exchange and the above-mentioned software can be put to use.

We also certify that none of the current Directors / Partners / Promoters of the member are directly or indirectly related with any of the Directors / Promoters / Partners of _____ (Name of Auditing Firm) and there is no conflict of interest with respect to the member being audited.

Signature

(Name of the Auditor & Auditing firm)

CISA / DISA / CISM / CISSP Reg. No. :

UDIN:

Date:

Place:

Stamp/Seal: (valid digital signature is acceptable)

Annexure 30

Undertaking for ASP

To be executed on Rs. 1000/- stamp paper / applicable stamp duty of the state (whichever is higher), duly Notarized on all pages, signed, stamped & sealed by Authorized Signatory on all pages

I / We _____, an individual / a firm / company / a body corporate/ registered under the Indian Partnership Act, 1932 / a Company / Body Corporate incorporated under the Companies Act of 1956/ _____ Act, ___, and residing at / having our registered office at _____ (hereinafter referred to as the " _____" which expression shall, unless repugnant to the context or meaning thereof, be deemed to mean and include his/her/its successors, and permitted assigns) give this UNDERTAKING on this _____ day of _____20_____ at _____ IN FAVOUR OF Multi Commodity Exchange of India Ltd, a company incorporated under the Companies Act, 1956, with its Registered Office at Exchange Square, CTS No.255, Suren Road, Chakala, Andheri (East), Mumbai – 400 093 (hereinafter called 'MCX') (hereinafter referred to as the "**EXCHANGE**" which expression shall, unless repugnant to the context or meaning thereof, be deemed to mean and include its successors, and permitted assigns).

WHEREAS

a) MCX has provided Trading software to enable its members to trade.

b) MCX provides a Computer to Computer Link Facility (hereinafter referred to as the "CTCL facility") by which it provides a facility for order entry, receipt of order and trade confirmation and also for receipt of data relating to its trade quotations etc.

c) The Trading Members may introduce Internet Based Trading through order routing system for trading (hereinafter referred to as "IBT facility") and Wireless Trading through order routing system for trading (hereinafter referred to as "WT facility"), after obtaining prior written permission from MCX.

d) MCX has decided that it shall make the CTCL Facility available to its Trading Members / grant permission to Trading Members to offer IBT and/or WT facility on a case to case basis subject to such terms and conditions as MCX may impose from time to time.

e) Trading Members may develop the necessary software at their end for the purposes of CTCL facility/ IBT facility /WT facility or procure the same from such of those software vendors as may be identified by MCX, or avail of the services provided by service providers to facilitate IBT/ WT, after duly complying with the requirements as may be stipulated by MCX in this regard from time to time.

f) MCX has decided that the service providers shall be identified for this purpose, based on the application received from them and subject to fulfillment of such criteria as may be prescribed by MCX from time to time, and subject to such service provider executing an Undertaking in favour of MCX in the format prescribed by it and agreeing to abide by and be bound by the various terms and conditions which MCX may prescribe from time to time.

g) MCX has agreed to identify me / us as a service provider for the above purpose and I / we am/are desirous of providing such services (which may, *inter-alia,* include software / hardware / other infrastructure) to the Trading Member to enable the Trading Member to avail of the CTCL facility and/or IBT facility and/or WT facility, and shall fulfill all the terms and conditions as may be prescribed by MCX from time to time at its discretion in this regard.

NOW THEREFORE IN CONSIDERATION OF MCX having agreed to identify / identified me / us as a service provider for the aforesaid purposes, I / we hereby IRREVOCABLY UNDERTAKE and agree to abide by and be bound by the following terms and conditions:

1. I/We shall ensure that the connectivity of the CTCL facility and/or IBT facility and/or WT facility is as per MCX and Department of Telecommunications (DOT) approved network diagram of the CTCL facility and/or IBT facility and/or WT facility.

2. I/We undertake to pay any such license fees/charges/royalties as may be levied by MCX or any other regulatory/statutory authorities from time to time.

3. I/We shall provide the service to the Trading Member of MCX only after duly ensuring that all the requirements stipulated by MCX in this regard have been complied with by the Trading Member and that the Approved Users of the Trading Member shall not make the CTCL facility and/or IBT facility and/or WT facility available to any unauthorised person.

4. I/We undertake to ensure that the connectivity between the Trading Member and MCX shall be used only for application of the CTCL facility and/or IBT facility and/or WT facility.

5. I/We undertake to obtain the prior written approval of MCX for any changes to be made to the existing network diagram / software.

6. I/We undertake to ensure that access shall be given only to the individuals authorised and also a method shall be established to maintain an audit trail of all access and to ensure that unauthorised persons cannot access the system.

7. I/We undertake that the software design shall use only the specified messages given by MCX and shall consider all the structures defined by MCX from time to time. The Deliverables shall be:
   a. Basic functionalities as and when required by MCX
   b. Customisation of Trading Members needs as approved by MCX

8. I/We also undertake that the Software should provide all the essential functions as may be prescribed by MCX from time to time.

9. I/We undertake that controls shall be inbuilt by me / us to ensure that the orders are matched by the central computer of MCX only and there is no scope for orders being matched in my / our / Trading Members own private network.

10. I/We shall not develop any software which shall either directly or indirectly facilitate program trading, i.e. software to generate buy/sell orders without manual entry of orders on fulfillment of certain parameters.

11. I/We undertake that the following controls should be inbuilt in the Software by me/us to detect loss of product integrity:
    I. Data validation routines to detect input errors.
    II. Backup and recovery procedures.

12. I / We shall ensure that the Approved Persons shall not make the CTCL facility and/or IBT facility and/or WT facility available to any other person and that there shall be no provision in the Software to enable such persons to do so.

13. I / We shall ensure that position monitoring etc., shall be inbuilt in the CTCL facility and/or IBT facility and/or WT facility and it shall be flexible to change as per regulator and/or Exchange from time to time.

14. I / We shall ensure that the CTCL facility and/or IBT facility and/or WT facility shall be developed so as to generate the following from the System for the purpose of verification during the inspection:
    I. Number of Users connected on to the Network.

II. Number of Dealers connected on to the Network including privileges to each Dealer.
III. All the systems log and audit trails of the Dealer and the Trading Member.
IV. Provision for entering complementary dummy orders.

15. I/We undertake that:

(i) MCX shall have the right and privilege of inspecting and testing the Software at my/our site and the Trading Members site without any prior intimation/notice. The source code of the Software shall be available at both, my/ our site as well as the Trading Member's site for verification.
(ii) I / We shall make available Prototype and the technical specifications of the Software to MCX for testing purposes.
(iii) I / We shall be responsible to fix the bugs in the Software if any, found at the time of testing.

16. I / We shall meet the criteria set to measure the expected level of performance.

17. I / We shall provide the documentation i.e. training manuals required to operate the product and use of system outputs by the Trading Member, with the Software. Further, such documentation shall include the potential error conditions and recommend action in the event of occurrence of error.

18. I / We undertake to provide User training first when the product is installed and thereafter whenever a major upgrade is released to the Trading Member's Personnel for the following:
(i) Use of Product
(ii) Maintenance of the product.

Further, I / We also undertake that the frequency and caliber of the Vendor Personnel providing the training shall be as specified.

19. I / We undertake that:
(i) All material and information which has or will come into my /our possession or knowledge in connection with this agreement or the performance hereof, consists of confidential and proprietary data, whose disclosure to or use by third parties shall be damaging or cause loss to MCX and its Trading Members, I / We agree to hold such material and information in strict confidence, not to make use thereof other than for the performance of this Agreement, to release it only to my/our employees requiring such information and that too only with the written consent of MCX, and not to release or disclose it to any other parties. I / We shall take appropriate action with respect to my / our employees to ensure that the obligations of non-use and non-disclosure of confidential information under this Agreement are fully satisfied and shall also ensure that my/our Employees are aware and comply with the above provisions. The provisions of this clause shall survive the termination of this agreement. For the purpose of this clause the term data shall include, amongst other things technical data which may be divulged by the Trading Member during the normal course of development of the software and information relating to the operations of MCX.

(ii) I / We shall not in any way represent that the software developed is a part of the MCX Trading software.

(iii) I / We shall not advertise or publish any brochure, pamphlet, booklet, notice, or promotional material mentioning MCX or the services to be provided under this Agreement without the prior written consent of MCX.

(iv) I / We shall keep full security of MCX's / Trading Members' programs, databases and computer records in accordance with best computing practices.

20. I / We shall develop the software / system after considering the current and expected increase in workload, to ensure that the desired efficiency can be maintained with future workloads.

21. I / We shall develop the software and make it compatible with other Operating Systems, in case of any need to transfer the Software from one piece of hardware to another due to technological changes with prior written consent of MCX.

22. I / We shall provide upgrade to the application software / hardware as and when the need for the same arises and in accordance with the requirements of MCX.

23. I / We undertake to make the Software compatible with the MCX Trading system, upon prior written consent of MCX, in case any modification is made to the MCX Trading software by MCX and the same is required to be incorporated in the Software.

24. I / We am / are fully aware that MCX shall not be responsible for development, maintenance, updates, upgrades, error fixes and other support functions.

25. I / We undertake to provide the training and documentation as and when the Software is technically upgraded.

26. I / We undertake to ensure as follows:

    (i) That in case of failure or malfunctioning of the Software / System , I/We shall make such first level trouble shooting and rectification of the Software / System problem to restore the Software / System in its proper operating condition at no cost to the Trading Member.

    (ii) That I / We shall provide services for regular onsite maintenance of the Software / System in such manner and at such time intervals as specified by the Trading Member. The fees for the same shall be the amount mutually agreed upon by the Trading Member and me/us and shall not at any point of time be unreasonable so as to put the Trading Member in hardship. We are also aware that MCX shall in no way be responsible for non-fulfilment of either this or any other condition by the Trading Member.

    (iii) That I/We shall provide services to Trading Member at any location in the country which the Trading Member desires to operate from.

27. I / We confirm that the Software / System complies with all the requirements stipulated by MCX and Regulator in this regard and undertake that I / we shall modify the Software / System, if necessary to ensure continued compliance with the requirements of MCX / Regulator / any other authority as may be issued from time to time.

28. I / We am/are aware and agree that I / We am/are only acting as a facilitator, facilitating trading and other services, as and when provided, on the Internet, through maintenance of the application / systems / portal, etc., and I / We shall not involve or associate myself / ourselves directly or indirectly in any manner whatsoever with the act of trading.

29. I / We hereby undertake to duly inform MCX in case of any cause, resulting in any change to my/our entity, or any change in any of the eligibility criteria based on which we have been identified as an Application Service Provider (ASP) for these purposes by MCX at present.

30. I / We hereby undertake to duly inform MCX the list of Trading Members who are availing our services along with the details required by MCX from time to time.

31. That during the continuation of this Agreement if any modification/amendment is required by MCX/Trading Member, to be made by us, I/We agree and undertake to make the same.

32. I / We shall render all possible assistance and co-operation to MCX by providing access to any kind of information in any form as it may require and I/we hereby undertake to produce such documents,

records, accounts, books, data howsoever stored including data stored in magnetic tapes, floppy diskettes, etc. and any other information as may be required by MCX at its discretion.

33. I / We agree and undertake that MCX should not be held liable and responsible for any direct or indirect loss, damage, costs, claims and expenses whatsoever caused or contributed by any event of force majeure. For the purposes of this Clause, "Force Majeure" means and includes wars, insurrections, revolution, fires, floods, epidemic, quarantine restrictions, declared general strikes in relevant industries, act of God, act of the Government of India and any concerned State Government and such other acts or events beyond MCX's control and further the above is without prejudice to the rights already accrued to MCX due to my/our failure to perform either in full or in part, my/our obligations prior to the occurrence of events of Force Majeure.

34. I / We shall indemnify and keep the indemnified MCX harmless against every and all claims, demand, damages, liabilities, losses and expenses suffered by it directly or indirectly by reason of my / our non-compliance, contravention with any of the provisions of this Undertaking or by reason of bugs or malfunctioning of the software provided by us to the Trading Members.

35. I / We agree that no forbearance, delay or indulgence by MCX in enforcing the provisions of this Undertaking shall prejudice or restrict the rights of MCX nor shall any waiver of its rights operate as a waiver of any subsequent breach and no rights, powers, remedies herein conferred upon or reserved for MCX is exclusive of any other right, power or remedy available to MCX and each right, power or remedy shall be cumulative.

36. I / We undertake that any declaration or other notice to be given by me/us to MCX shall be sent by registered letter or telex/cable or facsimile transmission to the address first mentioned above.

37. That I / we shall execute, sign, and subscribe to such other documents, papers, agreement, covenants, bonds, and/or undertakings as may be prescribed or required by MCX from time to time.

38. I/We also agree that in the event of my/our non-compliance with any of the provisions as mentioned above, MCX shall take such action against us as it may deem fit in this regard.

39. I/ we agree that in the event that any terms, conditions or provisions of this Undertaking is held to be in violation of any applicable law, statute or regulation the same shall be deemed to be deleted from this Undertaking and shall not affect the validity or enforceability of the remaining rights, duties and obligations under this Undertaking.

40. I/ we hereby represent and warrant to MCX as follows:
    a) I/ we have duly organized and validly existing under the laws of India and has full power and authority and has all material governmental licenses, consents and approvals necessary to own my/our assets and properties and to carry on its business as now conducted.

    b) I/ we have all necessary powers, authority and approvals to execute and deliver this undertaking and to perform all of its obligations arising or created hereunder.

    c) There exists no undertaking, commitments or agreements of any nature which may conflict in interest with this undertaking, and

    d) I/ we are financially sound and, other than as disclosed, do not have any pending debt or other financial obligations in any manner whatsoever.

    e) Person signing onto this Undertaking on my/our behalf has been duly authorized to do so.

f) That upon execution and delivery hereof and at the execution of this Undertaking and any undertakings contemplated herein, all of such shall be legal, valid and binding obligations on me/ us and shall be enforceable against me/ us in accordance with their respective terms.

g) I/ we hereby agree that I/ we shall perform my/our role in the manner specified in this undertaking and fulfill my/our duties, and obligations in the manner specified in this undertaking.

41. I/ we hereby undertake that nothing in this Undertaking shall be deemed to constitute or be construed as constituting a partnership, joint venture, agency or the relationship of principal and agent and I/ we shall not have any authority to bind MCX in any way.

42. I/ we hereby undertake that except as agreed in this Undertaking, I/ we shall not have the right to assign or otherwise transfer this Undertaking, or any right or obligation under this Undertaking to any other party, without the prior written consent of the other Party.

43. I/ we hereby agree that no modification or amendment to this Undertaking and no waiver of any of the terms or conditions hereof shall be valid or binding unless made in writing and duly signed by MCX.

44. I we hereby further undertake and agree to the following:

a) Any and all disputes or differences between us and MCX arising out of or in connection with this Undertaking or its performance shall, so far as it is possible, be settled by negations between us and MCX amicably through consultation between our representatives and MCX.

b) Any dispute or difference arising out of or in connection with this Undertaking, which cannot be amicably settled within 30 (thirty) days, shall be referred to the sole arbitrator to be appointed by MCX. Arbitration shall be governed by the Arbitration and Conciliation Act, 1996. The award passed by the Arbitrator shall be final and binding on us. The language of arbitration shall be English, and the venue of arbitration shall be Mumbai.

c) I/ we shall bear and pay all the costs and expenses in connection with the arbitration proceedings unless the arbitrators direct otherwise.

d) I/ we must continue to fulfill my/ our obligations under this Undertaking to the extent reasonably practicable based upon the nature of the dispute during the pendency of a Dispute Resolution.

e) The arbitration proceedings, including the arbitral award shall be kept confidential.

45. I/ we hereby undertake and agree that this Undertaking shall be governed in accordance with the laws of India and shall be subject to the exclusive jurisdiction of the courts in Mumbai, India.

IN WITNESS WHEREOF this Undertaking is executed by the undersigned on the day, month, year and the place first mentioned above.

SIGNED, SEALED AND DELIVERED BY

_____

For and on behalf of _____

_____

In The presence of Witness:

Sr. No.	Name	Address	Signature

1.			
2.			

Annexure 31

Application for enabling Tick by Tick Trading Market Data (EOBI)
(On the letterhead of the Trading Member)

To,
CTCL Department,
Multi Commodity Exchange of India Limited
Exchange Square, CTS No-255, Suren Road,
Chakala, Andheri (East),
Mumbai – 400 093.

I/We …… (Name of the Trading Member) hereby apply for enabling Tick by Tick Trading Market Data (EOBI)

Sr.	Particulars	Details
1.	Name of the trading member	
2.	Member Id	
3.	Registered Office/ Correspondence address:	
4.	Telephone & Fax No.:	
5.	Name(s) & Designation of Authorised Signatory:	
6.	Contact details (Phone, Fax, Email) of Authorised Signatory:	
7.	Correspondence Address of Authorised Signatory:	
8.	IP Address of Leased Line	
9.	Empanelled Vendor Name / In-house/ Name of Non-Empanelled vendor	
10.	Name of the Software and Version Number	
11.	Algo Strategy Name and Version number	
12.	Detailed Product Write-up	
13.	Allow Interactive feed to be disabled	**Yes**

I / We certify that all the statements are true and correct to the best of our knowledge. We are aware that in case any of the statements are found to be incorrect or false, we are liable for disciplinary action.

I/We undertake that Tick-by-Tick Trading Market Data (EOBI) shall be used exclusively for the purpose of our own activities and for activities of our clients on MCX platform only.

I/We undertake that we should keep Tick by Tick Trading Market Data (EOBI) data received from the Exchange strictly confidential and shall not disclose the same to unauthorized persons.

I/We undertake to abide by any action deemed fit by the Exchange in case of non-compliance of the conditions imposed by the Exchange from time to time.

I / We understand that the Exchange reserves the right to modify or withdraw this facility.

Place:
Date:
Signature of the Authorised representative of the trading member & Stamp (valid digital signature is acceptable)

Annexure 32

Application for enabling Enhanced Market Data Interface (EMDI)
(On the letterhead of the Trading Member)

To,
CTCL Department,
Multi Commodity Exchange of India Limited
Exchange Square, CTS No-255, Suren Road,
Chakala, Andheri (East),
Mumbai – 400 093.

I/We …… (Name of the Trading Member) hereby apply for enabling Enhanced Market Data Interface (EMDI)

Sr.	Particulars	Details
14.	Name of the trading member	
15.	Member Id	
16.	Registered Office/ Correspondence address :	
17.	Telephone & Fax No.:	
18.	Name(s) & Designation of Authorised Signatory:	
19.	Contact details (Phone, Fax, Email) of Authorised Signatory:	
20.	Correspondence Address of Authorised Signatory:	
21.	IP Address of Point to Point Leased Line	
22.	Empanelled Vendor Name / In-house/ Name of Non-Empanelled vendor	
23.	Name of the Software and Version Number	
24.	Algo Strategy Name and Version number	
25.	Detailed Product Write-up	
26.	Allow Interactive feed to be disabled	**Yes**

I / We certify that all the statements are true and correct to the best of our knowledge. We are aware that in case any of the statements are found to be incorrect or false, we are liable for disciplinary action.

I/We undertake that Enhanced Market Data Interface (EMDI) should be used exclusively for the purpose of our own activities and for activities of our clients on MCX platform only.

I/We undertake that we shall keep Enhanced Market Data Interface (EMDI) data received from the Exchange strictly confidential and shall not disclose the same to unauthorized persons.

I/We undertake to abide by any action deemed fit by the Exchange in case of non-compliance of the conditions so imposed by the Exchange from time to time.

I / We understand that the Exchange reserves the right to modify or withdraw this facility.

Place:
Date: _____
Signature of the Authorised representative of the trading member & Stamp (valid digital signature is acceptable)

Annexure 33 Terms and Condition

PART – 1: DMA FACILITY USED BY THE CLIENT

1. The client is expected to be fully aware of the risks associated with the market and the financial instruments being traded on stock exchanges through DMA. The client shall be responsible for complying with laws, rules, regulations, notifications etc issued by regulatory authorities as may be applicable from time to time.

2. The client shall ensure that DMA facility provided by the Broker is used only to execute the trades of the client and shall not be used for transactions on behalf of any other person / entity.

3. The client shall be responsible for ensuring that only persons authorized by it shall access and use the DMA facility provided by the Broker. All orders originating from such facility / system shall be deemed to be authorized by the client.

4. Where the client accesses or proposes to access the Broker's DMA platform through external applications, including but not restricted to services of third party service provider(s), own application(s), etc., the client shall ensure that such applications have adequate security features including but not limited to access controls, password protection etc; and that appropriate agreement(s) with such third party service provider(s) etc. for ensuring secured access and communication has been executed and are in place.

5. The client shall ensure that no person authorized by them to place orders through DMA facility provided by the broker has been / is involved in any adverse action by any regulatory authorities in any jurisdiction.

6. The client shall provide the names of authorized individual users to the broker prior to placing DMA orders.

7. The client shall not use or allow the use of DMA facility to engage in any form of market misconduct including insider trading and market manipulation or conduct that is otherwise in breach of applicable laws, rules and regulations.

8. The client is aware that Algorithmic trading i.e. generation of orders using automated execution logic is governed by Algorithmic trading guidelines issued by SEBI and Exchanges and requires prior approval of the exchanges. The client shall ensure that new algorithms and changes to existing approved algorithms are not used through the DMA facility without prior approval of concerned stock exchanges. The client shall ensure that it has the necessary checks and balances, in place to identify and control dysfunctional algorithms and the Broker shall have the right to shut down the DMA facility and remove any outstanding client orders in case of any suspected dysfunctional algo.

9. The client is aware that authentication technologies and strict security measures are required for routing orders through DMA facility and undertakes to ensure that the password of the client and/or his representative are not revealed to any third party.

10. The client acknowledges that all DMA orders placed by them through the DMA facility would be validated by the risk management system of the broker. The Broker has the right to accept or reject any DMA order placed by the client at its sole discretion.

11. The client shall be solely responsible for all acts or omissions of any person using a DMA facility and shall be bound to accept and settle all transactions executed through the DMA facility provided by the Broker notwithstanding that such order(s) may have been submitted erroneously or by an unauthorized user, or that its data is inaccurate or incomplete when submitted, or the client subsequently determines for whatever reason that the order should not have been submitted.

12. The client shall notify the Broker in the event of DMA facility being compromised. Upon receipt of this notice, client's DMA facility shall be promptly disabled but the client shall continue to be responsible for any misuse of the DMA facility or any orders placed through the DMA facility as a result of the compromise of the DMA facility at their end. The Broker shall not be liable for any loss, liability or cost whatsoever arising as a result of any unauthorized use of DMA facility at the client's end.

13. In the event of winding-up or insolvency of the client or his otherwise becoming incapable of settling their DMA obligation, broker may close out the transaction of the client as permissible under byelaws, rules, regulations of the exchanges. The client shall continue to be liable for any losses, costs, and damages arising thereof.

14. The client is fully aware of the risks of transmitting DMA orders to the Broker's DMA facility through vendor systems or service providers and the Broker is not responsible for such risks.

15. The client should be aware of the fact that neither the DMA facility will be uninterrupted nor error free nor the results that may be obtained from the use of the service or as to the timeliness, sequence, accuracy, completeness, reliability or content of any information, service or transaction provided through DMA. The DMA service is provided on an "as is", "as available" basis without warranties of any kind, either express or implied, including, but not limited to, those of information access, order execution, merchantability and fitness for a particular purpose. The Broker shall not be liable for any loss, damage or injury including but not limited to direct lost profits or trading losses or any consequential, special, incidental, indirect, or similar damages from the use or inability to use the service or any part thereof.

16. The Broker shall have the right to withdraw the DMA facility in case of: -
    - Breach of the limits imposed by the broker or any regulatory authority.
    - On account of any misuse of the DMA facility by the client or on instructions from SEBI/Exchanges.
    - Any other reason, at the discretion of the broker

    The broker shall endeavor to give reasonable notice to the client in such instances.

17. The Broker shall not be liable or responsible for non-execution of the DMA orders of the client due to any link/system failure at the client/ Broker/ exchange(s) end.

18. This document shall not be altered, amended and /or modified by the parties in a manner that shall be in contravention of any other provisions of this document. Any additional terms and conditions should not be in contravention with rules / regulations /bye-laws/circulars, of the relevant authorities including applicable stock exchanges as amended from time to time.

PART – 2: DMA FACILITY USED BY THE CLIENT THROUGH AN INVESTMENT MANAGER

1. The client shall be solely responsible for all acts or omissions of any person using a DMA facility and shall be bound to accept and settle all transactions executed through the DMA facility provided by the Broker to the investment manager acting on behalf of the client, notwithstanding that such order(s) may have been submitted erroneously or by an unauthorized user, or that its data is inaccurate or incomplete when submitted, or the client subsequently determines for whatever reason that the order should not have been submitted.

2. The investment manager is expected to be fully aware of the risks associated with the market and the financial instruments being traded on stock exchanges through DMA. The investment manager shall be responsible for complying with laws, rules, regulations, notifications etc. issued by regulatory authorities as may be applicable from time to time.

3. Where the DMA facility provided by the Broker is to execute trade on behalf of one or more clients, by the investment manager, then it is represented and warranted that, at each time an order is placed by such investment manager through the DMA facility of the Broker -

    a) The investment manager has due authority to deal on behalf of the client(s) through the Broker, specifying the roles and responsibilities of the investment manager in execution of transactions on behalf of the client(s).

    b) The investment manager shall comply with any applicable laws, rules and regulations affecting or relating to trading operations.

    c) The investment manager and the client(s) are bound by the terms and conditions hereof;

    d) The investment manager using the DMA facility for routing client(s) orders shall not cross trades of their client(s) with each other. Accordingly, all orders should be offered in the market.

    e) The stock exchange or SEBI may at any time call for any information from a client(s) or an investment manager acting on behalf of the client(s) with respect to any matter relating to the activity of the investment manager. The investment manager shall also furnish any information specifying the roles and responsibilities of the investment manager in execution of transactions on behalf of the client(s), as and when required by the exchanges or SEBI.

4. The investment manager shall be responsible for ensuring that only persons authorized by it shall access and use the DMA facility provided by the Broker. All orders originating from such facility / system shall be deemed to be authorized by the client.

5. Where the investment manager accesses or proposes to access the Broker's DMA platform through external applications, including but not restricted to services of third party service provider(s), own application(s), etc., the investment manager shall ensure that such applications have adequate security features including but not limited to access controls, password protection etc; and that appropriate agreement(s) with such third party service provider(s) etc. for ensuring secured access and communication has been executed and are in place.

6. The investment manager shall ensure that no person authorized by them to place orders through DMA facility provided by the broker has been / is involved in any adverse action by any regulatory authorities in any jurisdiction.

7. The investment manager shall provide the names of authorized individual users to the broker prior to placing DMA orders.

8. The investment manager shall not use or allow the use of DMA facility to engage in any form of market misconduct including insider trading and market manipulation or conduct that is otherwise in breach of applicable laws, rules and regulation.

9. The investment manager is aware that Algorithmic trading i.e. generation of orders using automated execution logic is governed by Algorithmic trading guidelines issued by SEBI and Exchanges and requires prior approval of the exchanges. The investment manager shall ensure that new algorithms and changes to existing approved algorithms are not used through the DMA facility without prior approval of concerned stock exchanges. The investment manager should ensure that it has necessary checks and balances, in place to identify and control dysfunctional algorithms and the Broker shall have the right to shut down the DMA facility and remove any outstanding client orders in case of any suspected dysfunctional algo.

10. The investment manager is aware that authentication technologies and strict security measures are required for routing orders through DMA facility and undertakes to ensure that the password of the investment manager and/or his representative are not revealed to any third party.

11. The investment manager acknowledges that all DMA orders placed by them through the DMA facility would be validated by the risk management system of the broker. The Broker has the right to accept or reject any DMA order placed by the investment manager at its sole discretion.

12. The investment manager shall notify the Broker in the event of DMA facility being compromised. Upon receipt of this notice, client's DMA facility shall be promptly disabled but the client shall continue to be responsible for any misuse of the DMA facility or any orders placed through the DMA facility as a result of the compromise of the DMA facility at their end. The Broker shall not be liable for any loss, liability or cost whatsoever arising as a result of any unauthorized use of DMA facility at the client's end.

13. In the event of winding-up or insolvency of the client or his otherwise becoming incapable of honoring their DMA obligation, broker may close out the transaction of the client as permissible under bye-laws, rules, regulations of the exchanges. The client shall continue to be liable for any losses, costs, damages arising thereof.

14. The investment manager is fully aware of the risks of transmitting DMA orders to the Broker's DMA facility through vendor systems or service providers and the Broker is not responsible for such risks.

15. The investment manager should be aware of the fact that neither the DMA facility will be uninterrupted nor error free nor the results that may be obtained from the use of the service or as to the timeliness, sequence, accuracy, completeness, reliability or content of any information, service or transaction provided through DMA. The DMA service is provided on an "as is", "as available" basis without warranties of any kind, either express or implied, including, but not limited to, those of information access, order execution, merchantability and fitness for a particular purpose. The Broker shall not be liable for any loss, damage or injury including but not limited to direct lost profits or trading losses or any consequential, special, incidental, indirect, or similar damages from the use or inability to use the service or any part thereof.

16. The Broker shall have the right to withdraw the DMA facility in case of:-

    (a) Breach of the limits imposed by the broker or any regulatory authority.

    (b) On account of any misuse of the DMA facility by the client/ investment manager or on instructions from SEBI/Exchanges.

    (c) Any other reason, at the discretion of the broker

    The broker shall endeavor to give reasonable notice to the client in such instances.

17. The Broker shall not be liable or responsible for non-execution of the DMA orders of the client due to any link/system failure at the client/ Broker/ exchange(s) end.

18. This document shall not be altered, amended and /or modified by the parties in a manner that shall be in contravention of any other provisions of this document. Any additional terms and conditions should not be in contravention with rules / regulations /byelaws/circulars, of the relevant authorities including applicable stock exchanges as amended from time to time.

Annexure 34

DETAILS TO BE PROVIDED TO THE STOCK BROKER

On the letter head of the Investment manager

PART I

S.No.	Particulars	
1	Details of The Investment Manager:	
2	Name of The Investment Manager:	
3	Name of The Home Regulator	
4	Country of Jurisdiction of Home	
5	Regulator Registered /Regulated In-Home Jurisdiction as:	
6	SEBI Registration Number:	

PART II

CLIENT(s) DETAILS:

S. No.	NAME OF THE ENTITY	NAME OF THE REGULATOR	REGULATED IN INDIA AS	REGISTRATION NUMBER	PAN

Annexure 35

Application form for permission to provide Computer to Computer Link (CTCL) / Internet based Trading (IBT) / Wireless Trading (WT) services using an ASP
(To be executed on letterhead of the Member)

We/I, _____ am/are trading member/s of Multi Commodity Exchange of India Limited; hereby apply for the permission of the Exchange for providing CTCL / IBT / WT facility and services.

A. GENERAL

Member ID	
SEBI Registration number	
Registered Office/ Office address	
Telephone / Fax No.	
Email ID	
Name of the Authorised Signatory and designation	
Contact address of the Authorised Signatory, telephone numbers, fax number	
Name of the Application Service Provider (ASP)	
Copies of the agreement/MOU entered into with the ASP to be enclosed	
User ID to be used for CTCL / IBT / WT using ASP facility	

B. PERSONNEL REQUIREMENTS

Total number of personnel are currently employed with the breakup of dealers, back-office personnel etc.	
No. of personnel to be dedicated to handling CTCL / IBT / WT service with break-up for communication handling, back office etc.	
Names of personnel, qualification, etc. of personnel specified in point 2 above	
Whether above personnel handling Internet trading have obtained certification in the MCCP module of the Exchange (copies of mark sheet / certificates to be enclosed): YES / NO	

We certify that all the statements are true and correct to the best of our knowledge. We are aware that in case any of the statements are found to be incorrect or false, we are liable for disciplinary action. We undertake to ensure continuous compliance with the requirements of the Exchange, DoT policy and Regulatory directives and other statutory requirements etc. in this regard, as may be issued from time to time.

We confirm and certify that the software / system provided by the Application Service Provider (ASP) for trading has undergone testing and we are satisfied with the product, and it complies with the stipulations of the Exchange.

Signed, sealed and delivered by the Authorised representative of the member.

Name
Designation

Signature of the Authorised Signatory

Date:
Place:

Annexure 36

CTCL / IBT / WT UNDERTAKING

(To be submitted by member)

To be executed on Rs. 1000/- stamp paper / applicable stamp duty of the state (whichever is higher), duly Notarized on all pages, signed, stamped & sealed by Authorized Signatory on all pages

I / We, _____, an individual /a firm registered under the Partnership Act, 1932 / a Company / body corporate incorporated under the Companies Act of 1956 /_____ Act, 19__, and residing at / having our office/ registered office at _____ (hereinafter referred to as the 'Undersigned' which expression shall unless repugnant to the context include her/his / its successors, assigns and legal representatives) give this Undertaking on this _____ day of _____20_____ at _____ IN FAVOUR of MULTI COMMODITY EXCHANGE OF INDIA LTD, a company incorporated under the Companies Act, 1956 and a Commodity Exchange duly recognized by the Central

Government/Forward Markets Commission having its registered office at Exchange Square, CTS No.255, Suren Road, Chakala, Andheri (East), Mumbai – 400 093, India (hereinafter referred to as “MCX”, which expression shall unless repugnant to the context include its successors, assigns and legal representatives)

1. WHEREAS, MCX provides *inter-alia* a Computer To Computer Link (hereinafter referred to as the "CTCL facility” as well as facility to use Internet Based Trading and Wireless Trading) through Application Service Provider (ASP) by which MCX provides a facility to its Trading Members to access the trading system of MCX.

2. WHEREAS, MCX makes available the CTCL and/or Internet-based trading and/or Wireless Trading facility to its Trading Members through ASP on case-to-case basis, subject to such terms and conditions as specified by MCX from time to time. One of the conditions is that each trading member willing to avail of the CTCL and/or internet-based trading and/or Wireless Trading facility through ASP shall execute an undertaking in favour of MCX in the format prescribed by MCX and agree to abide by any modifications / additions, as may be carried out by MCX, from time to time.

3. WHEREAS, I/We have been admitted to the Trading Membership of MCX and am/are desirous of availing the CTCL / Internet Based trading / Wireless Trading facility through ASP by fulfilling all the terms and conditions as may be prescribed by MCX from time to time at its discretion in this regard.

NOW THEREFORE IN CONSIDERATION OF MCX having agreed to allow the Member at his / its request, to avail of the CTCL and/or Internet based trading and/or wireless trading facility through ASP, the Trading Member hereby IRREVOCABLY UNDERTAKES and agrees to abide by and be bound by the following terms and conditions:

1. That I / We shall make the CTCL/IBT/WT facility available to the Authorized Persons only after obtaining the prior written consent of MCX and subject to such terms and conditions as may be prescribed by MCX from time to time.

2. I / We undertake and agree to adhere to the provisions of the Bye-laws, Rules, Regulations and Circulars of Exchange and the Regulations, Guidelines and Circulars issued by Securities Exchange Board of India (SEBI) from time to time relating to use, operation of the Trading System, CTCL, IBT and Wireless Trading facility.

3. That notwithstanding anything contained in this Undertaking, all my / our liabilities and obligations as a Trading cum Clearing Member of MCX shall not be affected nor shall be prejudiced in any manner whatsoever.

4. That without prejudice to the generality of the clause (3) of this Undertaking, I / we shall be responsible to settle all the trades executed by the Approved Persons on my / our behalf whether such trades were executed with or without my permission / knowledge and that I shall be bound to complete / fulfill all my / our obligations / liabilities / commitments arising due to the trades executed by the Approved Persons on my / our behalf.

5. That I/We shall abide by, comply with and be bound by the Rules, Bye-laws, and terms and conditions as applicable for CTCL and/or Internet Based Trading and/or Wireless Trading facility of MCX as in existence or as may be modified / amended by the relevant authority from time to time and any circular, order, direction, notice, instructions issued and / or as maybe modified or amended from time to time by the relevant authority.

6. That MCX may, at its discretion, make the CTCL/IBT/WT facility available to me / us at MCX address first mentioned above or at any other address as MCX from time to time may notify to me / us or approve as being the location.

7. That MCX shall be entitled to amend its Rules, Bye Laws, Regulations and terms and conditions for CTCL and/or Internet Based Trading and/or Wireless Trading facility unilaterally and I/We shall be deemed to have consented to them, and accordingly be bound by the Rules, Bye-laws, Regulations and terms and conditions for CTCL and/or Internet Based Trading and/or Wireless Trading facility prevailing from time to time and MCX shall be entitled to all powers vested in them under the Rules, Bye-laws and Regulations, by which I/We unconditionally agree to be bound.

8. That I/We shall execute, sign, subscribe, to such documents, papers, agreements, covenants, bonds and / or undertakings whether legal or otherwise as maybe required by MCX from time to time.

9. That without prejudice to the rights, remedies whether legal or otherwise available to MCX upon my / our non-compliance with this Undertaking, I/We shall indemnify and keep indemnified MCX and its directors, managers, officers, employees and authorized representatives against any loss / damage suffered by it whether legal or otherwise arising due to non-compliance by me/us with the provisions of this Undertaking.

10. That MCX, at its absolute discretion, may make the CTCL/IBT/WT facility available to me / us only from the date of my / our enablement on the CTCL/IBT/WT facility till such time as it may deem fit and further that the CTCL/IBT/WT facility may at any time be withdrawn by MCX at its discretion without giving me / us any notice or any reasons whatsoever.

11. That the CTCL/IBT/WT facility if made available to me / us by MCX will be made available to me / us by MCX on a non-exclusive basis only and that the same may be made available by MCX, at its discretion, to any other Trading cum Clearing Member whomsoever on such terms and conditions as it may deem fit.

12. That I / We may be entitled by giving one month's written notice to request MCX to withdraw from the CTCL/IBT/WT facility extended to me / us and such withdrawal shall be subject to such terms and conditions as may be prescribed by MCX including payment of such compensation to MCX as may be decided by MCX at its discretion.

13. That I / We shall be responsible and take all such steps, actions and proceedings to ensure and keep ensured that no Authorized Persons in any way further makes the CTCL/IBT/WT facility available to any other person nor shall extend the CTCL/IBT/WT facility outside his/new premises and that in case I / We fail to ensure the same, MCX shall be empowered to take such action as it may deem fit, which action may include disabling me / us from having access to CTCL/IBT/WT facility, and taking of such disciplinary actions as it may deem fit.

14. I / we undertake that
    a) I / We shall at my / our own expenses provide all lines, cabling, software, hardware, equipment and other communication facilities required for transmission of the data between the Receiving Premises and my / our server at my / our office and also obtain the necessary approvals from relevant authorities.

    b) I / We shall ensure that the connectivity of the CTCL/IBT/WT facility is as per the MCX and Department of Telecommunications (DoT) and/or Mahanagar Telephone Nigam Limited (MTNL) and/or any other appropriate governmental / statutory authority approved network diagram and that I/we shall produce the necessary approvals to MCX in order to meet one of its requirements for enabling me/us for having access to the CTCL/IBT/WT facility.

    c) I / We undertake to ensure that access shall be given only to Authorized persons and also a method shall be established to ensure that non-Approved persons cannot access the system.

d) I / We undertake to offer facility of IBT/WT to any client only after obtaining undertaking from the client that they are fully aware and agree for additional provisions specifying possible risks, responsibilities, obligations and liabilities associated with Internet Based Trading/ Wireless Trading as mentioned in Annexure -3 of Exchange circular MCX/COMP/469/2011 dated December 22, 2011.

e) I/We undertake to pay any such license fees/charges/royalties as may be levied by DoT/MTNL/MCX/any other regulatory/statutory authorities from time to time. MCX fees if any for using the CTCL/IBT/WT facility shall be paid in advance.

f) I / We shall provide MCX with the Network diagram and as adopted by me / us for having access to the CTCL/IBT/WT facility between the Receiving Premises and my / our server at my / our office and that we shall also provide MCX with the new network diagram as and whenever any changes are made to the existing network diagram with the prior written permission of MCX.

g) I / We shall notify MCX giving the details related to the Authorised Persons as per **Annexure 7** format described attached hereto for prior approval of MCX and shall acquire the prior written permission from MCX for every additional Authorised Person taken subsequently before letting him / her have access to the CTCL/IBT/WT facility, further in case an Authorised Person is disabled from acting in his / her capacity as such for any reason whatsoever, then I / we shall acquire prior written permission from MCX before appointing any other individual to act as an Authorised Person in his / her place.

h) I / We shall make the necessary changes in the software used by me / us for accessing the CTCL/IBT/WT facility as and when any changes either technical or structural are made by MCX in the CTCL/IBT/WT facility.

i) I / We shall not develop / use any software for accessing the CTCL/IBT/WT facility, which software in the opinion of MCX shall resemble or result in duplication of TRADING SYSTEM software in any manner and further that no representation shall be made by me / us that the software developed by me / us for accessing the CTCL/IBT/WT facility is part of-the TRADING SYSTEM software.

j) I / We shall not assign or otherwise transfer the rights and obligations arising out of the use of the CTCL/IBT/WT facility and this undertaking whether in whole or in part without the prior written consent of MCX.

k) I / We agree not to use, without the express permission of MCX, the name of MCX to directly or indirectly promote my/ our business.

l) I / We shall not, either by myself / ourselves or through any person acting on my / our behalf, issue / release / publish any advertisement, brochure, pamphlet, booklet, notice or any other promotional material on any aspect relating to the CTCL/IBT/WT facility in any form, whether in writing or otherwise, in accordance to the Code of Advertisement as prescribed by the MCX except with the prior written approval of MCX.

m) I / We agree to obtain prior approval of MCX for change of its activities/operations from existing approved ASP vendor to another.

n) I/We shall not do unauthorized changes to the approved software and only use the software which is approved by the Exchange.

15. I / We agree that MCX does not warrant that the provision of the CTCL/IBT/WT facility will be error free or uninterrupted.

16. I / We undertake and agree that

    a) I / We shall maintain all systems logs and make the same available for inspection by MCX at any time at its discretion.

    b) I / We shall not under any circumstances match the respective orders entered in by my / our Authorised Persons from their terminals by myself / ourselves by using any means whatsoever and that I / we shall route all the orders entered in by my / our Authorised Persons to the Trading System of MCX so that they could be matched by the Central Computer of MCX only.

    c) I/We shall ensure that the following guidelines on CTCL/IBT/WT and services would be adhered to:

        i. The system used by me / us has provision for security, reliability and confidentiality of data through the use of encryption technology.

        ii. I / We shall maintain adequate backup systems and data storage capacity and also arrange for alternative means of communications in case of Internet Link failure.

        iii. Order/Trade confirmation shall be sent to the investor through email at client's discretion at the time period specified by the client in addition to the other mode of display of such confirmations on real time basis on my/our web site. The investor shall be allowed to specify the time interval on the web site itself within which he/she would like to receive this information through email. Facility for reconfirmation of orders which are larger than that specified by the member's risk management system shall be provided on the internet-based system.

        iv. I / We shall ensure to have a system-based control on the trading limits of clients and exposures taken by clients and also set pre-defined limits on the exposure and turnover of each client. The system will also be capable of assessing the client's risk as soon as the order comes in. The client also needs to be informed of acceptance/rejection of the order within a reasonable period. Reports on margin requirements, payment and delivery obligations etc. to be informed to the clients through the system.

        v. I/We shall ensure that the following security measures shall be in-built in the system:
            - User Id
            - First Level Password (Private Code)
            - Automatic expiry of passwords at the end of reasonable duration. Re-initialise access on entering fresh passwords.

        vi. I/We shall ensure that all transaction logs with proper audit facilities are maintained in the system.

        vii. I/We shall ensure that Secured Socket Layer Security for server access through Internet is installed.

        viii. I/We shall ensure that shall integrate any advanced level security as specified by MCX from time to time.

ix. I/We shall ensure that the following systems operations procedures will be adhered to:

- Shall follow similar logic/priorities used by the Exchange to treat client orders.
- Shall maintain all activities / alerts log with audit trail facility.
- The Webserver shall have internally generated unique numbering for all client orders/trades.

d) I / We shall ensure that on-line surveillance and risk management features like trade-by-trade position monitoring etc., shall be inbuilt in the CTCL/IBT/WT facility and it shall be flexible to change as per MCX guidelines.

e) I / We shall not develop or use any software / program facility which shall either directly or indirectly facilitate program trading without prior written approval of the Exchange. For the purpose of this clause the term 'Program Trading' shall mean any software or program facility by the use of which, upon the fulfillment of certain specified parameters, without the necessity of manual entry of orders, buy/sell orders are automatically generated and entered by the software / program facility into the Trading System of MCX to be matched by the central computer.

f) I / We shall not develop or use any software / program which shall either directly or indirectly facilitate orders to cross the trades of the clients of MCX with each other. All orders shall be offered to the market for matching.

g) MCX shall be possessed with the absolute right to inspect the internal software used / being utilised me / us at any time at its discretion.

h) I / We shall render all possible assistance and cooperation to MCX by providing access to any kind of information in any form as it may require and shall produce such documents, records, accounts, books, data howsoever stored including data stored in magnetic tapes, floppy diskettes, etc. and any other information as may be required by MCX at its discretion.

17. That MCX shall not be liable for any direct or indirect damage, costs, claims and expenses whatsoever.

i. Arising from mechanical or electrical or telephone or network breakdown or power failure or malfunction of any computer, and / or / our server and / or any other auxiliary equipment including but not limited to the use of such ASP facility provided by ASP or any other cause beyond the reasonable control of MCX.

ii. Based upon special indirect economic or consequential loss or damage including, but not limited to loss of profit, business revenue, opportunity costs, and goodwill or anticipated savings.

iii. Caused or contributed to by any event of Force Majeure. For purposes of this Clause, "Force Majeure" means and includes wars, insurrections, revolution, fires, floods, epidemic quarantine restrictions, declared general strikes in relevant industries, act of God, act of the Government of India and any concerned State Government and such other acts or events beyond MCX control, and further the above is without prejudice to the rights already accrued to MCX due to my / our failure to perform either in full or in part, my / our obligations prior to the occurrence of events of Force Majeure.

iv. Or any other nature or type.

18. That MCX shall not be responsible for development, maintenance, updates upgrades, error-fixes and any other support of my / our software for accessing the CTCL/IBT/WT facility and shall not be liable for any loss suffered by me / us due to the use of the software for accessing the CTCL/IBT/WT facility.

19. That neither MCX nor the directors, managers, officers, employees or agents of MCX, guarantee the functioning of the CTCL/IBT/WT facility. MCX and the directors, managers, officers, employees and agents of MCX shall not be liable in any way to me / us or to any of my / our Authorized Persons or to any other person, for any non-performance or interruption of CTCL/IBT/WT facility or for any damages, consequential or otherwise, arising there from or occasioned thereby. No proceedings would be adopted by me / us or any third party neither against MCX nor against any individual officer or employee of MCX for any act done by such an officer or employee of MCX in their official capacity.

20. I / We shall indemnify and keep indemnified MCX along-with its Directors, Employees, Officers, Servants, Agents and Representatives harmless against every and all claims demand, damages, liabilities, losses and expenses suffered by it directly by reason of the provision of the CTCL/IBT/WT facility to me / us or by reason of my / our non-compliance, negligence, contravention with the any of the provisions of this Undertaking.

21. That this Undertaking is applicable not only in respect of the information services and terminal equipment currently offered by me / us to Authorised Persons but also in respect of any information services and terminal equipment developed by or for me / us in the future, even if I / we should at any time alter my / our mode of supplying information to Authorised Persons provided MCX approves in writing of such alteration with all details.

22. That without prejudice to any other right under any law for the time being in force or which may become applicable, MCX shall be vested with the exclusive right, upon my / our non-compliance with any of the terms and conditions of this Undertaking or upon the termination, suspension of my / our Membership or upon my / our ceasing to be a Trading cum Clearing Member of MCX, to take, at its discretion, such actions, steps, proceedings, measures, decisions within such period of time and upon such terms and conditions as it may deem fit and that any such actions, steps, proceedings, measures, decisions may, *inter alia*, include denial of access to the CTCL/IBT/WT facility and / or take such disciplinary actions as it deems fit. I / we further undertake that I / we shall abide by and be bound by any actions, steps, proceedings, measures, decisions as may be taken by MCX.

23. That no forbearance, delay or indulgence by MCX in enforcing the provisions of this Undertaking shall prejudice or restrict the rights of MCX nor shall any waiver of its rights operate as a waiver of any subsequent breach and no right, power or remedy herein conferred upon or reserved for MCX is exclusive of any other right, power or remedy available to MCX and each such right, power or remedy shall be cumulative.

24. I / We shall treat as confidential all information obtained from MCX pursuant to the arrangement and shall not divulge such information to any person (except to my / our own employees and then only to those employees who need to know the same) without the prior written consent of MCX and that I / we shall also ensure that my / our employees are aware of and comply with the provisions of this clause. The foregoing obligations as to confidentiality shall survive any termination of the availability of the CTCL/IBT/WT facility.

25. Any declaration or other notice to be given by me / us to MCX shall be sent by registered letter or telex / cable or facsimile transmission to the address first mentioned above.

26. A Member shall not advertise or use any software/ program, which may directly or indirectly facilitate matching orders between or among two or more clients by way of grouping or otherwise. The

CTCL/IBT/WT facility being used by a member shall have inbuilt feature of pushing in all the orders, entered by any of the Authorized persons only through CTCL/IBT/WT server of the member for which in turn will push such orders to the trading system of the Exchange, the purpose of execution.

27. The above undertaking will be binding on my / our successors and permitted assignees.

28. I/ we hereby represent and warrant to MCX as follows:

    a) I/ we have duly organized and validly existing under the laws of India and has full power and authority and has all material governmental licenses, consents and approvals necessary to own my/our assets and properties and to carry on its business as now conducted.

    b) I/ we have all necessary powers, authority and approvals to execute and deliver this undertaking and to perform all of its obligations arising or created hereunder.

    c) There exists no undertaking, commitments or agreements of any nature which may conflict in interest with this undertaking, and

    d) Person signing onto this Undertaking on my/our behalf has been duly authorized to do so.

    e) That upon execution and delivery hereof and at the execution of this Undertaking and any undertakings contemplated herein, all of such shall be legal, valid and binding obligations on me/ us and shall be enforceable against me/ us in accordance with their respective terms.

    f) I/ we hereby agree that I/ we shall perform my/our role in the manner specified in this undertaking and fulfill my/our duties, and obligations in the manner specified in this undertaking.

29. I/ we hereby further undertake and agree to the following:

    a) Any and all disputes or differences between us and MCX arising out of or in connection with this Undertaking or its performance shall, so far as it is possible, be settled by negotiations between us and MCX amicably through consultation between our representatives and MCX.

    b) Any dispute or difference arising out of or in connection with this Undertaking, which cannot be amicably settled within 30(thirty) days, shall be referred to the sole arbitrator to be appointed by MCX. The arbitration shall be governed by the Arbitration and Conciliation Act, 1996. The award passed by the Arbitrator shall be final and binding on us. The language of arbitration shall be English, and the venue of arbitration shall be Mumbai.

    c) I/ we shall bear and pay all the costs and expenses in connection with the arbitration proceedings unless the arbitrators direct otherwise.

    d) I/ we must continue to fulfill my/ our obligations under this Undertaking to the extent reasonably practicable based upon the nature of the dispute during the pendency of a Dispute Resolution.

    e) The arbitration proceedings, including the arbitral award shall be kept confidential.

30. I / we hereby undertake and agree that this Undertaking shall be governed in accordance with the laws of India and shall be subject to the exclusive jurisdiction of the courts in Mumbai, India.

31. I / We undertake that
    a) will take all necessary steps to ensure that every new software and any change thereupon to the trading and/or risk management functionalities of the software will be tested as per the

framework prescribed by SEBI / Exchange before deployment of such new / modified software in Commodity/Securities market.

b) We shall put in place adequate mechanism to restore trading systems to 'production stat' at the end of testing session so as to ensure integrity trading system

c) will ensure that approval of the Exchange is sought for all new/modified software and will comply with various requirements specified by SEBI or the Exchange from time to time with regard to usage, testing and audit of the software.

d) the absolute liability arising from failure to comply with the above provisions shall lie entirely with me/us.

IN WITNESS WHEREOF this Undertaking is executed by me / us (*in terms of the resolution passed by the Board of Directors at the duly convened meeting held on _____) on the day, month, year and the place first mentioned above

(*I / We or me/us or my / our delete whatever is inapplicable)

SIGNED and DELIVERED by the within named)
_____, *for and on behalf of)

In the presence of Witnesses

Sr. No.	Name	Address	Signature
1.			
2.			

Annexure 37

(To be executed on letter head of the Application Service Provider)

We / I _____, having our registered office at _____ and represented by _____ and hereinafter referred to as APPLICATION SERVICE PROVIDER are providing to M/s._____, having their registered office at _____ who are trading members of Multi Commodity Exchange of India Limited, and hereinafter referred to as MEMBER, services (inter alia including software / hardware / applications / infrastructure etc.) to facilitate CTCL / IBT /WT services to be provided by the member. We hereby certify that the software / system provided by us comply with all the stipulations and directives of Regulator & the Exchange in this regard.

NOTWITHSTANDING the generality of the above, the software provided by us complies with the following provisions in particular as directed by Regulator / the Exchange.

Sr. No:	Particulars	Remarks
1	Access for order routing is permitted only through the use of specific user ids / client specific User ids	Yes / No
2	The access is permitted only through the use of specified / client specified password (private code)	Yes / No
3	The system provides for automatic expiry of passwords at the end of a reasonable duration and reinitializing of access on entering fresh passwords.	Yes / No
4	The system has provision for security, reliability and confidentiality of data related to members and clients	Yes / No
5	Records maintained in electronic form are not susceptible to manipulation	Yes / No
6	All transaction logs are maintained with proper audit facilities (a write-up in this regard shall be enclosed)	Yes / No
7	Secured socket level security for server access through Internet is available.	Yes / No
8	Suitable firewalls between trading set-up and Internet trading set up are available.	Yes / No
9	There are adequate provisions in respect of physical security of the hardware / systems at the hosting location and controls on admission of personnel into the location (audit trail of all entries-exits at location etc.)	Yes / No
10	There is role-based access control of the APPLICATION SERVICE PROVIDER's staff to the system and audit trail of all access by the staff.	Yes / No
11	The optional advanced security products used for e-commerce, including SMART cards, dynamic password and 128-bit encryption or above, second level passwords are available. If so, details of the same.	Yes / No
12	Between the trading web server and trading client terminals, interfaces standards as per recommendations of IETF and W3C (e.g. HTTP Ver 4 or above, HTML Ver 4/XML) are adopted.	Yes / No
13	Logic/priorities similar to those used by the Exchange are used to treat client orders.	Yes / No
14	Provision for maintenance of all activities / alerts log with audit trail is available	Yes / No
15	The CTCL / Web server internally generates unique numbering for all client orders/ trades.	Yes / No
16	Adequate provisions for backup systems and data storage capacity are available.	Yes / No
17	There are adequate provisions for system redundancy, fault tolerance and load balancing as well as database redundancy and standby databases (hot standby / cold standby)	Yes / No

Sr. No:	Particulars	Remarks
18	Adequate provisions for capacity planning including provisions to monitor system capacity utilisation and scalability of system on capacity utilisation are available	Yes / No
19	An alternative means of communication is arranged for in case of Internet link failure / Exchange link failure. (A write up shall be provided in this regard)	Yes / No
20	The web site providing the internet-based trading facility contains information meant for investor protection such as rules and regulations affecting client broker relationship, arbitration rules, investor protection rules, etc. The web site also provides and displays prominently hyperlinks to the web site/page on the web site of the Exchange displaying rules/regulations/circulars.	Yes / No
21	The web site displays the ticker/quote/order book of the Exchange along with the date and time stamp as well as the source of the information.	Yes / No
22	The software provides for sending of the order/trade confirmation through email at clients' discretion at the time period specified by the client in addition to the other mode of display of such confirmations on real time basis on the web site. The web site allows for specifying the time interval on the web site itself by the client.	Yes / No
23	The software provides for reconfirmation of orders which are larger than those specified by the member's risk management system. In this regard the system is capable of assessing the risk of the member / client as soon as the order comes in and shall inform the member / client of acceptance/rejection of the order within a reasonable period.	Yes / No
24	The software provides a system-based control facility on the trading limits of the members/ clients and exposures taken by the clients.	Yes / No
25	All orders entered into the CTCL / internet-based trading /Wireless Trading system are offered to the market for matching and no cross trades are generated	Yes / No
26	The software has the facility of providing reports on margin requirements, payment and delivery obligations etc. to the member / clients through the system.	Yes / No

Signed sealed and delivered by the Authorised representative of the APPLICATION SERVICE PROVIDER

Date
Place:

We / I, _____ having our registered office at _____ and represented by _____ are trading members of the Exchange. We confirm and certify that the software / system provided by the APPLICATION SERVICE PROVIDER for CTCL / IBT / WT has undergone tests by us and we are satisfied that it complies with the stipulations of the Regulator and the Exchange. We also undertake to get the software / system modified, if necessary to continue compliance with the requirements

of the Exchange, DOT policy and regulations with regard to levels of encryption, etc, Regulatory directives and other statutory requirements etc. as may be issued in this regard from time to time.

Countersigned, sealed and delivered by the Authorised representative of the MEMBER

Date:
Place:

Annexure 38

NETWORK DIAGRAM

(To be on the letter head of the MEMBER)

(Kindly enclose your network architecture)

Software Name & Version:
In-case of Algo Strategy Name & Strategy Version:

Annexure 39

In-House Software development team details on company letter head / Non-empanelled vendor details with vendor profile on vendor letter head.

a. In-House Software development team details.

(To be on the letter head of the MEMBER)

Software Name:
Version:

In-case of Algo Strategy Name:
Strategy Version:

Sr. No	Person name	Qualifications or Technical Skills	Designation	Total work experience on development.
1.				
2.				
3.				

b. In-case of software developed by a non-empanelled vendor. Vendor profile on vendor letter head to be attached.

Annexure 41
Compliance Letter from Member

(To be on the letter head of the MEMBER)
Compliance Letter on Algorithmic Trading Facility

Date:

To,

CTCL Department
Multi Commodity Exchange of India Limited
255, Exchange Square, Suren Road,
Chakala, Andheri (E),
Mumbai – 400 093

1. We confirm that we are using the version of Algorithmic Trading Facility (ATF) software which is approved by the Exchange
2. We confirm that we are using only those strategies which are approved by the Exchange
3. We confirm and certify that the software has undergone tests by us, and we are satisfied about the same. Further, we undertake to comply with and be bound by the Rules, Byelaws, Regulations of the Exchange, SEBI, any other statutory and regulatory body(ies) as may be applicable from time to time.
4. We undertake that any modifications / Change to the software to be affected only on prior approval of Exchange.
5. We are using the approved user IDs allotted by the Exchange under ATF in compliance to the details / documents of the strategy submitted to the Exchange.
6. We certify that all the statements are true and correct to the best of our knowledge. We are aware that in case any of the statements are found to be incorrect or false, we are liable for disciplinary action.

Seal and Signature
Authorized person of Member
Name of Member
Member ID

Date:
Place:

Annexure 43

Application form for Discontinuation of CTCL / IBT / Wireless Trading (WT) / Algorithmic Trading Facility (ATF) / DMA Software

(On letterhead of the member)

To
CTCL Department
Multi Commodity Exchange of India Limited
255, Exchange Square,
Suren Road, Chakala,
Andheri (East), Mumbai – 400 093

I/We_____Name of the Member & Member ID) hereby apply for Discontinuation of CTCL / IBT / WT / ATF / DMA Software.

Sr. #	Particulars	Details
1.	Member ID	
2.	Registered Office/ Correspondence address	
3.	Type of Software (CTCL / IBT /WT / ATF / DMA-CTCL / DMA-ATF)	
4.	Software Name and Version number	
5.	For ATF- Strategy Name and version number.	
6.	User ID	
7.	Name of Empanelled Vendor / In-house	
8.	Contact Details of Authorised Signatory	
9.	Email ID of Authorised Signatory	

I / We certify that the CTCL Terminal details registered under the mentioned User ID/s / Software are deactivated by me/us.

I / We certify that all the statements are true and correct to the best of our knowledge. We are aware that in case any of the statements are found to be incorrect or false, we are liable for disciplinary action.

For (Name of the Member)

Authorised signatory
(Name and designation)
Date:
Place:

Glossary

Abbreviation	Meaning
Algo / AT	Algorithmic Trading
ASP	Application Service Provider
ATF	Algorithmic Trading Facility
BCP / DR	Business Continuity Plan / Disaster Recovery
CISA	Certified Information System Auditors from ISACA
CISM	Certified Information Securities Manager from ISACA
CISSP	Certified Information Systems Security Professional
CTCL	Computer to Computer Link
DISA	Diploma in Information System Audit from ICAI
FIX	Financial Exchange Information
FMC	Forward Market Commission
IBT	Internet Based Trading
ICAI	Institute of Chartered Accountants of India
ISV	Independent Software Vendor
MCX	Multi Commodity Exchange of India Limited
RMS	Risk Management System
SEBI	Securities Exchange Board of India
TOR	Terms of Reference
WT / STWT	Wireless Trading
DMA	Direct Market Access
EOBI	Enhanced Order Book Interface – Tick by Tick Data
EMDI	Enhanced Market Data Interface

Reference - List of Circulars:

Date	Circular Number	Subject
20-Jul-04	MCX/061/2004	Empanelment of vendor for providing CTCL/IBT Solutions
9-Feb-06	MCX/358/2006	Computer to computer link and IBT facilities
31-Jan-07	MCX/CTCL/042/2007	IBT software In-house development by member
2-Feb-07	MCX/CTCL/043/2007	CTCL (In-house CTCL software development by members OR Procurement of CTCL software from non-empanelled vendor)
1-May-08	MCX/CTCL/006/2008	Uploading Of Computer to computer link (CTCL) details
21-Feb-08	MCX/CTCL/075/2008	CTCL Terminal Details
9-Oct-08	MCX/CTCL/287/2008	IBT Terminal Details using CTCL ID
3-Oct-09	MCX/CTCL/119/2009	CTCL In-house development revised charges
4-Apr-12	MCX/CTCL/132/2012	Compliance Certificate for Automated Trading Facility
16-Apr-12	MCX/CTCL/152/2012	Approval Process for Internet Based Trading & Wireless Trading
22-Mar-13	MCX/CTCL/116/2013	Guidelines For Algorithmic Trading Facility
27-Dec-13	MCX/CTCL/431/2013	Revision in Guidelines for Algorithmic Trading Facility (ATF)
27-Mar-15	MCX/CTCL/095/2015	Computer to Computer Link (CTCL), Internet Based Trading (IBT), Wireless Trading (WT) Services through ASP
7-Mar-15	MCX/CTCL/192/2015	Tick by Tick Trading Market Data (EOBI)
15-Dec-15	MCX/TECH/350/2015	Testing of software used in or related to Trading and Risk Management
5-Feb-16	MCX/CTCL/032/2016	Empanelment of Application Service Provider (ASP)
21-Mar-16	MCX/CTCL/080/2016	Testing of Software used in or related to Trading & Risk Management
16-Aug-16	MCX/CTCL/236/2016	Annual system audit report of trading members of National Commodity Derivatives Exchanges
6-Sep-16	MCX/CTCL/270/2016	System Audit of Members of the Exchange
27-Sep-16	MCX/CTCL/299/2016	Broad Guidelines on Algorithmic Trading
01-Mar-17	MCX/CTCL/062/2017	Revision in ATF Guidelines
30-Mar-17	MCX/CTCL/096/2017	System Audit of Members of the Exchange
06-Jun-17	MCX/CTCL/171/2017	CTCL and IBT services through ASP
04-Apr-18	MCX/CTCL/131/2018	Orders per second limit and requirement of empanelment of system auditors for algorithmic trading in Commodity Derivatives
06-Apr-18	MCX/CTCL/140/2018	Revision in ATF Guidelines (Order per second – OPS limit)
06-Feb-24	MCX/TECH/066/2019	Drop Copy Facility for CTCL Users
15-Nov-19	MCX/CTCL/644/2019	CTCL/IBT/WT software In-house development by member
19-May-20	MCX/CTCL/356/2020	Introduction to CTCL Web Portal for availing CTCL Facility
26-May-20	MCX/CTCL/371/2020	Tick by Tick Trading Market Data (EOBI) – Additional Information
16-Jun-20	MCX/CTCL/419/2022	Test Market Environment for testing Negative (-) Price

06-Jul-20	MCX/CTCL/481/2020	CTCL Web Portal – Wireless Trading (WT) & Algo Trading Facility (ATF) application
23-Jul-20	MCX/CTCL/526/2020	Master Circular CTCL – Change in approval process
14-Aug-20	MCX/CTCL/583/2020	Test Market Environment for testing of software
30-Sep-20	MCX/CTCL/721/2020	CTCL Web Portal - Application for CTCL IBT WT services from Empanelled ASP
25-Nov-20	MCX/CTCL/891/2020	Testing of software used in or related to Trading and Risk Management
04-Dec-20	MCX/CTCL/921/2020	CTCL facility enablement Disablement on User ID(s) through eUIMS portal
29-Jan-21	MCX/CTCL/063/2021	CTCL Web Portal – In-house development of CTCL_IBT_WT_ATF software
29-Jun-21	MCX/CTCL/381/2021	Testing of Algo software used in or related to Trading and Risk Management
21-Mar-22	MCX/CTCL/167/2022	Revision in ATF Guidelines (Order per second – OPS limit)
31-Mar-22	MCX/CTCL/186/2022	Revision in ATF Guidelines (Order per second – OPS limit)
15-Jun-22	MCX/CTCL/346/2022	Implementation of Two Factor Authentication
26-Jul-22	MCX/TECH/445/2022	Empanelment of Backoffice Vendors
08-Sep-22	MCX/CTCL/521/2022	Performance return claimed by unregulated platforms offering algorithmic strategies for trading
03-Oct-22	MCX/CTCL/567/2022	Display of Brokerage Statutory Regulatory Levies
10-Nov-22	MCX/CTCL/639/2022	CTCL Web Portal – Application for version change
21-Feb-23	MCX/CTCL/120/2023	Display of Last Trading Day on CTCL Front-end and Back-office system
01-Apr-23	MCX/CTCL/218/2023	Display of Last Trading Day on CTCL Front-end and Back-office system
09-Aug-23	MCX/CTCL/518/2023	List of authorized mobile applications of Trading Members
18-Aug-24	MCX/CTCL/537/2023	List of authorized mobile applications of Trading Members
24-Jan-24	MCX/CTCL/046/2024	DIRECT MARKET ACCESS (DMA) FACILITY
30-Apr-24	MCX/CTCL/281/2024	Master Circular – Computer to Computer Link (CTCL)
16-May-24	MCX/CTCL/320/2024	Trading Interface - Test Environment
20-Sept-24	MCX/CTCL/621/2024	Update to – Computer to Computer Link (CTCL) approval process
12-July-24	MCX/TECH/462/2024	Enhancement of API Authentication & Security for Exchange Empaneled Vendors and Application Service Providers (ASP's)
25-July-25	MCX/CTCL/364/2025	Standard Operating Procedure - Safer Participation of Retail Investors in Algorithmic Trading
20-Sept-25	MCX/CTCL/471/2025	Amendment to Standard Operating Procedure - Safer Participation of Retail Investors in Algorithmic Trading