Circular no.: MCX/CTCL/046/2024 January 24, 2024

DIRECT MARKET ACCESS (DMA) FACILITY

This is in reference to the SEBI 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)".

The SEBI has approved Participation of SEBI registered Foreign Portfolio Investors (FPIs) in Exchange Traded Commodity Derivatives in India as mentioned in SEBI Circular reference EBI/HO/MRD/MRD-RAC-1/P/CIR/2022/131September 29, 2022.

Direct Market Access (DMA) facility allows members to provide direct trading terminals to clients through various connectivity modes. Direct Market Access (DMA) is used to describe clients / investor accessing the market directly using CTCL software of a trading member and routing the orders through the trading member's infrastructure.

Members seeking permission for offering Direct Market Access (DMA) are required to ensure compliance with the conditions specified in the SEBI circulars. SEBI Circular MRD/DoP/SE/CIR-7/2008 dated April 03, 2008, Circular MRD/DoP/SE/CIR-03/2009 dated February 20, 2009 ,Circular CIR/MRD/DP/20/2012 dated August 02, 2012, Circular SEBI/HO/MIRSD/MIRSD-PoD-1/P/CIR/2023/71 dated May 17, 2023, and all other applicable circulars.

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1. **Application for permission:**

   Members 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 shall seek approval of the Exchange by submitting required documents as detailed in **Annexure - A.**

2. **Eligibility:**

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

3. **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 sound audit trail 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 secured 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 for adequate systems and procedures to handle the DMA trades.

i. The trading system of broker 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 all exchange options available and users are required to choose one, while placing each order.

j. **CTCL Terminal Info** (15 Digits): Members using CTCL facility are required to provide CTCL terminal details (15 digits) information as per the format prescribe by Exchange. Members are required to populate the 15 digit CTCL terminal details in the order structure for every order emanating from CTCL terminal. *For orders generated from CTCL/DMA terminals 1-12 digits should be "222222222222", other digits would remain same as specified in the Master Circular no.: MCX/CTCL/443/2023 dated June 30, 2023 chapter 6*.

4. 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 subjected 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.

5. 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.

6. 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.

7. 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.

8. Other Terms and Conditions 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 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 stock-broker is used by the client the paragraphs one to eighteen of **Part A of Annexure-I** shall be applicable.

e. In case the DMA facility provided by the stock broker is used by the client through an investment manager the paragraphs one to eighteen of **Part B of Annexure-I** shall be applicable.

f. Additionally, the investment manager shall provide to the stock-broker the details as specified at **Annexure - II**.

9. Documentation for Empanelment of ISV:

Empanelled ISV seeking approval for DMA/ATF software /strategy(ies) shall submit necessary documents to Exchange as per **Annexure – B**.

10. Documentation for availing DMA facility from Empanelled ISV:

Members seeking approval for availing DMA facility from empanelled ISV shall submit necessary documents to Exchange as per **Annexure – C.**

Members and vendors are requested to take note of the same.

For and on behalf of
Multi Commodity Exchange of India Ltd.

Abhay Angarkar
AVP - Technology
Encl.: As above

Kindly contact Customer Service Team on 022 – 6649 4040 or send an email at customersupport@mcxindia.com for any clarification.

DIRECT MARKET ACCESS FACILITY

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Annexure I

Terms and Condition

PART – A: 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 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 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 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 bye-laws, rules, regulations of the exchanges. The client shall continue to be liable for any losses, costs, 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

    Broker shall endeavour 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 – B: 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 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 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

    Broker shall endeavour 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.

Annexure II

DETAILS TO BE PROVIDED TO THE STOCK BROKER

On the letter head of the Investment manager

PART A

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 B

CLIENT(s) DETAILS:

S. No.	NAME OF THE ENTITY	NAME OF THE REGULATOR	REGULATED IN INDIA AS	REGISTRATION NUMBER	PAN

Annexure – A: In-house approval documentation

Member seeking permission for **In-House DMA** software development submit documents through online CTCL Web portal to the Exchange:

Sr. No.	Particulars	Format
1.	Application form for In-House DMA software and Annexure 22 for registration of software details on letter head**.**	Annexure 22
2.	**Network Diagram** (Details of connectivity of CTCL server at member's office with MCX Central server in diagram to be provided by Member with software name & version.)	On Member Letter Head
3.	Software development team details / Non-empanelled vendor details	On Member Letter Head
4.	**CTCL/IBT/ATF/WT/DMA/DMA Undertaking** (Required only once)	Annexure 20
5.	**Guidelines for Undertaking**	Annexure 5
6.	**Certified true copy of board resolution** (If the member is company. Required only once)	Annexure 12
7.	**Checklist for software testing**	Annexure 14
8.	**Contingency Plan**	Annexure 17
9.	**Product write-up** (On Members letterhead with Authorised Signatory signature and company stamp)	To be provided by Member on letter head
10.	**Secured Socket Layer Certificate (SSL)** (Secured socket level security for server access through Internet to be provided by Member, if applicable)	To be provided by Member on letter head
11.	**System Audit Certificate**	Annexure_28
12.	**System Audit Report**	Annexure 27
13.	**Terms and condition used by Client/Investment manager**	Annexure-I
14.	Application for availing existing approved DMA facility on additional User ID	Annexure 44

Note:

- **Members are requested to submit documents through e-mail (ctcl@mcxindia.com) till online portal is available for DMA Facility.**

- Applicable chapters mentioned in Circular no.: MCX/CTCL/443/2023 dated June 30, 2023, will remain the same.

- For version change / Modification follow the process as per Circular no.: MCX/CTCL/443/2023 dated June 30, 2023, will remain the same.

Annexure - B: ISV approval documentation

Empanelled vendor seeking empanelment with Exchange for providing DMA software are required to submit the following documents to the Exchange on Email ID ctcl@mcxindia.com:

Sr. No.	Particulars	Format
1.	Application for Empanelment as ISV for DMA	Annexure 2 (Circular no.: MCX/CTCL/443/2023 June 30, 2023)
2.	Undertaking to be given by ISV - One time only	Annexure 3
3.	Certified true copy of board resolution	Annexure 12
4.	Guidelines for Undertaking	Annexure 5
5.	Checklist for software development	Annexure 6
6.	Application for approval DMA Software (New/Addition)	Annexure 7
7.	**Algorithmic Trading (Algo) Strategy Write-up** (Should cover note on Liquidity Infusion and controls built-in in the software to comply Exchange / SEBI guidelines)	--
8.	**DMA Product Write-Up**	On Letter Head

Note:

- **Members are requested to submit documents through e-mail (ctcl@mcxindia.com) till online portal is available for DMA Facility.**

- Vendor applying for first time for empanelment, have to refer Circular no.: MCX/CTCL/443/2023 dated June 30, 2023.

- Applicable chapters mentioned in Circular no.: MCX/CTCL/443/2023 dated June 30, 2023, will remain the same.

Annexure - C: From ISV approval documentation

Members seeking approval for availing DMA facility from empanelled ISV shall submit documents through online CTCL Web portal to the Exchange:

Sr. No.	Particulars	Format
1.	**Application form for DMA software**	
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 Member Letter Head
3.	**Annexure signed by vendor and countersigned by member.**	Annexure 16
4.	**CTCL/IBT/ATF/WT/DMA/DMA Undertaking** (Required only once)	Annexure 13
5.	**Guidelines for Undertaking**	Annexure 5
6.	**Certified true copy of board resolution** (If the member is company. Required only once)	Annexure 12
7.	**Checklist for software testing**	Annexure 14
8.	**Contingency Plan**	Annexure 17
9.	**Product write-up** (On Members letterhead with Authorised Signatory signature and company stamp)	To be provided by Member on letter head
10.	**Secured Socket Layer Certificate (SSL)** (Secured socket level security for server access through Internet to be provided by Member)	To be provided by Member on letter head
11.	**System Audit Certificate**	Annexure_28
12.	**System Audit Report**	Annexure_27
13.	**Terms and condition used by Client/Investment manager**	Annexure-I
14.	Application for availing existing approved DMA facility on additional User ID	Annexure 44

Note:

- **Members are requested to submit documents through e-mail (ctcl@mcxindia.com) till online portal is available for DMA Facility.**

- Applicable chapters mentioned in Circular no.: MCX/CTCL/443/2023 dated June 30, 2023, will remain the same.

- For version change / Modification follow the process as per Circular no.: MCX/CTCL/443/2023 dated June 30, 2023, will remain the same.

Annexure 6 Checklist/ Reference Points While Developing CTCL/IBT/AT/WT Software By ISV/ASP.

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
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	Optional	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	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

Description	Type of software and requirements				
Application	CTCL	IBT	AT	WT	DMA
The password numeric values should not fully comprise of user id	Yes	Yes	Yes	Yes	Yes
Password should expired 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
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 buy SL order, the trigger price should be less than limit price & vice versa for sell order	Yes	Yes	Yes	Yes	Yes

Description	Type of software and requirements				
Application	CTCL	IBT	AT	WT	DMA
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 display 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
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.	Yes	Yes	NA	Yes	Yes
Order Entry during Halt session is not allowed	Yes	Yes	Yes	Yes	Yes
Tracing and mitigating 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

Description	Type of software and requirements				
Application	CTCL	IBT	AT	WT	DMA
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
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 maximum order per second does not exceed 120 orders per second	Optional	Optional	Yes	Optional	Optional (Yes for ATF)
Checks are in place to ensure that OTR does not exceeds 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					

Description	Type of software and requirements				
Application	CTCL	IBT	AT	WT	DMA
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 log, 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 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
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	Optional	Optional	Optional	Optional
Display of Brokerage	Optional	Yes	NA	Yes	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	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
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

Description	Software and requirements				
Application	**CTCL**	**IBT**	**AT**	**WT**	**DMA**
The password numeric values should not fully comprise of user id	Yes	Yes	Yes	Yes	Yes
Password should expired 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
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
In case of buy 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

Description	Software and requirements				
Application	**CTCL**	**IBT**	**AT**	**WT**	**DMA**
If the orders are cancelled by Exchange or by Member Admin or by client, details of such information should be display 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 possibility of excessive and unnecessary order modification & Cancellation in the nature of order per second as per regulator compliance.	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	Yes	Yes	NA	Yes	Yes
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

Description	Software and requirements				
Application	**CTCL**	**IBT**	**AT**	**WT**	**DMA**
Intraday Special/Additional Margin changes @ Exchange should get updated on respective CTCL terminals	Yes	Yes	Optional	Yes	Yes
Alerts of Maximum Single Traded Value /Maximum Single 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
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 maximum order per second does not exceed as prescribed by MCX from time to time.	Optional	Optional	Yes	Optional	Yes
Checks are in place to ensure that OTR does not exceeds 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 Incase of ATF)
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					

Description	Software and requirements				
Application	**CTCL**	**IBT**	**AT**	**WT**	**DMA**
All message logs maintained (order logs, trade log, 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 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 600/-

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 13

CTCL/IBT/ATF/DMA/WT Undertaking
(To be submitted by member)

PART I – CTCL/IBT Undertaking
To be executed on Rs. 600/- 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 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 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 change 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. 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 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 risk of the client as soon as the order comes in. The client also 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 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 Web-server 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 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.

20. That Member should arrange to provide demonstration of the CTCLFacility 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:-

    a. 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.

    b. 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.

    c. 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.

d. 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 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 others 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 of 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

1. MCX has provided the trading software to enable its Members to trade.

2. 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.

3. 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.

4. 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, Bye-laws, 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 change 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 system to control to shut down such algorithms if identified on immediate basis.

12. I/We shall maintain logs of all trading activities to facilitate audit trail for minimum 5 years and I/We agree to provide such logs to the Exchange / appointed auditors during inspection / audits.

13. I/We shall maintain record of control parameters, orders, trades and data points emanating from trades executed through algorithmic trading for minimum 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, damages 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 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,

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,

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 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 Internet web site/web page where detailed information would be available, along with the minimum information shall be available on hand held device, as it may not be possible to give detailed information to the investor on a hand held 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 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 periodical System audit of the Wireless Trading system and software as specified by the Exchange and to submit certificate/report to the Exchange.

Trading Member's Undertaking for Direct Market Access Facility

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 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.

3. MCX has provided the trading software to enable its members to trade.

4. MCX also decides to permit the users of CTCL, with Direct Market Access facility (hereinafter referred to as the "DMA facility")

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. Member 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 Acess 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 about the same. Further, we undertake to comply with and be bound by the Rules, Bye-laws, 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 change 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 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 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 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 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 sound audit trail 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 of by third party network service provider and I / we shall also ensures secured access and a 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 vendor 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 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 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. 600/- 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,

1. MCX has provided the trading software to enable its Members to trade.

2. 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.

3. 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.

4. 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 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 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 change 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 minimum 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. 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 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 risk of the client as soon as the order comes in. The client also 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 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 Web-server 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 at the Member's site.

   a. The Member undertakes to make available 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 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 neither 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 others 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 of 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

1. 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.

2. 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, Bye-laws, 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 change 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 vendor 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 system to control to shut down such algorithms if identified on immediate basis.

14. I/We shall maintain record of control parameters, orders, trades and data points emanating from trades executed through algorithmic trading for minimum 5 years and I/We agree to provide these 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, damages 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.

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 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 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 in this undertaking.

8. I / We shall ensure that the addresses of Internet web site/web page where detailed information would be available, along with the minimum information shall be available on hand held device, as it may not be possible to give detailed information to the investor on a hand 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 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 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. Member 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 Acess 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, Bye-laws, 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 change 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 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 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 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 sound audit trail 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 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 vendor 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 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 3

UNDERTAKING TO BE GIVEN BY ISV

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 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 individuals authorized 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 shall 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 logs 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 as 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 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 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 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 of 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 this purposes by MCX.

32. I / We hereby undertake to duly inform MCX 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 as mentioned above, MCX shall take such action against us as it may deem fit in this regard.

Trading Member's Undertaking for Direct Market Facility
WHEREAS,

1. The Exchange has also allowed its vendors 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.

3. MCX has provided the trading software to enable its empaneled vendor for their client 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 has decided that it shall make Direct Market Access (hereinafter referred to as the "DMA facility") facility available to its Members 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 Acess 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 ensure that alternative means of communication for placing orders shall be made to our clients available in case of failure of the network.

3. 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.

4. 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, Bye-laws, 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 change 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 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.

9. I / We shall ensure that the addresses of 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.

10. 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 history of trades for the day.

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 devices.

12. 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.

13. I / We shall ensure to undertake periodical System audit of the DMA Trading system and software as specified by the Exchange and to submit certificate/report to the Exchange.

14. I / We undertake to ensure sound audit trail 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 available for at least five years and specified by Exchange from time to time.

15. 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.

16. The authorized user and client details should be part of the order details received and authenticated at the DMA server of the broker.

17. 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.

18. 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.

19. I/We agree that I/We will take undertaking from our non-empanelled software vendor on the following points
    1. Software vendor 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)

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 12
(On Letter Head of Member)

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) / Algorithmic Trading Facility (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 27

System Audit Report – Format
(On the letterhead of system auditor)

Date:
Name of Trading Member:
Member Id:
1. **CTCL/IBT Audit Checklist (Part I)**
2. **Direct Market Facility Checklist (Part II)**

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</td><td></td><td></td></tr>
<tr><td>Software developed by</td><td></td><td></td></tr>
<tr><td>Gateway</td><td></td><td></td></tr>
<tr><td>Risk Administration / Manager</td><td></td><td></td></tr>
<tr><td>Front End / Order Placement</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>2.</td><td>The installed system features are as prescribed by MCX.

The Member ensures that 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

Trade Confirmation:</td><td></td><td></td></tr>
</table>

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	The system has a feature, which enables confirmation of trades.		
3.	**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 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.		
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		
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 of 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.		
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 User Creation: New User IDs are created as per the CTCL guidelines. User ID: All users are uniquely identified through 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
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)		
B	**Risk Management System**	Results	Opinions
11.	**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.		f
12.	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/open orders g) Order Price Checks h) Security wise limit check		
13.	**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**		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	processed for clients or otherwise and the same is not susceptible to manipulation. The installed systems has 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 has a provision for off line monitoring and risk management as per the requirements of MCX and includes reports / logs on a) Number of Authorized Users b) Activity logs c) Systems logs d) Number of active clients		
14.	**The installed 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.** Only orders that are within the parameters specified by the risk management systems are allowed to be placed.		
15.	System-based control on the pre-defined trading limits set by the Member.		
16.	**The installed system provides for reconfirmation of orders which are larger than that as specified by the member's risk management system.** Whether system has a manual override facility for allowing orders that do not fit the system based risk control parameters?		
17.	Facility to prompt the user when he puts in orders that are over and above the normal limits set by the Member.		
18.	Review and release facility for orders which got rejected because of clients having exceeded limits etc.		
19.	Internally generated unique numbering for all client order/trades		
20.	To capture IP address for all orders		
21	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
21.	Whether system has secure end-to-end encryption for all data transmission between the client and the member system through a Secure Standardized Protocol.		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	A procedure of mutual authentication between the client and the member server is implemented?		
22.	**The installed system provides for session security for 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 user only. b) The system uses session security measures like encryption to ensure confidentiality of sessions initiated.		
23.	**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
24.	**The installed system Authentication mechanism is as per the guidelines of the MCX** a) The installed system uses passwords for authentication. b) The system requests for identification and new password before login into the system. c) The Password is masked at the time of entry.		
25.	System authenticates user with a User Name and password as first level of security.		
26.	System mandates changing of password when the user logs in for the first time?		
27.	Automatic disablement of the user on entering erroneous password on five consecutive occasions.		
28.	The system provides for automatic expiry of passwords at the end of a reasonable duration (maximum 6 months) and Reinitialization of access on entering fresh passwords.		
29.	Prior intimation is given to the user before such expiry?		
30.	System controls to ensure that the password is alphanumeric (preferably with one special character), instead of just being alphabets or just numerical.		
31.	System controls to ensure that the changed password cannot be the same as of the last 6 passwords.		
32.	System controls to ensure that the Login id of the user and password should not be the same.		
33.	System controls to ensure that the password should be		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	of minimum six characters and maximum 8 characters.		
34.	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.		
35.	System allows user to change their passwords at their discretion and frequency.		
36.	System controls to ensure that the password is encrypted at member's end so that employees of the member cannot view the same at any point of time.		
37.	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		
38.	2 factor authorization for login session and these 2 factors can't be the same		
E	**Infrastructure & Capacity Management**	Results	Options
39.	System has built-in high system availability to address any single point failure.		
40.	Service has adequate bandwidth and multiple links to ensure reliability and redundancy.		
41.	Are the resources monitored, tuned and calculations made for future capacity requirements to ensure the required performance.		
42.	Adequate un-interrupted power supply for smooth operation of the System is available at the Site?		
43.	Whether backup network link is available in case of failure of the primary link to the MCX?		
44.	Adequate data backup & data storage capacity.		
45.	**Firewall** Whether suitable firewalls are implemented? Is specific port / services access granted on firewall by following a proper approval process?		
46.	Network security protocols & interface standards are as per prevalent industry standards		
47.	**Anti-virus** Is Anti-virus system is installed and updated on regular basis?		
48.	**Additional Access Control Security** **The installed system provides a dual factor authentication system for access to the various components.** Extra Authentication Security The systems uses additional authentication measures		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	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
49.	Does the organization's documented policy include a backup policy and procedures?		
50.	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?		
51.	**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 b) Database c) Audit Trails Reports At the user level a) Market Watch b) Logs c) History d) Reports e) Audit Trails Are backup procedures documented and backup logs maintained? Are the backup logs maintained and are the backups been 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
52.	**Does the Organisation have a suitable documented**		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	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?		
53.	**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?		
54.	Location of all servers is within India		
55.	Security, reliability & confidentiality of data through encryption		
56.	Suitably quilified & Adequate personnel to handle communication including trading instruction & back office work		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
57.	**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 - 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?		
58.	In case of failure of Internet, the alternate channel of communication has adequate capabilities for client identification and authentication.		
H	**Operational Integrity**	Results	Options
59.	Does the organization's policy and procedure document have an access control policy for users of the service?		
60.	**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.		
61.	**Physical Security** Whether adequate controls have been implemented for		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	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?		
62.	**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 k) 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 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 are in place? o Whether approvals are in place for all the changes during the audit period? o Whether all backup is available for minimum period of 3 years o Whether backup logs are maintained? o Have backup been verified and tested?		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	○ Are there any recovery procedure and have the same been tested? ○ Whether backup media is stored safely? ○ Whether Members have defined and implemented recovery procedures to recover system and data from any unforeseen events / disaster? ○ Whether recovery procedures are tested regularly?		
63.	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.		
64.	**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 f) Activity Logs g) Retention Period h) Data Maintenance		
65.	**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		
66.	**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?		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	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
67.	**Insurance (optional)** The insurance policy of the Member covers the additional risk of usage of system and probable losses in case of software malfunction.		
68.	**Settlement of Trades** **The installed system provides a 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.		
69.	**Database Security** a) The installed system has sufficient controls 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 user names / passwords securely. e) Whether database is hardened with latest security guidelines.		
70.	Whether system has adequate safety features to		

<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>ensure it is not susceptible to internal / external attacks?</td><td></td><td></td></tr>
<tr><td>71.</td><td>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?</td><td></td><td></td></tr>
<tr><td>72.</td><td>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</td><td></td><td></td></tr>
<tr><td>73.</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>74.</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
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

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>75.</td><td>Verification of participation by Member in Periodic Mock Session / Simulated Trading Environment conducted by Exchange

Whether member has 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/ DMA</th></tr>
</table></td><td></td><td></td></tr>
</table>

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	Whether any abnormalities observed in the verification of Logs, Reports, Audit Trail and Database of the tests performed by member while participating in Periodic Mock Trading session conducted by Exchange		
76.	**Risk Management**		
	1. Individual order price check		
	2. Individual order quantity limit check		
	3. Individual order value check		
	4. Client level exposure limit		
	5. Client level Turnover limits		
	6. Client level Trading limits		
	7. Client level Cumulative open order value check		
	8. Client level security wise limit check		
	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.		
77.	**Order Management**		
	1. Order modification/ cancellation facility and trade history provided to clients		
	2. TM follows similar logic/priorities used by the SE to treat client orders		
	3. Internally generated unique numbering for all client order/trades		
	4. Provision to capture IP address for all orders		
	5. Order/ Trade confirmation sent to investor		
	6. Order/ Trade confirmation displayed on website/ application on real time basis		
	7. Reconfirmation of orders which are larger than that specified by the TM's risk management system provided on the internet based system		
	8. System doesn't have any functionality for matching of cross trades and all orders are offered to exchange trading system for matching		
	9. In case of failure of the IBT or wireless network, alternative means of communication for placing orders are available		
78.	**Systems, Infrastrucutre and Network**		
	1. ,Location of all servers is within India		
	2. Security, reliability & confidentiality of data through encryption		
	3. Records are temper-proof		
	4. Adequate data backup & data storage capacity		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	5. High system availability to ensure there is no single point failure.		
	6. Adequate back-up (on-site as well as remote site) and restore systems in place to deliver sustained performance and high availability.		
	7. Suitably quilified & Adequate personnel to handle communication including trading instruction & back office work		
	8. Ticker/quote/order book displayed on website also display the time stamp as well as the source of such information against the given information		
	9. 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		
	10. 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)		
79.	**Access and Security controls**		
	1. User id		
	2. First Level password (Private code)		
	3. Other forms of access controls such as smart cards, biometric devices etc. (Applicable for STWT only)		
	4. Automatic expiry of passwords at the end of a reasonable duration. Reinitialize access on entering fresh passwords		
	5. 2 factor authorization for login session and these 2 factors can't be the same		
	6. Session login details not be stored on the devices used for internet based trading and securities trading using wireless technology		
	7. All transaction/activities/alert logs with proper audit facilities maintained in the system		
	8. Secured Socket Level (SSL) Security for server access through Internet		
	9. Suitable Firewalls between trading set-up directly connected to an Exchange trading system and the Internet trading set-up		
	10. Network security protocols & interface standards are as per prevalent industry standards		

PART- II

DMA Specific point

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 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 has been specified by Stock Exchange - System doesn't have any functionalility for matching of cross trades and all orders are offered		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	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		
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 user name, 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		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
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 Referenc
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		

Sr. No.	Area of Audit	Control / Processes	Compliance S / M / W	Report Referenc
11.	Any Other area/aspect which in the auditors 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:

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 Audit Certificate

Direct Market Access (DMA)

System Auditors' Certificate
(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 _____, a 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 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>1.</td><td>Category</td><td>(New / Modification)</td></tr>
<tr><td>2.</td><td>Verification of software testing done by Member in Exchange provided Test environment

No. of days software has been tested by member 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 member in Exchange provided Test environment</td><td></td></tr>
<tr><td>3.</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><th>Mock / Simulated Trading Date</th><th>Test Duration (Time in Hrs.)</th><th>Segment</th><th>User ID</th><th>CTCL/IBT/WT/ATF/DMA</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
</table>
</td><td></td></tr>
</table>

	Whether any abnormalities observed in the verification of Logs, Reports, Audit Trail and Database of the tests performed by member while participating in Mock/Simulated Environment Trading session conducted by Exchange	
4.		

Particulars	Name	Version No
Application software		
Software developed by		---
Gateway		
Risk Administration / Manager		
Front End / Order Placement / Algo Strategy(ies)		
Database details		

Part II - 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: 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 (mandatory for CTCL) f) Two factor authentication for login (mandatory) g) Appropriate message is displayed for login attempt failure		

Sr. No.	Area of Audit	Complied (Yes/No)	Auditor's Remark
6.	Contract Information displays 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.		
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 the guidelines laid by the Exchange		
15.	Order Entry for Disclosed Order below 25% is not allowed		
16.	Maximum order per second does not exceeds 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 /		

Sr. No.	Area of Audit	Complied (Yes/No)	Auditor's Remark
	Limit breach for CTCL Terminal are 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.	**Risk Management**		
A	1. Individual order price check		
	1. Individual order quantity limit check		
	2. Individual order value check		
	3. Client level exposure limit		
	4. Client level Turnover limits		
	5. Client level Trading limits		
	6. Client level Cumulative open order value check		
	7. Client level security wise limit check		
	8. System is capable of assessing the risk of the client as soon as order comes in		
	9. Margin requirements, payment & delivery obligations etc. informed to clients through system		
	10. Review and release facility for orders which got rejected because of clients having exceeded limits etc.		
26**.**	**Order Management**		
	1. Order modification/ cancellation facility and trade history provided to clients		
	2. TM follows similar logic/priorities used by the SE to treat client orders		
	3. Internally generated unique numbering for all client order/trades		
	4. Provision to capture IP address for all orders		
	5. Order/ Trade confirmation sent to investor		
	6. Order/ Trade confirmation displayed on website/ application on real time basis		
	7. Reconfirmation of orders which are larger than that specified by the TM's risk management system provided on the internet based system		

Sr. No.	Area of Audit	Complied (Yes/No)	Auditor's Remark
	8. System doesn't have any functionality for matching of cross trades and all orders are offered to exchange trading system for matching		
	9. In case of failure of the DMA, alternative means of communication for placing orders are available		
27.	**Systems, Infrastrucutre and Network**		
	1. Location of all servers is within India		
	2. Security, reliability & confidentiality of data through encryption		
	3. Records are temper-proof		
	4. Adequate data backup & data storage capacity		
	5. High system availability to ensure there is no single point failure.		
	6. Adequate back-up (on-site as well as remote site) and restore systems in place to deliver sustained performance and high availability.		
	7. Suitably quilified & Adequate personnel to handle communication including trading instruction & back office work		
	8. Ticker/quote/order book displayed on website also display the time stamp as well as the source of such information against the given information		
	9. 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		
	10. 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)		
28.	**Access and Security controls**		
	1. User id		
	2. First Level password (Private code)		
	3. Automatic expiry of passwords at the end of a reasonable duration. Reinitialize access on entering fresh passwords		
	4. 2 factor authorization for login session and these 2 factors can't be the same		
	5. Session login details not be stored on the devices used for internet based trading and		

Sr. No.	Area of Audit	Complied (Yes/No)	Auditor's Remark
	securities trading using wireless technology		
	6. All transaction/activities/alert logs with proper audit facilities maintained in the system		
	7. Secured Socket Level (SSL) Security for server access through Internet		
	8. Secured Socket Level (SSL) Security for server access through Internet		
	9. Suitable Firewalls between trading set-up directly connected to an Exchange trading system and the Internet trading set-up		
	10. Network security protocols & interface standards are as per prevalent industry standards		
29	Member must have a minimum net worth of rupees fifty lacs if the broker is providing the Internet based facility on his own. The networth computation shall be as per methodology prescribed by the Exchange/SEBI from time to time.		
30	Display of Brokerage statutory Regulatory Levies on terminal.		
31	Display of Last Trading Day on CTCL/IBT/WT front-end		

DMA Checklist

Sr. No.	Area of Audit	Complied (Yes / No)	Auditor's Remark
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.		
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.		

Sr. No.	Area of Audit	Complied (Yes / No)	Auditor's Remark
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. 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".		
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** Orders shall not be released in breach of position limit as defined by the trading member for the client.		
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**		
8.	DMA terminal info sent along with the orders placed via software complies the guidelines laid by the Exchange		

Part III – ATF Checklist

Sr. No.	Area of Audit	Complied (Yes / No)	Auditor's Remark
1.	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.		

Sr. No.	Area of Audit	Complied (Yes / No)	Auditor's Remark
	b) The member has 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 Maximum order per second does not exceed 120 orders per second. d) Checks are in place to ensure that OTR does not exceeds 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).		
2.	Maker checker facility available for defining parameters in strategy		
3.	CTCL terminal info sent along with the orders placed complies the guidelines laid by the Exchange. The orders generated by Automated Trading software are identified as Algorithm orders while releasing to the Exchange.		
4.	IOC and Market orders are not allowed		
5.	Orders Modified / Cancelled / Rejected by Exchange / Member Admin - such information is displayed in Message bar / Log, Order Book with reasons for cancellation/rejection.		
6.	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.		
7.	Order Entry during Halt session is not allowed		
8.	Strategy is behaving as expected while partial execution of orders and after DPR relaxation.		
9.	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. **Maximum Order Size / Position Limits**: (Maximum Single Transaction Value / Maximum Single Transaction Quantity): Order is not		

Sr. No.	Area of Audit	Complied (Yes / No)	Auditor's Remark
	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.		
10.	MTM Calculation in Software is accurate (optional)		
11.	The algorithm strategy/ies are conducive to efficient price discovery and fair play and shall not take liquidity away from the market		

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:

Annexure 44

Application for availing existing approved DMA facility on User ID

(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

Dear Sir,

I/We _____ (Name of Trading Member & Member Id) do hereby apply for DMA facility enable on additional user id.

Sr. #	Particulars	Details
1.	Member ID	
2.	Type of software	
3.	User ID	
4.	Unique Client Code	
5.	Client Name	
6.	Login ID Allotted	
7.	PAN No	
8.	Category Of Client	
9.	**Complete Postal Address of Client**	
	Address 1	
	Address 2	
	Address 3	
	City	
	Pin Code	
	State	
	Telephone Number	
10.	**Complete Postal Address of DMA Terminal Same As Above**	
	Address 1	
	Address 2	
	Address 3	
	City	
	Pin Code	
	State	
	Telephone Number	
11.	Date Of Activation	

For (Name of the Member)

Authorised Signatory
(Name and designation)
Date:
Place:

Annexure 17
Contingency Plan

(On Letterhead of the Member)

The Company is providing Internet Trading through 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 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 link 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

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 the 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 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, second level pass words 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 on 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 the 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 22
Form for creation of in-house DMA 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	Non-FIX
6.	Type of facility	DMA
7.	Software Name	
8.	Software Version No.	
9.	ATF Strategy Name (applicable only for Algo facility)	
10.	ATF Strategy Version No. (applicable only for Algo facility)	
11.	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]
	DMA facility details	
12.	Whether proposed Direct Market Access (DMA) facility is provided by Member on its own	(Yes/No)
13.	Whether the software proposed for Direct Market Access (DMA) facility is being developed by Member on its own	(Yes/No)
14.	Whether Frontend is provide by Member*	(Yes/No)
15.	Operating System	WINDOWS / LINUX / UNIX / MACOS
16.	Software Developed by	In-House Team / Non-Empanelled vendor
17.	Details Non-Empanelled vendor from whom the software is developed	Name: E-Mail ID:

Algo guidelines.

Conditions for use of Algo system:

- 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.

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

- 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.

- Clear classification of algo orders by identification flag as specified by the Exchange is used in their algo orders as specified in Chapter 6 Circular no.: MCX/CTCL/443/2023 dated June 30, 2023.

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

- 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.

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

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

- 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 price limit which is 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 member's system.

- Members have to put in place 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, 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.

- 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).

- 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

- 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 time 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 the relevant circular(s) issued by the Exchange from time to time for penalty structure.

- 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.

- 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.

- 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.

- 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.

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

- 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.

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

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

- 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).

- 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.

- 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.

- Algo software should have 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 the algorithmic trading guidelines of the Exchange.

- Member 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.

- ATF Guidelines (Order per second – OPS limit) OPS Circular no.: MCX/CTCL/186/2022 March 31, 2022

CTCL Terminal Info

CTCL Terminal Info (15 Digits)

Members using CTCL facility are required to provide CTCL terminal details (15 digits) nformation as per the format prescribe 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 the requirement of CTCL Terminal info as required by the Exchange.

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
Direct Market Access (DMA) Trading Termnial	222222222222
Wireless Trading Terminal	333333333333

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.

Identification of 14-15 digit

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

Note:

- All the applicable compliances and general practices defined in Master Circular – Computer to Computer Link (CTCL) Circular no.: MCX/CTCL/443/2023 date June 30, 2023 & Master Circular – Member Technology Related Compliance Circular no.: MCX/TECH/444/2023 dated June 30, 2023, will remain the same.

- Members are required to submit/upload the online application and supporting documents with valid digital signature.