

CTCL Department

Circular No.: MSE/CTCL/17639/2025 August 12th, 2025

Master Circular - Computer to Computer Link (CTCL)

The Exchange has periodically issued circulars related to various trading mechanisms, including Computer-to-Computer Link (CTCL), Internet-Based Trading (IBT), Algorithmic Trading (Algo), Direct Market Access (DMA), Securities Trading through Wireless Technology, Smart Order Routing (SOR), inhouse development of CTCL software by members, and ISV empanelment across all segments.

In order to provide the users with easy access to all the applicable circulars at one place, the present Master Circular for CTCL has been prepared. This Master Circular consolidates regulations/directions of all earlier circulars and new directions / regulations issued by Exchange for the above. Members may kindly take notes and ensure compliance. All earlier Circulars of the Exchange for the above are hereby superseded.

In case of general queries kindly contact Customer Service on 022 – 61129010 or send an email to **customerservice@msei.in**. For any clarifications on circular, kindly contact undersigned on 022 – 61129017 or send an email at **ctcl@msei.in**.

On behalf of Metropolitan Stock Exchange

Aniruddh Shukla Market Operations

Encl: Master Circular - CTCL

Master Circular – Computer to Computer Link (CTCL)

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CHAPTER 1

Empanelment of ISVs

An Independent Software Vendor (ISV) is an organization specializing in making and selling software, usually for niche or specialized purposes, that operates on third-party platforms.

1.1 Empanelment of ISVs

1.1.1 The Exchange provides an option to software vendors providing CTCL / IBT software developed using Non FIX API / FIX API to Members of Exchange to be empanelled with the Exchange.

1.2 Documentation for ISV Application

- 1.2.1 ISVs seeking empanelment with Exchange shall submit the application and other documents as per the checklist given in Part A of **Annexure 1**.
- 1.2.2 An ISV who is already empanelled in one or more segments of the Exchange and is desirous of seeking empanelment for new segment(s) will not be required to submit the undertaking (**Annexure 4**) again.

1.3 Criteria for Empanelment as an ISV

1.3.1 The software vendors desirous of being empanelled with the Exchange as an Independent Software Vendor (ISV) would be required to meet the criteria prescribed in **Annexure 2** and submit supporting documents with the application.

1.4 Procedure of ISV Empanelment

- 1.4.1 On receipt of the above duly completed documents and the applicable fees and on the ISV meeting requirements of the Exchange / SEBI and any other authority, the Exchange will share the API with ISV.
- 1.4.2 The ISVs shall ensure that the software developed by them meets the minimum requirements outlined in **Annexure 5** (Reference Points While Developing CTCL/IBT Software). On completion of development of CTCL/IBT software, the ISV will have to test the software on the test environment provided by the Exchange. For this purpose a User Id on the test environment may be provided by the Exchange, upon a requisition being made for the same by the ISV through email. After successful completion of testing on the Exchange test environment, the documents submitted by the ISV and on being satisfied that the ISV meets SEBI / Exchange minimum requirements, the ISV may be empaneled with the Exchange. The Exchange shall specify the software in respect of which such empanelment is given.
- 1.4.3 In case of version change or customization of the specified software, the vendor shall apply to the Exchange for its approval before its release. The Exchange may approve such application after satisfying all the requirements.

1.5 Documentation by Empanelled ISV for Algo

- 1.5.1 Empanelled ISV seeking approval for Algo Strategy shall submit necessary documents to Exchange as per the <u>checklist</u> given in Part B of **Annexure 1** except that fresh Undertaking need not be submitted if the ISV submits Undertaking as mentioned in paragraph 1.3.1 above.
- 1.5.2 The empanelled ISV will have to test the Algo software on the test environment provided by the Exchange. For this purpose a User Id on the test environment may be requested from the Exchange through email. On successful completion of testing on the Exchange test environment and being satisfied that empanelled ISV meets the requirement which may be stipulated from time to time by Exchange / SEBI and / or any other regulatory body(ies), the Exchange shall approve empanelled ISV"s Algo as "Approved Strategy".

1.6 Other Terms and Conditions

- 1.6.1 Empanelment for CTCL solutions and IBT solutions are separate and ISVs are required to apply separately for empanelment for the same. However ISVs empanelled for CTCL solutions would not be required to pay additional charges at the time of empanelment for IBT and vice versa.
- 1.6.2 The Exchange at its discretion may impose any additional conditions as it deems fit for the continuous empanelment of ISV. In the event the empanelled ISVs fail to comply with the conditions so imposed, the Exchange reserves the right to cancel their empanelment.
- 1.6.3 Without prejudice to above, the Exchange reserves the right to cancel or modify the empanelment/approval if the need so arises in its sole discretion.

1.7 Charges for ISV Empanelment

1.7.1 The charges as mentioned below shall be payable by ISVs

| | Common charges across empanelment for CTCL and IBT software | | | |
|-----------------------------|---|--|--|--|
| One Time Non-Refundable Fee | ₹ 1000000 + Applicable Service Tax | | | |
| Recurring Annual Charge | ₹ 250000 + Applicable Service Tax | | | |

- 1.7.2 The ISVs shall pay the annual fee for the first year in advance along with the application. The annual fee shall be calculated on a pro-rata basis from the date of receipt of the ISV"s application till the ensuing March 31st for the first year. Any excess amount paid for the first year (on pro-rata basis) shall be adjusted towards annual fees for the next financial year. The annual fee shall be payable in by 30th day of April each year. An interest @ 21% p.a. shall be levied on late payment of the annual fees.
- 1.7.3 The Fees/Charges mentioned in Paragraph 1.7.1 are applicable on a per segment basis. e.g. those who have previously paid Onetime Fee and are paying annual charges for any of the segment will also be required to pay onetime fee and annual charges for each new segment separately while applying for empanelment in respective segments and thereafter.

CHAPTER 2

Registration of Independent Software Vendors from outside India (ISVOI)

An Independent Software Vendor (ISV) is an organization specializing in making and selling software, usually for niche or specialized purposes, that operates on third-party platforms from outside India.

2.1 Registration of Independent Software Vendors from outside India (ISVOI)

2.1.1 Independent Software Vendors outside India (ISVOI) who provide trading solutions developed using Non FIX API / FIX API globally and who are desirous of developing software for members of Exchange may get registered with the Exchange in terms of the provisions of this CHAPTER. Upon registration with the Exchange, ISVOIs would receive the API"s / technical specifications directly from the Exchange.

2.2 Procedure of ISVOI Registration

- 2.2.1 The ISVOIs desirous of being registered with the Exchange would be required to meet the criteria prescribed in **Annexure 37** and provide the supporting documents/details mentioned therein.
- 2.2.2 For registration as an ISVOI, interested vendor shall apply to the Exchange in the format specified in **Annexure 38** along with duly executed "Standard Terms & Conditions" (as specified in **Annexure 39**).
- 2.2.3 On receipt of the duly filled application form, duly executed "Standard Terms & Conditions" and the charges, Exchange will evaluate the application and on being satisfied that the vendor meets the requirements of the Exchange and regulatory requirements, the vendor may be registered with the Exchange as an ISVOI.

2.3 Approval to members for Registered ISVOI's software

2.3.1 The software developed by "Registered ISVOI" is not considered as software of empanelled ISV. The procedure for providing approval to trading members for software procured from / developed by "Registered ISVOI" would be same as the approval procedure for members developing In-House software / procuring software from non-empanelled vendors (Ref: CHAPTER 4).

2.4 Charges for ISVOI Registration

2.4.1 The charges as mentioned below shall be payable by ISVOI:

| One Time Non-Refundable Fee | ₹ 1000000 + Applicable Service Tax |
|-----------------------------|------------------------------------|
| Recurring Annual Charge | ₹ 250000 + Applicable Service Tax |

2.4.2 The ISVOI shall be required to pay the annual fee for the first year in advance along with the application. The annual fee shall be calculated on a pro-rata basis from the date of receipt of the ISVOI"s application till March 31st for the first year. Any excess amount paid

for the first year (on pro-rata basis) shall be adjusted towards annual fees for the next financial year. The annual fee shall be payable in by 30th day of April each year. An interest @ 21% p.a. shall be levied on late payment of the annual fees.

2.4.3 The Fees/Charges mentioned in Paragraph 2.4.1 are applicable on a per segment basis. e.g. those who have previously paid Onetime Fee and are paying annual charges for any of the other segment will also be required to pay onetime fee and annual charges for each new segment separately while applying for registration in respective segments and thereafter.

2.5 Other Terms and Conditions

- 2.5.1 The Exchange at its discretion may impose any additional conditions as it deems fit for the continuous registration of ISVOI. In the event the registered ISVOI fails to comply with the conditions so laid, the Exchange may cancel their registration.
- 2.5.2 Without prejudice to above, the Exchange reserves the right to cancel or modify the registration/approval if the need so arises in its sole discretion.

CHAPTER 3

CTCL / IBT Facility from Empanelled ISVs

CTCL / IBT is a system that allows brokers or traders to connect their trading terminals directly to the stock exchange's trading system, enabling real-time, direct order placement and execution.

3.1 Documentation for CTCL / IBT Procurement from Empanelled ISV

- 3.1.1 The list of Exchange empanelled ISVs for CTCL / IBT is available on Exchange website www.msei.in. Members desirous of using CTCL Software developed by empanelled Vendors are required to seek approval of the Exchange under this CHAPTER. Applications seeking approval of the Exchange for using software of empanelled ISVs shall be made in the format given in **Annexure 8** and shall be accompanied by documents as per the checklist given in Part C of **Annexure 1**.
- 3.1.2 Members desirous of seeking approval to use IBT facility from empanelled ISV shall make the requisite application to the Exchange and submit the documents as per the <u>checklist</u> given in Part D of **Annexure 1**. Members desirous of seeking approval to use IBT facility are advised to ensure complete compliance with the circulars of SEBI and Exchange.

3.2 Set of Instructions

3.2.1 The requirements applicable to usage of CTCL / IBT facilities are enclosed as Annexure 7. Members are required to take note of the instructions and ensure strict compliance with the same. These "Set of Instructions" shall apply notwithstanding anything to the contrary contained in any Undertaking submitted earlier by an existing member of the Exchange. Any member opting for CTCL / IBT facility shall not be required to submit any separate Undertaking. All members who use the CTCL / IBT facility shall be deemed to have undertaken to comply with the Instructions given in Annexure 7.

3.3 Approval to Member for IBT Facility

3.3.1 The software and system proposed for IBT shall be duly certified by the Exchange empanelled system auditor before grant of approval. List of Exchange empanelled trading system auditors qualified to undertake such system audit is available on Exchange

- website <u>www.msei.in</u>. The system audit charges should be negotiated and paid directly by the member to the system auditor.
- 3.3.2 Members are required to submit the original copy of the report of the system audit conducted of their IBT software and system to the Exchange along with the documents as per checklist mentioned above. The system audit report should be on the letter head of the system auditor. It may be noted that all the pages of the System Audit Report should be stamped and signed by the auditor. The system audit report must contain the Name and registration number of system auditor along with stamp, place and date at the end of report. The system auditor should categorically certify in the report that "There is no conflict of interest with respect to the member being audited".

3.4 Periodic System Audit of CTCL / IBT systems

3.4.1 Members using CTCL / IBT facility shall ensure that the periodic audit has such scope as may be specified by the Exchange from time to time and covers compliance of all requirements mentioned in SEBI and Exchange Circulars on CTCL / IBT.

3.5 Charges for Using CTCL / IBT Facility Procured from Empanelled ISV

3.5.1 No charges are payable to Exchange by members procuring approved CTCL / IBT software from empanelled ISVs.

CHAPTER 4

In-House Development of CTCL / IBT Software

In-house development refers to the process of designing, developing, and maintaining CTCL / IBT software internally within an organization, using its own team and resources, rather than outsourcing the work to external vendors or third-party companies.

4.1 Documentation for In-House CTCL Software Application by Member

- 4.1.1 Where a member is desirous of developing CTCL / IBT software In-House using Non FIX API / FIX API provided by the Exchange or procuring / developing CTCL / IBT software from or through Non-empanelled vendors, shall apply to the Exchange which shall be accompanied by documents as per the <a href="https://checklist.gov
- **4.1.2** A prospective member (a person who has not yet been admitted as a member of the Exchange and has already applied for membership with the Exchange) may apply to Exchange for In-House software development by submitting application as per format prescribed in **Annexure 18** and an Undertaking as per format prescribed in **Annexure 19**.

4.2 Approval to Member

- 4.2.1 Members shall be fully responsible for the development and testing of software. They shall make the CTCL/IBT set up ready at their offices/branch offices which includes software, hardware and network.
- 4.2.2 On completion of the development of In-House CTCL / IBT software, the member will have to test the software on the test environment provided by the Exchange. For this purpose a User id on the test environment may be requested from the Exchange through email.
- 4.2.3 The CTCL/IBT facility being used by a member shall have inbuilt feature of pushing in all the orders, entered by any of the approved users only through CTCL server of the

member, which in turn will push such orders to the trading system of the Exchange, for the purpose of execution. The member should ensure that the In-House software meets the minimum requirements outlined in **Annexure 5**.

- 4.2.4 The Exchange shall give approval to a prospective member applicant for using In-House developed software only after he complies with all exchange requirements and is admitted as a member of the Exchange.
- 4.2.5 Members who are desirous of testing the software again after grant of approval for In-House CTCL/IBT software in test environment shall apply for the same citing reasons, and indicating duration of testing, nature of changes to the software and new functionalities introduced etc. The member shall test of the modified software in test environment and after completion of testing, obtain a fresh approval from the Exchange for use of the said modified software.

4.3 Periodic System Audit of In- House CTCL / IBT systems

4.3.1 Members using In-House CTCL / IBT facility shall ensure that the periodic audit has such scope as may be specified by the Exchange from time to time and covers compliance of all requirements mentioned in SEBI and Exchange Circulars on CTCL / IBT.

4.4 Charges for In-House Development of CTCL / IBT Software

4.4.1 The charges as mentioned below shall be payable by member:

| | Common charges across In-House development of CTCL and IBT software |
|-----------------------------|---|
| One Time Non-Refundable Fee | ₹ 150000 + Applicable Service Tax |
| Recurring Annual Charge | ₹ 50000 + Applicable Service Tax |

- 4.4.2 The members shall pay the annual fee for the first year in advance along with the application. The annual charges shall be calculated on a pro-rata basis from the date of receipt of the member's application till the ensuing March 31st for the first year. Any excess amount paid for the first year (on pro-rata basis) shall be adjusted towards annual charges for the next financial year. The annual charges shall be payable in April each year. Applicable annual charges from next financial year will be recovered from the "Settlement Account" of the member.
- 4.4.3 The Fees/Charges mentioned in Paragraph 4.4.1 are applicable on a per segment basis. e.g. those who have previously paid Onetime Fee and are paying annual charges for any of the other segment will also be required to pay onetime fee and annual charges for each new segment separately while applying for approval in respective segments and thereafter.

CHAPTER 5

Direct Market Access (DMA) Facility

Direct Market Access (DMA) refers to the ability of traders usually institutional or high-net-worth clients to place orders directly into the exchange's order book without manual intervention from a broker.

5.1 DMA Facility

- 5.1.1 DMA is a facility which allows Members to offer their clients direct access to the exchange trading system through their Computer to Computer Link (CTCL) infrastructure without manual intervention by them.
- 5.1.2 SEBI vide its circular no.MRD/DoP/SE/Cir-7/2008 dated April 03, 2008 had permitted introduction of Direct Market Access facility ("DMA Facility"). Further it had vide its circular no.MRD/DoP/SE/Cir-3/2009 dated February 20, 2009 and CIR/MRD/DP/ 20 /2012 dated August 2, 2012 issued clarifications regarding availing of DMA facility by institutional clients through their investment managers.
- 5.1.3 The requirements applicable to DMA facilities are enclosed as **Annexure 7**. Members are required to take note of the instructions and ensure strict compliance with the same. These "Set of Instructions" shall apply notwithstanding anything to the contrary contained in any Undertaking submitted earlier by an existing member of the Exchange. Any member opting for DMA facility shall not be required to submit any separate Undertaking. All members who avail the DMA facility shall be deemed to have agreed to the Instructions given in **Annexure 7**.
- 5.1.4 Members desirous of availing the DMA facility for their clients are advised to ensure complete compliance with the aforesaid circulars of SEBI and this circular. The procedure and relevant information has been detailed in the following manner:
 - Application
 - Eligibility
 - Terms and Conditions
 - Operational Specifications including password maintenance and authentication
 - Other requirements

5.2 Application by Member for DMA Facility

- 5.2.1 Members who are desirous of offering DMA facility to their eligible clients may make an application to the Exchange for approval, in the format given in the **Annexure 20** and submit the documents as per the <u>checklist</u> given in Part F of **Annexure 1**.
- 5.2.2 The applications of the Members shall be examined on a case-to-case basis. The systems and the software proposed for the DMA facility shall be duly certified by the Exchange empanelled system auditor before grant of approval. List of Exchange approved trading system auditors qualified to undertake such system audit is available on Exchange website www.msei.in. The system audit charges should be negotiated and paid directly by the member to the system auditor.
- 5.2.3 Members are required to submit the original copy of the report of the system audit conducted of their DMA software and system to the Exchange along with the documents as per checklist mentioned above. The system audit report should be on the letter head of the system auditor. It may be noted that all the pages of the System Audit Report should be stamped and signed by the auditor. The system audit report must contain the Name and registration number of system auditor along with stamp, place and date at the end of report. The system auditor should categorically certify in the report that "There is no conflict of interest with respect to the member being audited."
- 5.2.4 The electronic/automated risk management systems should be capable of carrying out appropriate validations of all risk parameters including Quantity limits, Price Range Checks, Order Value and Credit Checks before the orders are released in the Exchange trading system.

5.2.5 Applicant members shall test their proposed DMA software in the test environment provided by the Exchange at a pre-specified time (under previous intimation to the Exchange). On satisfactory results and fulfillment of all conditions mentioned by SEBI and by the Exchange, the member would be granted approval on a case-to-case basis to provide the facility to its eligible clients (such clients who have been provided the facilities are hereinafter referredto as "DMA clients").

5.3 Eligibility

- 5.3.1 DMA facility may be used by the client or an investment manager of the client. DMA facility is being permitted only to institutional clients as specified in SEBI circular. Only SEBI registered entity shall be permitted to act as an investment manager on behalf of institutional clients. In case DMA is used by the clients through an investment manager, the investment manager may execute the necessary documents on behalfof the clients.
- 5.3.2 The Members providing the facility shall ensure compliance as mentioned in the SEBI circulars and required by the Exchange, in respect of their DMA clients and orders emanating from their systems.

5.4 Terms and Conditions

- 5.4.1 The "Terms and Conditions" as specified in the **Annexure 24** shall be provided by the member to the client or investment manager acting on behalf of the client for availing the DMA facility.
- 5.4.2 In case the DMA facility provided by the Trading Member is used by the client, Part A of **Annexure 21** shall be applicable. In case the DMA facility provided by the Trading Member is used by the client through an investment manager, Part B of **Annexure 21** shall be applicable. Additionally the investment manager shall provide to the Trading Member the details specified at Part C of **Annexure 21**.

5.5 Operational Specifications Including Password Maintenance and Authentication

- 5.5.1 Members shall ensure that standard procedures as mentioned under part 2 ("Operational specifications") of SEBI circular no MRD/DoP/SE/Cir-7/2008 dated April 03, 2008, are provided in the DMA facility, including in cases where the clients access the DMA server of Trading Member through third party service providers.
- 5.5.2 Password maintenance and authentication may be done either by the trading member and or by the third party network service provider. The member shall ensure that there is secured access and communication and a sound audit trail for all the DMA orders/trades. The trading members and the DMA clients shall have appropriate agreements with the third party service providers for ensuring secured access and communication.
- 5.5.3 The systems used by the members for DMA facility shall have adequate security, reliability and confidentiality of data through use of encryption technology. Members shall also ensure that there are adequate provisions for back-up systems and data storage capacity in place. The Members shall ensure that proper audit trail, transaction logs, identification of user ID, activities / alert logs, unique numbering of orders / trades is maintained.
- 5.5.4 The authorized user and client details should be part of the order details received and authenticated at the DMA server of the trading member.

5.6 Other Requirements

- 5.6.1 Members are advised to note that they shall be fully responsible and liable for all orders emanating from their DMA systems and that it shall be their responsibility to ensure that only eligible DMA clients access the facility.
- 5.6.2 Members are further advised to ensure that their systems do not cross orders of their clients with each other and that all orders are placed in the Exchange system.

5.7 Periodic System Audit of DMA system

5.7.1 Members using DMA facility shall ensure that the periodic audit has such scope as may be specified by the Exchange from time to time and covers compliance of all requirements mentioned in SEBI and Exchange Circulars on DMA.

5.8 Charges for DMA Facility

5.8.1 Members who have already paid onetime Non Refundable Fee for their current In-House set up are not required to pay the same while applying for DMA facility. Members NOT having current In-House set up are required to pay the onetime Non Refundable Fee and Recurring Annual charges as mentioned in the paragraph 4.4 of CHAPTER 4.

CHAPTER 6

Algorithmic Trading (Algo)

Algorithmic trading, also known as algo trading or automated trading, refers to the use of computer programs (algorithms) to automatically place, modify, and execute trades in financial markets based on predefined rules and logic.

6.1 Algorithmic Trading (Algo)

- 6.1.1 SEBI has vide its circular no. CIR/MRD/DP/ 09 /2012 dated March 30, 2012 laid down Broad Guidelines for Algorithmic Trading. The said circular was intimated to members vide Exchange Circular No. MCX-SX/CTCL/743/2012 dated April 3, 2012.
- 6.1.2 The Exchange allows Algorithmic Trading for placing orders on the trading system of the Exchange subject to the terms and conditions mentioned herein. Algorithmic Trading (hereinafter referred to as "Algo") for the purpose of this circular means "A system used by a trading member to generate orders using automated execution logic."
- 6.1.3 Members may use Algo subject to the following conditions and other conditions as may be specified by the Exchange, SEBI and /or any other Regulatory body(ies) from time to time.
 - 6.1.3.1 Member shall use the facility of algorithmic trading only with the prior permission of the Exchange through its CTCL terminal and only at the location approved by the Exchange.
 - 6.1.3.2 All Algorithmic orders shall be necessarily routed to the exchange trading system through the member servers located in India.
 - 6.1.3.3 The member has proper procedures, systems and technical capability to carry out trading through the use of algorithms.

- 6.1.3.4 The member has procedures and arrangements to safeguard algorithms from misuse or unauthorized access.
- 6.1.3.5 Members placing orders generated using algos are required to maintain the following minimum levels of risk controls:
 - 6.1.3.5.1 <u>Price check</u> Algo orders shall not be released in breach of the price bands defined by the Exchange for the security / contract.
 - 6.1.3.5.2 Quantity check Algo orders shall not be released in breach of the quantity limit as defined by the Exchange for the security / contract.
 - 6.1.3.5.3 Order Value check Algo orders shall not be released in breach of the "value per order" as defined by the Exchange.
 - 6.1.3.5.4 <u>Cumulative Open Order Value check</u> 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 system.
 - 6.1.3.5.5 <u>Automated Execution check</u> An Algo shall account for all executed, unexecuted and unconfirmed orders, placed by it before releasing further order(s). Further, the Algo system shall have pre-defined parameters for an automatic stoppage in the event of Algo execution leading to a loop or a runaway situation.
 - 6.1.3.5.6 Market Price Protection Algo users shall not send MARKET order (i.e. order without any price) to Exchange. Algo users should send Market protection order instead of Market Order. The Market Protection order will be a LIMIT order with a price which will be computed automatically based on plus or minus "x%" of LTP within the maximum range of DPR/dummy circuit filter.
- 6.1.3.6 Members shall endeavor that release of Algo orders does not result in breach of order to trade ratio, specified by the Exchange from time to time. Members may note that in case of exceeding the order to trade ratio, they shall be liable for economic disincentives as may be specified by the Exchange. The charges and other actions for high daily order-to-trade ratio shall be as specified by the Exchange from time to time.
- 6.1.3.7 Members shall ensure that all Algo orders are tagged with a unique identifier provided by the stock exchange in order to establish audit trail. The Exchange has communicated from time to time that the members are required to populate the CTCL Terminal Information in the order structure for every order emanating from CTCL Terminals. For identification of Algo orders members are required to ensure that the 13th digit of CTCL Terminal Information, which indicates whether the order is generated through Algo software or not, should be:
 - 0 if order is not generated through Algo software.
 - 1 if order is generated through Algo software,
 - 2 if order is generated through Smart Order Routing without Algo software.
 - 3 if order is generated through Smart Order Routing with Algo software.

- 6.1.3.8 Members shall ensure that the Algo is used only by a person approved by the Exchange to operate CTCL terminal ("Approved User").
- 6.1.3.9 Orders through Algo facility will not be permitted in those securities / contracts as are specified by the Exchange from time to time to be not eligible for Algo trading.
- 6.1.3.10 The Exchange reserves the right to withdraw or modify this facility in respect of all or any securities / contracts, generally or specifically for any member or for any client of any member.
- 6.1.3.11 Members shall ensure that 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 Aglorithmic trading does not result in shortages in margin deposit or settlement obligation.
- 6.1.3.12 Members shall also ensure that all risk management measures like price / volume parameters, open position limits, etc. are strictly adhered to by Algo.
- 6.1.3.13 The Exchange may, where it deems it necessary to do so, place restrictions on automatic generation of orders through Algos at or beyond the price levels specified by it and thereupon the Members shall be bound to ensure that such orders are not generated and placed on the trading system of the Exchange.
- 6.1.3.14 Members shall ensure that the trades routed through Algos are not in the nature of abnormal / manipulative trades.
- 6.1.3.15 The member has real-time monitoring systems to identify algorithms that may not behave as expected. Member shall keep Exchange informed of such incidents immediately.
- 6.1.3.16 The member shall maintain logs of all trading activities to facilitate audit trail. The Member shall maintain record of control parameters, orders, trades and data points pertaining to Algo.
- 6.1.3.17 Members shall be solely responsible for all the losses, damages or other costs and consequences arising in any manner to them pursuant to the use of Algo facility and shall not hold the Exchange responsible in any manner whatsoever.
- 6.1.3.18 All other compliance requirements will apply mutatis mutandis, in respect of Algo facility.

6.2 Algo to Clients

- 6.2.1 Members desirous of providing the service of placing orders on behalf of clients through Algo, are required to adhere to the following.
- 6.2.2 Algo facility shall be made available only through an Approved User operating a CTCL terminal at the office of a member, as approved by the Exchange in other words order generation through Algo shall be effected only by Approved User of the trading member.
- 6.2.3 Algo service through approved users of the Member shall be provided to a client based on separate request from the client.

- 6.2.4 The request letter shall not be a part of the client registration documents kit and shall be taken from the client separately.
- 6.2.5 Upon receipt of the request letter, the member shall give to the client a document in duplicate, detailing the features of the Algo, as provided by the software vendor or prepared by the member (depending on whether vendor so In-House software is used by the member) and also the risk factors involved.
- 6.2.6 The client shall read the Algo document and, if interested in availing the service, shall return an acknowledged copy of the document to the member and also submit an undertaking to the member, duly stamped and including clauses inter alia, covering the following:
 - 6.2.6.1 That he / she / they desire(s) to avail the service of placing orders on the Exchange"s trading platform through Algo, as provided by the member, out of his / her / their own volition and not at the instance of any person including the member.
 - 6.2.6.2 That he / she / they has (have) signed a request on a dated letter, addressed to the member for Algo, out of his / her / their own will.
 - 6.2.6.3 That a disclosure document on Algo was provided to him / her / them by the member, that he / she / they has (have) read and understood all the contents of the disclosure document and that he / she / they was (were) satisfied about the features and risk factors of Algo proposed to be provided by the member.
 - 6.2.6.4 That he / she / they shall ensure availability of sufficient deposits / funds for margin / settlement obligations, in respect of the trades effected through Algo, as and when required.
 - 6.2.6.5 That he / she / they shall be bound by restrictions on the facility including withdrawal of the service without notice, parameters in order generation or their modification, securities / contracts permitted under the service, conditions under which further order generation in permitted securities / contracts is not allowed and any other terms and conditions which may be imposed from time to time by the member / Exchange / SEBI.
 - 6.2.6.6 Upon receipt of duly executed undertaking from the client, the Member may accept written instructions from the client for buying or selling, securities / contracts together with specification of parameters for order generation such as order generation timing, order quantity, etc.
- 6.2.7 All the above said documents shall be preserved by the member for a period of 7 years from termination of facility to the respective client and shall be produced to the Exchange at the time of inspection.

6.3 Documentation by Member for Algo through Empanelled ISV

6.3.1 Members desirous of using "Approved Strategy" of empanelled ISV shall apply to Exchange (for each "Approved Strategy" separately) for approval by submitting the documents as per the <u>checklist</u> given in Part G of **Annexure 1**. They shall further follow the procedure in paragraph 6.5 below.

6.4 Documentation by Member for In-House Algo

- 6.4.1 Member desirous of developing In-House Algo software shall apply for approval as per requirements mentioned in CHAPTER 3 for In-House software devlopment and shall additionally submit the following documents to the Exchange for approval. Please refer checklist in Part E of **Annexure 2** They shall further follow the procedure in paragraph 6.5 below.
 - Application Form for use of Algo (**Annexure 22**)
 - Trading member"s undertaking for use of Algo (Annexure 23) One time only
 - Application for approval of Algo software developed In-House / developed from nonempanelled vendor (**Annexure 17**)
 - Network diagram
- 6.4.2 Members who already have Application Programming Interface (API) provided by Exchange for In-House CTCL development can use the same API for developing Algo without additional charges, after submitting the documents mentioned above.

6.5 Approval to member for Algo

- 6.5.1 The member will have to test the Algo software on the test environment provided by the Exchange. For this purpose a User id on the test environment may be requested from the Exchange through email. After successful testing in test environment of the Algo software and on being satisfied that member meets the requirements which may be stipulated from time to time by Exchange, SEBI and / or any other regulatory body(ies) and that the member system has the capability to ensure orderly trading and integrity of the market, the Exchange may grant permission to Member for the usage of Algo.
- 6.5.2 After obtaining approval to use Algo, the members shall install the Algo Software as approved by Exchange only at the location approved by the Exchange and after ensuring that all the requirements stipulated by the Exchange / SEBI in this regard have been complied with.

6.6 Modifications in Approved Algo

6.6.1 Member shall inform the Exchange on any modification or change to the approved Algos or systems used for Algos. Exchange may require fresh approval of the modified Algo.

6.7 Periodic System Audit of Algo system

- 6.7.1 Member using Algo shall submit a system audit report on Half Yearly basis for Algo which shall include a specific report verifying whether the different checks as specified by SEBI / Exchange and any other regulatory body(ies) from time to time are in place. The said report shall be issued by Certified Information System Auditors (CISA) empanelled by Exchange or by such other eligible auditors as may be specified by Exchange from time to time.
- 6.7.2 It is further specified that the members as identified by the Exchange shall be required to submit the system audit report for Algo on quarterly basis. Such members will be intimated by Exchange separately in this regard.

6.8 Charges for Algo

6.8.1 No charges are payable to Exchange by members procuring "Approved Strategy" from

empanelled ISVs.

- 6.8.2 For Non-Approved Strategy of empanelled ISVs or strategies developed In-house/ procured or developed from or through non empanelled vendor, member shall pay following charges to Exchange:
 - 6.8.2.1 Members who have already paid onetime Non Refundable Fee for their current In-House set up are not required to pay the same.
 - 6.8.2.2 Members NOT having current In-House set up are required to pay the onetime Non Refundable Fee and Recurring Annual charges as mentioned in the paragraph 4.4 of CHAPTER 4.

CHAPTER 7

Securities Trading using Wireless Technology

Security trading through wireless refers to the buying and selling of financial securities (stocks, bonds, derivatives, etc.) using wireless technologies.

7.1 Securities Trading using Wireless Technology

- 7.1.1 SEBI vide its circular no. CIR/MRD/DP/25/2010 dated August 27, 2010, has permitted "Securities Trading using Wireless Technology" (hereinafter referred to as "Wireless Trading") which shall include devices such as mobile phone, laptop with data card, etc, that use Internet Protocol (IP). Further it had issued circular no. CIR/MRD/DP/ 8 /2011 dated June 30, 2011 regarding "Review of Internet Based Trading (IBT) and Securities trading using Wireless Technology (STWT)". Same was intimated to members vide Exchange circular no. MCX-SX/CTCL/431/2010, dated September 3, 2010 and MCX-SX/CTCL/596/2011, dated July 5, 2011.
- 7.1.2 Members who have been permitted by Exchange to provide IBT are eligible to provide Wireless Trading. All relevant requirements applicable to IBT shall also be applicable to Wireless Trading.
- 7.1.3 Members desirous of availing the Wireless Trading are advised to ensure complete compliance with the circulars of SEBI and Exchange.

7.2 Documentation for Wireless Trading Application by Members

- 7.2.1 Members, who have already taken permission for IBT facility from Exchange and wish to avail the facility of Wireless Trading shall apply to the Exchange by submitting the documents as per the <u>checklist</u> given in Part H of **Annexure 1**.
- 7.2.2 Members, who have not yet taken permission for IBT facility, and wish to avail the facility of Wireless Trading shall apply to Exchange for IBT facility as per CHAPTER 3 and additionally submit documents as per Part H of **Annexure 1** of this circular for Wireless Trading facility approval.
- 7.2.3 The software and system proposed for Wireless Trading shall be duly certified by the Exchange empanelled system auditor before grant of approval. List of Exchange approved trading system auditors qualified to undertake such system audit is available on Exchange website www.msei.in. The system audit charges should be negotiated and paid directly by the member to the system auditor.
- 7.2.4 Members are required to submit the original copy of the report of the system audit conducted of their Wireless Trading software and system to the Exchange along with the

documents as per checklist mentioned above. The system audit report should be on the letter head of the system auditor. It may be noted that all the pages of the System Audit Report should be stamped and signed by the auditor. The system audit report must contain the Name and registration number of system auditor along with stamp, place and date at the end of report. The system auditor should categorically certify in the report that – "There is no conflict of interest with respect to the member being audited".

7.2.5 Exchange may require the testing of Wireless Trading software in the test environment of the Exchange. After successful testing of the software and on being satisfied with the documents and system audit report submitted by the member, the Exchange may grant permission to member for the usage of Wireless Trading facility.

7.3 Periodic System Audit of Wireless Trading system

7.3.1 Members using Wireless Trading facility shall ensure that the periodic audit has such scope as may be specified by the Exchange from time to time and covers compliance ofall requirements mentioned in SEBI and Exchange Circulars on Wireless Trading.

7.4 Charges for Wireless Trading Facility

- 7.4.1 No charges are payable to Exchange by members procuring Wireless Trading software from empanelled IBT ISVs.
- 7.4.2 For Wireless Trading software developed In-house/procured or developed from or through non empanelled IBT ISVs, member shall pay following charges to Exchange:
 - 7.4.2.1 Members who have already paid onetime Non Refundable Fee for their current In-House set up are not required to pay the same.
 - 7.4.2.2 Members NOT having current In-House set up are required to pay the onetime Non Refundable Fee and Recurring Annual charges as mentioned in the paragraph 4.4

CHAPTER 8

Smart Order Routing

Smart Order Routing (SOR) is a technology used in financial markets that automatically finds the best possible venue to execute a trade based on various parameters like price, liquidity and speed.

8.1 Smart Order Routing (SOR)

8.1.1 SEBI has vide its circular no. CIR/MRD/DP/26/2010 dated August 27, 2010, permitted Smart Order Routing in Indian Securities Market. Further it has vide its circular no.CIR/MRD/DP/36/2010 dated December 09, 2010 issued clarifications regarding SOR. Same was intimated to members vide Exchange circular no. MCX-SX/CTCL/432/2010, dated September 3, 2010 and MCX-SX/CTCL/503/2011, dated January 03, 2011.

8.2 Documentation for SOR Application by Members

- 8.2.1 Members desirous of availing the Smart Order Routing facility are advised to ensure complete compliance with the aforesaid circulars of SEBI, this circular and circulars relating to CTCL, IBT, DMA and Algo.
- 8.2.2 Members who have already taken permission for CTCL/IBT/DMA/Algo facility, and wish to

- commence the Smart Order Routing facility shall submit the documents as per the checklist given in Part I of **Annexure 1**.
- 8.2.3 Members who have not taken permission for CTCL/IBT/DMA/Algo facility, and wish to avail the facility of Smart Order Routing shall apply to Exchange as per CHAPTER 3 (for CTCL/IBT) / CHAPTER 5 (for DMA) / CHAPTER 6 (for Algo) and additionally submit documents as per Part I of **Annexure 1** of this circular for SOR facility approval.

8.3 Approval to Members

- 8.3.1 The software and system proposed for Smart Order Routing shall be duly certified by the any of the common system auditors qualified to undertake such system audit before grant of approval. The Initial list of common system auditors qualified to undertake such system audit is available Exchange website.
- 8.3.2 Members can opt for any one of the system auditors from the list provided in Exchange website for conducting system audit of their system and software proposed for SOR. Members may note that this list may be modified from time to time by SEBI or the Exchange which will then be separately intimated. Members are required to submit the original copy of the report of the system audit conducted of their system and software proposed for SOR to the Exchange along with the aforesaid documents. The system audit report should be on the letterhead of the system auditor. It may be noted that all the pages of the System Audit Report should be stamped and signed by the auditor. The system audit report must contain the Name and registration number of system auditor along with stamp, place and date at the end of report. The system auditor should categorically certify in the report that
 - "There is no conflict of interest with respect to the member being audited".
- 8.3.3 Exchange may require the testing of the Smart Order Routing system in the test environment of the Exchange. If the Exchange is satisfied with the testing and documents submitted by the Member, it may grant permission to commence Smart Order Routing facility.
- 8.3.4 The Member server routing orders placed through Smart Order Routing system of the Exchange shall be located in India. The exchange shall permit members to offer SOR facility through all their servers irrespective of their location in India.
- 8.3.5 Member shall communicate to all clients the features, possible risks, rights, responsibilities and liabilities associated with the smart order routing facility. The "Terms and Conditions" as specified in the **Annexure 33** shall be provided by the member to the client for availing the SOR facility
- 8.3.6 The Member shall formulate its best execution policy in accordance with the requirements of SEBI and the Exchange from time to time and shall ensure that execution of constituents" orders is in accordance with its best execution policy. The best execution policy shall be disclosed to the constituent and explained to him.
- 8.3.7 Members may take such other measures and implement such other safeguards as they deem fit to ensure security and integrity of transactions.

8.4 Periodic System Audit of SOR system

8.4.1 Members using SOR facility shall ensure that the periodic audit has such scope as may be specified by the Exchange from time to time and covers compliance of all requirements mentioned in SEBI and Exchange Circulars on SOR.

8.5 Charges for SOR Facility

8.5.1 Members who have already paid onetime Non Refundable Fee for their current In-House set up are not required to pay the same while applying for SOR facility. Members NOT having current In-House set up are required to pay the onetime Non Refundable Fee and Recurring Annual charges as mentioned in the paragraph 4.4 of CHAPTER 4.

CHAPTER 9

CTCL Terminal Details (15 Digits)

9.1 CTCL Terminal Info

9.1.1 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.

9.2 Identification of 1-12 digits

9.2.1 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 | 11111111111 |
| IBT Terminal (Securities Trading using Wireless Technology) | 3333333333 |
| | 2222222222 |

9.3 Identification of 13th digit

- 9.3.1 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 software,
 - 1 If order is generated through program trading software,
 - 2 If orders is generated through Smart Order Routing without program trading software,
 - 3 If orders is generated through Smart Order Routing with program trading software.

9.4 Identification of 14-15 digit

9.4.1 Digits 14-15 should be valid Vendor Code / *In-House CTCL code for member.

*Members approved for using CTCL software developed In-House or developed / procured from non-empanelled vendor of the Exchange are required to use the code allotted to them by the Exchange.

Guidelines For Submitting Exchange (MSEI) 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 `500/-
- Further the Undertaking (including all annexures / schedules) has to be notarised before a Notary Public.
- Please use the format of respective undertaking as it is. PLEASE DO NOT RETYPE THE UNDERTAKING.
- 4. All the pages of this Undertaking (including all annexures / schedules) have to be signed in full. 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.

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 by me/us Mr. /Mrs. /M/s. | | form | | | his Undertaking our residence/o | • | |
|--|---------|-----------|--------------|-------------|------------------------------------|----|----|
| on | this | the | day | of , | | 20 | at |
| IN FAVOUR of | f Metro | politan S | tock Exchang | ge of India | a Limited. | | |
| | | | | | | | |
| | | | | | | | |

Signature**

(**to be signed by the person(s) signing the Undertaking)

Auditor Selection Norms

(Only for member reference, not to be submitted)

- 1. The Auditor shall have minimum 3 years of experience in IT audit of securities market participants e.g. stock exchanges, clearing corporations, depositories, stock brokers, depository participants etc. The audit experience should cover all the major areas mentioned under Terms of Reference (ToR) of the system audit specified by SEBI / Stock Exchange.
- 2. Resources employed for the purpose of system audit shall have relevant industry recognized certifications e.g. D.I.S.A. (ICAI) Qualification, CISA (Certified Information System Auditor) from ISACA, CISM (Certified Information Securities Manager) from ISACA, CISSP (Certified Information Systems Security Professional) from International Information Systems Security Certification Consortium, commonly known as (ISC).
- 3. The Auditor should have experience of IT Audit / Governance Frameworks and Processes conforming to industry leading practices like CobiT.
- 4. The Auditor shall not have any conflict of interest in conducting fair, objective and independent audit of the Stock Broker. Further, the directors / partners of Auditor firm shall not be related to any Stock Broker including its directors or promoters either directly or indirectly.
- 5. The Auditor shall not have any cases pending against its previous audited companies / firms, which fall under SEBI's jurisdiction, which point to its incompetence and/or unsuitability to perform the audit task.

Checklist for Documentation

Part A: Checklist for Application for Empanelment of ISV

| Sr. No. | Particulars | Format |
|---------|---|-------------|
| 1. | Application for Empanelment as ISV (With annexures) | Annexure 3 |
| 2. | Undertaking to be given by ISV - One time only | Annexure 4 |
| 3. | Certified true copy of board resolution | Annexure 12 |
| | (If the vendor is company) | |

Part B: Checklist for Approval of Algo Strategy by ISV

| Sr. No. | Particulars | Format |
|---------|---|------------|
| 1. | Undertaking to be given by ISV - One time only | Annexure 4 |
| 2. | Application for approval of Algorithmic Trading (Algo) Strategy | Annexure 6 |

Part C: Checklist for CTCL Facility from Empanelled ISV

| Sr. No. | Particulars | Format |
|---------|--|------------------------------|
| 1. | Application for change of Authorised User from MSEI - TWS to CTCL | Annexure 8 |
| 2. | Details of CTCL Network being used by Member (Not required for additional CTCL ld in same segment or while applying in new segment for using same software) | Annexure 9 |
| 3. | Acceptance Certificate for CTCL / IBT Software (Certificate to be issued by the Member after testing all the features of the software. Not required for additional CTCL Id in same segment for using same software) | Annexure 10 |
| 4. | Software confirmation by Vendor (Confirmation to be issued by Exchange empanelled ISV on their letter head) | Annexure 11 |
| 5. | Network Diagram (Details of connectivity of CTCL server at member's office with MSEI Central server in diagram to be provided by Member. Not required for additional CTCL Id in same segment or while applying in new segment for using same software) | |
| 6. | Certified true copy of board resolution (If the member is company. Not required for additional CTCL Id in same segment or while applying in new segment for using same software) | Annexure 12 |
| 7. | Undertaking to be given by trading member/stock broker for testing of software - One time only | Annexure 31 |
| 8. | System Audit Report (Not required if applying for additional User Id in same segment for using same software) | Annexure 32 & Annexure 33 |

Part D: Checklist for IBT Facility from Empanelled ISV

| Sr. No. | Particulars | Format |
|---------|--|-------------|
| 1. | Acceptance Certificate for CTCL / IBT Software (Certificate to be issued by the Member after testing all the features of the software. Not required for additional CTCL Id in same segment for using same IBT software) | Annexure 10 |
| 2. | Network Diagram (Details of connectivity of IBT server with MSEI Central server and distribution Connectivity in diagram to be provided by Member. Not required if applying for additional User Id in same segment or while applying in new segment for using same IBT software) | |
| 3. | Software confirmation by Vendor (Confirmation to be issued by Exchange empanelled ISV on their letter head) | Annexure 11 |

| 4. | Certified true copy of board resolution (If the member is company. Not required if applying for additional User Id in same segment or while applying in new segment for using same IBT software) | Annexure 12 |
|-----|--|------------------------------|
| 5. | Request for User Id to be used for Internet Based Trading Facility | Annexure 13 |
| 6. | Annexure signed by vendor and countersigned by member. (Not required if applying for additional User Id in same segment or while applying in new segment for using same IBT software) | Annexure 14 |
| 7. | Contingency Plan (Not required if applying for additional User Id in same segment or while applying in new segment for using same IBT software) | Annexure 15 |
| 8. | Undertaking to be given by trading member/stock broker for testing of software - One time only | Annexure 31 |
| 9. | System Audit Report (Not required if applying for additional User Id in same segment for using same software) | Annexure 32 & Annexure 33 |
| 10. | Secured Socket Layer Certificate (SSL) (Secured socket level security for server access through Internet to be provided by Member. Not required if applying for additional User Id in same segment or while applying in new segment for using same IBT software) | |
| 11. | Internet trading write-up (Features) (Internet trading front-end information of the software to be provided by Member. Not required if applying for additional User Id in same segment for using same IBT software) | |
| 12. | Print Screen of URL (home Page) (URL which is created and shall be accessed by users over Internet for the purpose of trading, to be provided by the Member. Not required if applying for additional User Id in same segment or while applying in new segment for using same IBT software) | |

Part E: Checklist for In-House Software Development Application by Member

| Sr. No. | Particulars | Format |
|---------|--|-------------|
| 1. | Application form for In-House CTCL / IBT / Algo software | Annexure 16 |
| 2. | Additional In-House CTCL Documents | |
| | Annexure 8 Annexure 9 Annexure 10 Network Diagram Annexure 12 CTCL Software write up | |
| 3. | Additional In-House IBT Documents Annexure 10 Network Diagram Annexure 12 Annexure 13 Annexure 15 System Audit Report Secured Socket Layer Certificate (SSL) Internet trading write-up (Features) Print Screen of URL (home Page) | |

| 4. | Additional In-House Algo Documents | |
|----|---|------------------------------|
| | Annexure 22 Annexure 23 Network Diagram Annexure 17 | |
| 5. | Undertaking to be given by trading member/stock broker for testing of software - One time only | Annexure 31 |
| 6. | System Audit Report (Not required if applying for additional User Id in same segment for using same software) | Annexure 32 & Annexure 33 |

Part F: Checklist for Direct Market Access (DMA) Facility

| Sr. No. | Particulars | Format |
|---------|---|------------------------------|
| 1. | Application form for permission for providing Direct Market Access (DMA) to clients | Annexure 20 |
| 2. | Comprehensive write-up on the Direct Market Access (DMA) system (Not required if applying for additional User Id in same segment for using same DMA software) | |
| 3. | Undertaking to be given by trading member/stock broker for testing of software - One time only | Annexure 31 |
| 4. | System Audit Report (Not required if applying for additional User Id in same segment for using same DMA software) | Annexure 32 & Annexure 33 |
| 5. | Network Diagram (Details of connectivity of DMA server with MSEI Central server along with the diagram of distribution connectivity is to be provided by Member. Not required if applying for additional User Id in same segment for using same DMA software) | |

Part G: Checklist for Algorithmic Trading (Algo) Facility from Empanelled ISV

| Sr. No. | Particulars | Format |
|---------|--|------------------------------|
| 1. | Application Form for use of Algorithmic Trading (Algo) Facility | Annexure 22 |
| 2. | Trading member's undertaking for use of Algorithmic Trading Facility – One time only. | Annexure 23 |
| 3. | Software confirmation by Vendor | Annexure 24 |
| 4. | Network Diagram (Provide network diagram for use of Algo through CTCL facility. Not required for additional User Id for using same strategy) | |
| 5. | Undertaking to be given by trading member/stock broker for testing of software - One time only | Annexure 31 |
| 6. | System Audit Report (Not required if applying for additional User Id in same segment for using same Algo software) | Annexure 32 & Annexure 33 |

Part H: Checklist for Securities Trading using Wireless Technology (Wireless Trading) Facility

| Sr. No. | Particulars | Format |
|---------|--|---------------|
| 1. | Application Form for IBT ID to be used for Wireless Trading | Annexure 25 |
| 2. | Trading Member's Undertaking for Securities Trading using Wireless Technology – One time only | Annexure 26 |
| 3. | Undertaking to be given by trading member/stock broker for testing ofsoftware - One time only | Annexure 31 |
| 4. | System Audit Report | Annexure 32 & |
| | (Not required if applying for additional User Id in same segment for using same Wireless Trading software) | Annexure 33 |
| 5. | Network Diagram (Kindly enclose detailed network architecture showing the geographical location of the order routing server for Wireless Trading. Not required if applying for additional User Id in same segment or while applying in new segment for using same Wireless Trading software) | |
| 6. | Internet trading write-up (Features) (Wireless trading front-end information of the software to be provided by Member. Not required if applying for additional User Id in same segment for using same Wireless Trading software) | |

Part I: Checklist for Smart Order Routing (SOR) Facility

| Sr. No. | Particulars | Format |
|---------|---|------------------------------|
| 1. | Application Form for CTCL ID to be used for Smart Order Routing | Annexure 27 |
| 2. | Vendor Certificate for Smart Order Routing System | Annexure 28 |
| 3. | Trading Member's Undertaking for use of Smart Order Routing – One time only | Annexure 29 |
| 3. | Undertaking to be given by trading member/stock broker for testing of software - One time only | Annexure 31 |
| 4. | System Audit Report (Not required if applying for additional User Id in same segment for using same SOR software) | Annexure 32 & Annexure 33 |
| 5. | Network Diagram (Kindly enclose detailed network architecture showing the geographical location of the order routing server for SOR. Not required if applying for additional User Id in same segment for using same SOR software) | |
| 6. | A write-up on Smart Order Routing Features (Not required if applying for additional User Id in same segment for using same SOR software) | |

Part K: Checklist for Application for Test Environment facility

| Sr. No. | Particulars | Format |
|---------|---|-------------|
| 1 | Application for the MSEI CTCL Test Environment Facility | Annexure 34 |

CRITERIA FOR EMPANELMENT OF ISV

| Sr. # | Criteria | Response to Criteria |
|-------|--|--|
| 1. | The applicant must be a registered Partnership Firm, LLP or a Company having its registered office in India. | Provide proof of registration |
| 2. | The Partnership Firm / LLP / Company should be in existence for at least 3 years | Provide copy of Partnership Deed / Certificate of Incorporation |
| 3. | Whether the Applicant has any affiliation with other entities like brokers / sub-brokers etc. including beneficial interests held by / in such brokers / sub-brokers etc. | If Yes, Please mention name of all such entities with required details |
| 4. | Whether applicant is having previous experience in similar product development / implementation. | If yes, provide name and project / product details with reference |
| 5. | Whether Applicant has requisite skills within the organization in relation to product development, system integration and maintenance | Please provide details with key personnel profile |
| 6. | Whether Applicant is certified for ISO or CMM Certificate IT activities. | Provide certification copy |
| 7. | Whether the Applicant has adequate infrastructure in terms of: • Hardware & software facilities. • Communication & networking facilities within the organization • General office facilities in terms of office space and infrastructure • Staff | Provide the existing and planned infrastructure. |
| 8. | Whether Applicant has developed and implemented CTCL / Order Management Solution for connecting to international exchanges. | If yes, please provide details of the project and exchange. |

APPLICATION FOR EMPANELMENT AS ISV

(To be executed on letterhead of the ISV)

То

CTCL Department

Metropolitan Stock Exchange of India Limited, Building A, Unit 205(A), "D - Wing", 2nd Floor, Agastya Corporate Park, Sunder Baug Lane, L.B.S. Road, Kurla (W), Mumbai - 400070

| Sr. # | Particulars | Details |
|-------|--|---|
| 1. | Application for empanelment for: (CTCL / IBT) | |
| 2. | API required from Exchange: (NonFIX API / FIX API) | |
| 3. | API Required for Segment | |
| 4. | Name of the ISV: | |
| 5. | Registered Address: | |
| 6. | Legal form of Organisation: | Certificate of Registration / Partnership deed to be enclosed |
| 7. | Telephone No.: | |
| 8. | Fax No.: | |
| 9. | Name(s) & Designation of Authorised Signatory: | |
| 10. | Contact details (Phone, Fax, Email) of Authorised Signatory: | |
| 11. | Correspondence Address of Authorised Signatory: | |
| 12. | Organisational structure: | To be enclosed |
| 13. | Total Staff: | |
| 14. | Directors: | |
| 15. | Technical Staff - Hardware: | |
| 16. | Technical Staff - Software: | |
| 17. | Technical Staff - Support: | |
| 18. | Technical Staff - Others: | |

| | - | - |
|-----|--|--|
| | | |
| 19. | No. of support offices across the country: | Complete details to be enclosed |
| 20. | Details of promoters and their background: | To be enclosed |
| 21. | No. of years in the IT Business: | |
| 22. | IT Turnover for last three years: | Complete details including audited balance sheets to be enclosed |
| 23. | Technical Details – Hardware Infra Structure available within Organisation: | To be enclosed |
| 24. | Technical Details – Software Infra Structure available within Organisation: | To be enclosed |
| 25. | Technical Details – Communication / Networking Infra Structure available within Organisation: | To be enclosed |
| 26. | Details of Empanelment as CTCL / IBT software vendor with other Stock/Commodity Exchanges: | |
| 27. | Complete details of Proposed Solution along with Platforms used: | Comprehensive write-up explaining features of the solution, programming language, OS platform, Database details and network diagram to be provided. |
| 28. | Name and reference of Exchange (MSEI) trading members where solution is implemented, if any: | |
| 29. | Proposed Price (indicative per user & site license fee) for providing the Solution to the Members of the Exchange: | (Give details) |
| | Price for Workgroup edition: | |
| 30. | Supporting documents in relation to fulfillment of criteria for empanelment | To be enclosed as Annexure |

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

| Signed s | sealed | and | deli | ivered | hv | the | Aut | hori | sed | Si | ianai | torv | ∙ of | the | Ven | ob |
|-----------|--------|-----|------|--------|----------|------|------|------|-----|----|-------|-------|------|------|-------|-------|
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| Date | |
|--------|--|
| Place. | |

UNDERTAKING TO BE GIVEN BY ISV

| I / We | , an individua | al / firm reg | gistere | d under the Inc | dian |
|--|---------------------------------------|------------------------|------------|-------------------|-------|
| Partnership Act, 1932 / a Limited Liak | oility Partnership registered unde | er Limited Li | iability F | Partnership Act 2 | 2008 |
| / a Company / Body Corporate incor | porated under the Companies | Act 1956 / | | Act, | |
| and having our registered office at _ | · · · · · · · · · · · · · · · · · · · | give | this U | NDERTAKING | on |
| this | day ofat _ | _ | | IN FAVOUR | ₹ of |
| Metropolitan Stock Exchange of Inc | dia Limited, a company incorp | porated und | der the | Companies Ad | ct of |
| 1956, with its Registered Office at | Building A, Unit 205(A), "D -\ | Wing", 2 nd | Floor, | Agastya Corpo | rate |
| Park, Sunder Baug Lane, L.B.S. Ro | ad, Kurla (W), Mumbai – 4000 | 70 (herein | after ca | alled 'Exchange' | '). |

WHEREAS

- a) The Exchange has provided the trading software to enable its Members to trade on its trading platform.
- b) In addition, Exchange provides a computer to computer link facility (hereinafter referred to as the 'CTCL facility') by which it provides a facility for order entry, receipt of order and trade confirmation and also for receipt of data relating to its trade quotations etc.
- c) The Members of the Exchange may introduce internet trading through order routing system for trading (hereinafter referred to as 'Internet based trading facility'), after obtaining permission from Exchange.
- d) The Exchange has decided that it shall make the CTCL Facility available to Members of the Exchange / grant permission to Members of the Exchange to offer Internet based trading facility on a case to case basis subject to such terms and conditions as Exchange may impose from time to time.
- e) The Members of the Exchange may develop the necessary software at their end for the purposes of CTCL/ Internet based trading facility or procure the same from such of those software vendors as may be empanelled by Exchange, after duly complying with the requirements as may be stipulated by Exchange in this regard.
- f) Exchange has decided that the software vendors shall be empanelled for this purpose, based on the application received from them and subject to fulfillment of such criteria as may be stipulated by Exchange from time to time, and subject to such software vendor executing an Undertaking in favour of Exchange in the format prescribed by it and agreeing to abide by and be bound by the various terms and conditions which Exchange may prescribe in this regard from time to time.
- g) The Exchange has agreed to consider my application for empanelment 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 Members of the Exchange to avail of the CTCL facility /Internet based trading facility, and shall fulfill all the terms and conditions as may be prescribed by Exchange from time to time at its discretion in this regard.

NOW THEREFORE IN CONSIDERATION OF EXCHANGE having agreed to consider my application for empanelment 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 facility / Internet based trading facility is as per Exchange and Department of Telecommunications (DOT) approved network diagram of the CTCL facility / Internet based trading facility.
- 2. I/We undertake to pay any such license fees/charges/royalties as may be levied by DOT/MTNL/Exchange or any other regulatory/statutory authorities from time to time.

- 3. I/We shall install the software only at the location of the Members of the Exchange after duly ensuring that all the requirements stipulated by Exchange in this regard have been complied with by the Member and that the Approved User shall not make the CTCL facility / Internet based trading facility available to any other unauthorised person.
- 4. I/We undertake to ensure that the connectivity between the Member and Exchange shall be used only for application of the CTCL facility / Internet based trading facility.
- 5. I/We undertake that the API shared by the Exchange will be used in strict conformity with the terms & conditions that may be laid down by the Exchange either at time of sharing the same or any other point of time.
- 6. I/We agree that the data communication link between Exchange'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.
- 7. I/We undertake to obtain the prior approval of Exchange for any changes to be made to the existing network diagram / software.
- 8. I/We undertake to ensure that access shall be given only to the authorised individuals and also a method shall be established to ensure that non authorised persons cannot access the system.
- 9. I/We undertake that the software design shall use only the specified messages given by Exchange and shall consider all the structures defined by Exchange from time to time. The Deliverables shall be:
 - i. Basic functionalities as and when required by Exchange.
 - ii. Customisation for Members needs as approved by Exchange.
- 10. 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 Exchange from time to time.
- 11. I/We undertake that controls shall be inbuilt by me / us to ensure that the orders are matched by the central computer of Exchange only and there is no scope for orders being matched in my / our/Members of the Exchange own private network.
- 12. I / we shall not develop or use any software / program facility which shall either directly or indirectly facilitate Algorithmic Trading without prior written approval of the Exchange. For the purpose of this clause the term 'Algorithmic Trading' shall mean any order that is generated using automated execution logic, entered by the software / program facility into the Trading System of Exchange to be matched by the Exchange's System.
- 13. 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.
- 14. I / We shall ensure that the Approved Persons shall not make the CTCL facility / Internet based trading facility available to any other person and that there shall be no provision in the Software to enable such persons to do so.
- 15. I / We shall ensure that position monitoring etc., shall be inbuilt in the CTCL facility / Internet based trading facility and it shall be flexible to change as per the requirements of the Exchange and the regulators.

- 16. I / We shall ensure that the CTCL facility / Internet based trading facility shall be developed so as to generate the following from the System for the purpose of verification by the Exchange:
 - 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.

17. I/We undertake that

- i. Exchange 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. The source code of the Software shall be available at both, my/ our site as well as the Member's site for verification.
- ii. I / We shall make available Prototype and the technical specifications of the Software to Exchange for testing purposes.
- iii. I / We shall be responsible to fix the bugs or defects in the Software if any, found at the time of testing.
- 18. That I / We shall meet the criteria set to measure the expected level of performance.
- 19. I / We also undertake that the entire process of development and testing of the CTCL / IBT software to the Exchange shall not take more than six months from the date of my / our application to the Exchange.
- 20. 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.
- 21. 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.

22. I / We undertake that:

- . All material and information which has or will come into my /our possession or knowledge in connection with the development of CTCL/IBT software 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 Exchange. I / We agree to hold such material and information in strict confidence, not to make use thereof other than for the performance as specified herein, employees requiring such information 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 are fully satisfied and shall also ensure that my/our Employees are aware and comply with the above provisions. For the purpose of this clause the term data shall include amongst other things technical data which may be divulged to or by the vendor during the normal course of development of the software and information relating to the operations of Exchange.
- ii. I / We shall not in any way represent that the software developed is a part of the Exchange Trading software.
- iii. I / We shall keep full security of Exchange's programs, databases and computer records in accordance with best computing practice.

- 23. 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.
- 24. 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.
- 25. 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 MSEI.
- 26. I / We undertake to make the Software compatible with the Exchange Trading system, under intimation / (written consent) of Exchange, in case any modification is made to the Exchange Trading software by Exchange and the same is required to be incorporated in the Software.
- 27. I / We am / are fully aware that Exchange shall not be responsible for development, maintenance, updates, upgrades, error fixes and other support functions.
- 28. I / We undertake to provide the training and documentation as and when the Software is technically upgraded.
- 29. I / We undertake to ensure as follows:
 - i. That in case of failure or malfunctioning of the Software, I/We shall make 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 Exchange shall in no way be responsible for non-fulfillment of either this or any other condition by the Member.
 - iii. Shall supply and maintain the CTCL application software solution to any Exchange 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 Exchange and DOT in this regard and undertake that I / we shall modify the Software, if necessary to ensure continued compliance with the requirements of Exchange / DOT / any other authority as may be issued from time to time.
- 31. I / We hereby undertake to duly inform Exchange 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 Exchange.
- 32. I / We hereby undertake to duly inform Exchange the list of Members of the Exchange who are using my/our CTCL / Internet trading application software.
- 33. I / We shall render all possible assistance and co-operation to MSEI 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 Exchange at its discretion.
- 34. I / We agree and undertake that Exchange shall not be liable for any direct or indirect loss, damage, costs, claims and expenses whatsoever caused or contributed by any event of force majeure. For the purposes of this Clause, "Force Majeure" means and includes wars, insurrections, revolution, fires, floods, epidemic, quarantine restrictions, declared general strikes in relevant industries, act of God, act of the Government of India and any concerned State Government and such other acts or events beyond Exchange's control and further the above is without prejudice to the rights already accrued to

Exchange 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.

- 35. I / We shall indemnify and keep indemnified Exchange 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.
- 36. I / We agree that no forbearance, delay or indulgence by Exchange in enforcing the provisions of this Undertaking shall prejudice or restrict the rights of Exchange 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 Exchange is exclusive of any other right, power or remedy available to Exchange and each right, power or remedy shall be cumulative.
- 37. I / We undertake that any declaration or other notice to be given by me/us to Exchange shall be sent by registered letter or telex/cable or facsimile transmission to the address first mentioned above.
- 38. 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 Exchange from time to time.
- 39. I/We also agree that in the event of my/our non-compliance with any of the provisions as mentioned above, Exchange shall take such action against us as it may deem fit in this regard.

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 (Witness) | | | | |

Reference Points While Developing CTCL/IBT Software

• Order Management

- Order entry- attributes
- Order confirmation
- Order status
- o Order modification
- Order cancellation
- o Pending orders
- Order history / reports

• Trade management

- Trade confirmation
- Trade Reports
- o Trade modification

Risk Management

- Exposure limit
- Margin limit
- o Order Quantity Limits
- o Order Value Limits
- o Daily Price Range Checks
- Cumulative limit on value of unexecuted orders

Client information

- Client code structure
- Display of client position

Security & Compliance related

- o Password protection
- o Lock-in mechanism for inactive users
- Security of login session
- o Display of Trading member code and user id
- Mandatory collection of margins
- o Display of Exchange User Id and TM name on trader workstation

Internet Trading

- Member name and SEBI registration no. on website
- Display of Investor protection rule, Arbitration rule and rules effecting member client relationship
- Display of Risk disclosure documents
- o Trade confirmation through email and/or on the mobile phone
- Default client code while order entry

Application for approval of Algorithmic Trading (Algo) Strategy (To be executed on letterhead of the Vendor)

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|----------------|-------------------------------------|--|--|
| Me Bu Ag | etropolita iilding A jastya C | partment an Stock Exchange of India Limited, , Unit 205(A), "D - Wing" , 2 nd Floor, corporate Park, Sunder Baug Lane, ad, Kurla (W), Mumbai - 400070 | |
| I / | We | , 6 | an individual / a firm registered under the Indian |
| Pa | rtnershi | p Act, 1932 / a Company / Body Corporate in Act. and re | an individual / a firm registered under the Indian ncorporated under the Companies Act of 1956/ siding at / having our registered office |
| at_ | | | _· |
| Se | e are degment proval o | | members of the Exchange in apply for the permission of the Exchange for |
| | Sr. # | Particulars | Details |
| | 1. | Name of the ISV: | |
| | 2. | Registered Office/ Correspondence address : | |
| | 3. | Telephone No.: | |
| | 4. | Fax No.: | |
| | 5. | Name and Designation of the Authorised Signatory: | |
| | 6. | Contact details of the Authorised Signatory | |
| | | Telephone No. : | |
| | | Email: | |
| | 7. | Algo Strategy Name and Version number: | |
| | 8. | Detailed Write-up on Algo Strategy (To be provided on letterhead of the Vendor) | |

Signed sealed and delivered by the Authorised Signatory of the Vendor

Date: Place:

Instructions on CTCL, IBT and DMA facilities

These Instructions shall be applicable to the Members of MSEI using the CTCL and/or IBT and/or DMA facility.

These Instructions shall be in addition and not in derogation to any of the provisions of the Bye-laws, Rules, Regulations of MSEI and the Regulations, Guidelines and Circulars issued by SEBI from time to time on CTCL, IBT and DMA facility.

- 1. A Member shall make the CTCL/IBT/DMA facility accessible to only those persons approved by him after obtaining the prior written consent of MSEI (hereinafter referred to as "Approved Users") and subject to such terms and conditions as may be prescribed by SEBI and MSEI from time to time.
- A member shall ensure that no CTCL facility is extended to any user / person unless such user / person has passed the requisite Certification Course as may be prescribed by SEBI and/or MSEI from time to time.
- In addition to such terms and conditions as may be prescribed under clause (1) by MSEI, all the
 provisions of the Byelaws, Rules, Regulations and Circulars relating to use and operation of the
 Trading System shall also mutatis mutandis applicable to the use and operation of the
 CTCL/IBT/DMA facility.
- Notwithstanding anything contained in these Instructions, the other liabilities and obligations of a Member as a Member of MSEI shall not be affected nor shall be prejudiced in any manner whatsoever.
- 5. A Member shall be responsible for all the trades executed by his/its Approved Users whether such trades were executed with or without his permission / knowledge and he shall be bound to complete / fulfill all his/its obligations / liabilities / commitments arising due to the trades executed by the Approved Users using the CTCL/IBT/DMA facility provided to him.
- 6. MSEI, at its discretion, may make the CTCL/IBT/DMA facility available to any Member at an approved location.
- 7. A Member shall use the physical communication link(s) provided to him/it for the purpose of connectivity between the CTCL/IBT/DMA facility and TRADING SYSTEM Software.
- 8. MSEI, at its absolute discretion, may make the CTCL/IBT/DMA facility available to a Member only from the date of his enablement on the CTCL/IBT/DMA facility till such time as it may deem fit. The CTCL/IBT/DMA facility may be withdrawn by MSEI at its discretion without giving any notice or any reasons to the Member.
- 9. The CTCL/IBT/DMA facility if made available to a Member shall be on a non-exclusive basis only and that the same may be made available by MSEI, at its discretion, to any other Member whomsoever on such terms and conditions as it may deem fit.
- 10. A Member may be entitled by giving one month written notice to request MSEI to withdraw the CTCL/IBT/DMA facility extended to the Member. Withdrawal pursuant to such request shall be subject to such terms and conditions as may be prescribed by MSEI including payment of such compensation to MSEI as may be decided by MSEI at its discretion.
- 11. A Member shall be responsible and take all such steps, actions and proceedings to ensure and keep ensured that no Approved Users in any way further makes the CTCL/IBT/DMA facility available to any other person nor shall extend the CTCL/IBT/DMA facility outside his/its premises and in case if the Member fails to ensure the same, MSEI shall be empowered to take such action as it may deem fit,

- which action may include disabling the Member from having CTCL/IBT/DMA facility, and taking of such disciplinary actions as it may deem fit.
- 12. A Member and his Approved Users shall execute any of the orders received from any of their constituents only in the respective name / client code of the constituent and no order received from any of the constituents shall be executed under proprietary code and / or under other client code.
- 13. A Member shall at his own expenses provide all lines, cabling, software, hardware, equipment and other communication facilities required for transmission of the data between the Receiving Premises and his/its server at his office and also obtain the necessary approvals from relevant authorities.
- 14. A Member shall ensure that the connectivity of the CTCL/IBT/DMA facility is as per network diagram approved by MSEI and Department of Telecommunications (DoT) and/or Mahanagar Telephone Nigam Limited (MTNL) and/or any other appropriate governmental / statutory authority diagram and shall produce the necessary approvals to MSEI in order to meet the requirements for enabling him/it for having access to the CTCL/IBT/DMA facility.
- 15. A Member shall ensure that access to the CTCL/IBT/DMA facility is given only to his Approved Users. Member shall also ensure that a method is put in place to ensure that none other than the Approved Users can access the system. Use of terminal (s) without approval of Exchange shall be treated as unauthorized use of terminals under the bye laws. Such violation by any Member shall render him / her liable for such disciplinary action as the Exchange may deem fit including withdrawal of the User ID forthwith that is granted to the CTCL server from which the Member has extended the CTCL/IBT trading facility to unauthorised persons.
- 16. A Member shall pay the license fees/charges/royalties as may be levied by DoT/MTNL/MSEI/any other regulatory/statutory authorities from time to time. Fees if any levied by MSEI for using the CTCL/IBT/DMA facility shall be paid in advance to MSEI.
- 17. A Member shall ensure that data communication lines between MSEI equipment and his/its equipment will be connected to his own and further telecommunication network will be as per MSEI and/or DoT and/or MTNL and/or any other appropriate governmental / statutory authority approved network diagram.
- 18. A Member shall indemnify MSEI against any loss or damage arising out of the use of CTCL/IBT/DMA facility availed by him, including those arising out of his non-compliance with these Instructions.
- 19. A Member shall provide MSEI with the Network diagram as adopted by him/it for having access to the CTCL/IBT/DMA facility between the Receiving Premises and his/its server at his/its office. Members shall also provide MSEI with the new network diagram as and whenever any changes are made to the existing Network diagram with the prior written permission of MSEI.
- 20. A Member shall notify MSEI giving the details related to the Approved Users for prior approval of MSEI and shall acquire the prior written permission from MSEI for every additional Approved User taken subsequently before letting him / her have access to the CTCL/IBT/DMA facility. Further in case if an Approved User is disabled from acting in his / her capacity as such for any reason whatsoever, then the Member shall seek prior written permission from MSEI before appointing any other individual to act as an Approved Users in his / her place.
- 21. A Member shall make the necessary changes in the software used by him/it for accessing the CTCL/IBT/DMA facility as and when any changes either technical or structural are made by MSEI in the CTCL/IBT/DMA facility.
- 22. A Member shall provide MSEI with the Technical Specifications for the software used by him/it for accessing the CTCL/IBT/DMA facility and shall also provide it with the new Technical Specifications for the software as and whenever any changes are made by it/him to the existing software used to access the CTCL/IBT/DMA facility.

- 23. A Member shall not develop / use any software for accessing the CTCL/IBT/DMA facility, which software in the opinion of MSEI shall resemble or result in duplication of the trading system software in any manner and further that no representation shall be made by him/it that the software developed by them for accessing the CTCL/IBT facility is part of the trading system software.
- 24. MSEI is the absolute owner of the proprietary rights in respect of the APIs entrusted to the Member for the purpose of developing the software and the Member shall not duplicate, sell, assign, license or part in any other mode and / or method for consideration or otherwise and / or transfer the APIs to any third party any time.
- 25. In case MSEI rejects the application of a Member for developing software for availing the CTCL / IBT / DMA facility or the Member withdraws the application for developing the software, the Member shall return immediately, without any demur, the APIs to MSEI.
- 26. No Member shall assign or otherwise transfer the rights and obligations arising out of the use of the CTCL/IBT/DMA facility and these Instructions whether in whole or in part without the prior written consent of MSEI.
- 27. A Member shall not use, without the express permission of MSEI, the name/trademark/logo of MSEI to directly or indirectly promote his/its business.
- 28. A Member shall not, either by themselves or through any person acting on his/its behalf, issue / release / publish any advertisement, brochure, pamphlet, booklet, notice or any other promotional material on any aspect relating to the CTCL/IBT/DMA facility in any form, whether in writing or otherwise except in accordance to the Code of Advertisement as prescribed by the MSEI and except with the prior written approval of MSEI.
- 29. A Member shall obtain prior approval of MSEI for change of his/its activities/operations from existing approved CTCL/IBT/DMA vendor to another.
- 30. MSEI does not warrant that the provision of the CTCL/IBT/DMA facility shall be error free or uninterrupted.

31. A Member shall ensure that

- a) He /it maintain all systems logs and make the same available for inspection by MSEI at any time at its discretion.
- b) He/it shall not under any circumstances match the respective orders entered in by his/its Approved Users from their terminals by using any means whatsoever and route all the orders entered in by the Approved Users to the Trading System of MSEI so that they could be matched by the Central Computer of MSEI only. -
- c) The following stipulations on CTCL/IBT/DMA would be adhered to:
 - i. the System used by the Member has provision for security, reliability and confidentiality of data through the use of encryption technology
 - the Member maintains adequate backup systems and data storage capacity and also arrange for alternative means of communications in cases of primary link failure.
 - iii. the Order/Trade confirmation is 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 their web site. The investor is allowed to specify the time interval on the website 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 theinternet based system.

- iv. he has 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 will be informed of acceptance/rejection of the order within a reasonable period. The reports on margin requirements, payment and delivery obligations etc to be informed to the clients through the system
- v. the following security measures are in-built in the system:
- User Id
- First Level Password (Private Code)
- Automatic expiry of passwords at the end of reasonable duration. Provision toreinitialise access on entering fresh passwords.
- vi. all transaction logs with proper audit facilities are maintained in the system
- vii. he has a Secured Socket Level Security for server access through Internet
- viii. there are Suitable Firewalls between trading set-up directly connected to an MSEI trading system and the Internet trading set up.
- ix. Any advanced level security as specified by MSEI from time to time is integrated.
- d) The following systems operations procedures will be adhered to:
 - use of similar logic/priorities as that used by the MSEI to treat client orders
 - maintenance of all activities / alerts log with audit trail facility
 - enablement of web-server having internally generated unique numbering for all client orders/trades
- e) The on-line surveillance and risk management features like trade-by-trade Position Monitoring etc., shall be inbuilt in the CTCL/IBT/DMA facility and it shall be flexible to changes as per Guidelines, Instructions and other Directions of MSEI, from time to time.
- f) He/it shall not use any software / program facility which shall either directly or indirectly facilitate program trading without prior written approval of the MSEI. For the purpose of this clause the term 'Program Trading' shall mean any software or program facility by the use of which, upon the fulfillment of certain specified parameters, without the necessity of manual entry of orders, buy/sell orders are automatically generated and entered by the software / program facility into the Trading System of MSEI to be matched by the central computer.
- g) He/it shall not use any software / program which may either directly or indirectly facilitate orders to cross trades of their clients with each other. System controls shall be built in to ensure that orders placed by the clients are offered to the market for matching.
- h) MSEI is possessed with the absolute right to inspect the internal software used / being utilised by them at any time at its discretion.
- i) He/it render all possible assistance and cooperation to MSEI by providing access to any kind of information in any form as it may require and 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 MSEI at its discretion.
- 32. A member using DMA facility shall ensure that the systems used by him for DMA facility has adequate provisions for
 - (i). clients only to execute their own trades and not use it for transactions on behalf of any other person (s) or for any other purposes.

- (ii). appropriate validations for quantity limits, price range checks, order value and credit checks before the orders are released to MSEI.
- (iii). backup and data storage capacity.
- (iv).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.
- (v). limits for securities which are subject to FII limits as specified by Central Government/RBI.
- 33. A member shall ensure that only those clients who are deemed fit and proper for DMA facility are allowed to access to the DMA facility. A Member shall facilitate DMA facility to his clients only after satisfying the Know Your Client requirements and carrying out due diligence including Clients credit worthiness, risk taking ability, track record of compliance and financial soundness. The Member shall maintain proper records of such information and the same shall be made available to MSEI as when sought by MSEI.
- 34. A Member shall also ensure that in case DMA limits are set based on risk assessment, credit quality and available margin of the client and Member shall have appropriate authority levels to ensure that the limits can be set up only by persons authorized by risk/compliance manager.
- 35. MSEI shall not be liable for any direct or indirect damage, costs, claims and expenses whatsoever,
 - i. Arising from mechanical or electrical or telephone or network breakdown or power failure or malfunction of any computer and / or / our server and / or any other auxiliary equipment or any other cause beyond the reasonable control of MSEI.
 - ii. Based upon special, indirect, economic, or consequential loss or damage including, but not limited to loss of profit, business revenue, opportunity costs, goodwill or anticipated savings.
 - iii. Caused or contributed to by any event of Force Majeure. For the purposes of this Clause, "Force Majeure" means and includes wars, insurrections, revolution, fires, floods, epidemic quarantine restrictions, declared general strikes in relevant industries, act of God, act of the Government of India and any concerned State Government and other acts or events beyond the control of MSEI. The above is without prejudice to the rights already accrued to MSEI due to the Member's failure to perform either in full or in part, his obligations prior to the occurrence of events of Force Majeure.
 - iv. Or any other nature or type incurred in any way, whatsoever including any malfunctioning or misfunctioning of Member's software and/or due to virus infection and/or on account of any Cyber Crime.
- 36. MSEI shall not be responsible for development, maintenance, updates, upgrades, error-fixes and any other support of software used by Members for accessing the CTCL/IBT/DMA facility and shall not be liable for any loss suffered by any Member due to the use of the software for accessing the CTCL/IBT/DMA facility.
- 37. Neither MSEI nor the directors, managers, officers, employees or vendors of MSEI, guarantee the functioning of the CTCL/IBT/DMA facility. MSEI and the directors, managers, officers, employees and vendors of MSEI shall not be liable in any way to any Member or Approved Users thereof or to any other person, for any non performance or interruption of CTCL/IBT/DMA facility or for any damages, consequential or otherwise, arising there from or occasioned thereby. No Member shall proceed either against MSEI or against any individual officer or employee of MSEI for any act done by such officer or employee of MSEI in their official capacity.
- 38. A Member shall indemnify and keep indemnified MSEI 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/DMA facility to him or by reason of his non compliance with or contravention of any provision of these Instructions.
- 39. These Instructions are applicable not only in respect of the information services and terminal equipment currently offered by the Members to their Approved Users but also in respect of any

information services and terminal equipment developed by or for Members in the future, even if the Member alter his mode of supplying information to Approved Users, provided MSEI grants approval in writing for such alteration with all details.

- 40. Without prejudice to any other right under any law for the time being in force or which may become applicable, MSEI shall be vested with the exclusive right, upon a Member's non-compliance with any of the terms and conditions of these Instructions or upon the termination, suspension of Membership or upon a Member ceasing to be a Member of MSEI, 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/DMA facility and / or take such disciplinary actions as it deems fit. Further the Members shall abide by and be bound by any actions, steps, proceedings, measures, decisions as may be taken by MSEI.
- 41. No forbearance, delay or indulgence by MSEI in enforcing the provisions of these Instructions shall prejudice or restrict the rights of MSEI nor shall any waiver of its rights operate as a waiver of any subsequent breach.
- 42. No right, power or remedy herein conferred upon or reserved for MSEI is exclusive of any other right, power or remedy available to MSEI and each such right, power or remedy shall be cumulative.
- 43. A Member shall treat as confidential all information obtained from MSEI pursuant to the arrangement and shall not divulge such information to any person (except to his own employees who need to know the same) without the prior written consent of MSEI and the Member shall also ensure that his employees are aware of and comply with the provisions of this clause. The foregoing obligations as to confidentiality shall survive any termination of the CTCL/IBT/DMA facility.
- 44. A Member shall inform MSEI in writing as and when any notice is received by it in connection with any institution of winding up proceedings against it and shall also inform MSEI in writing before it initiates any winding up proceedings. A Member shall also inform MSEI on the onset of any circumstance which is likely to or may render it liable to be wound up or which is likely to or may render it liable to be subject to winding up proceedings.
- 45. Any declaration or other notice to MSEI to be given by a Member shall be sent by registered letter or telex / cable or facsimile transmission to the following address:-

Metropolitan Stock Exchange of India Limited, Building A, Unit 205(A), "D - Wing", 2nd Floor, Agastya Corporate Park, Sunder Baug Lane, L.B.S. Road, Kurla (W), Mumbai – 400070, India

Tel.: 022-6112 9000, Fax: 022-6112 9009.

- 46. A Member shall execute, sign, and subscribe, to such others documents, papers, agreement, covenants, bonds, and / or undertakings as may be prescribed or required by MSEI from time to time, in connection with the usage of the CTCL/IBT/DMA facility.
- 47. 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.
- 48. The CTCL/IBT/DMA facility being used by a Member shall have inbuilt feature of pushing in all the orders, entered by any of the Approved Users only through CTCL/IBT server of the Member for which in turn will push such orders to the trading system of the MSEI, for the purpose of execution.
- 49. A Member shall ensure that periodic audit of his CTCL/IBT/DMA systems is being carried out in accordance with the instructions specified by MSEI from time to time.

Application for change of Authorised User from MSEI - TWS to CTCL

(On letterhead of the member)

| To CTCL Department Metropolitan Stock Exchange of India Limited, Building A, Unit 205(A), "D - Wing", 2 nd Floor, Agastya Corporate Park, Sunder Baug Lane, L.B.S. Road, Kurla (W), Mumbai - 400070 | |
|--|--|
| | |
| Dear Sir, | |
| Weof Authorised User of MSEI TWS to CTCL. | (Name of Member) hereby apply for change |
| Sr # Darticulars | Details |

| Sr. # | Particulars | Details |
|-------|--|---------|
| 1. | Member ID: | |
| 2. | Segment: | |
| 3. | User Id : | |
| 4. | Name(s) & Designation of Contact person(s): | |
| 5. | Contact details (Phone, Fax, Email) of Contact person(s): | |
| 6. | Mode of connectivity between CTCL server and Exchange: (VSAT/Lease line etc) | |
| 7. | CTCL Software Name and Version Number: | |
| 8. | Empanelled ISV Name/In-House: | |

We hereby agree and bind ourselves to be responsible for all acts, quotations and transactions done, trades made, or affected by such user on the CTCL Trading System. We shall ensure that he/she will not en

| execute any order on his/her own accomproved by us in writing prior to execution | ount or or | 0 | , | | |
|--|------------|---|---|--|--|
| For (Name of the Member) | | | | | |

Authorised Signatory (Name and designation)

Date: Place:

Details of the CTCL network being used by the Member

(On letterhead of the Member)

То

CTCL Department

Metropolitan Stock Exchange of India Limited, Building A, Unit 205(A), "D - Wing", 2nd Floor, Agastya Corporate Park, Sunder Baug Lane, L.B.S. Road, Kurla (W), Mumbai - 400070

| Sr. # | Particulars | Details |
|-------|--|---------|
| 1. | Member ID: | |
| 2. | Office Address where CTCL is to be located: | |
| 3. | City: | |
| 4. | State: | |
| 5. | Pin Code: | |
| 6. | Telephone No.: | |
| 7. | Fax No.: | |
| 8. | Email: | |
| 9. | Mode of connectivity between the CTCL terminal and CTCL server: (VSAT / Dial-up / leased line / Internet/LAN, etc.): | |

For (Name of the Member)

Authorised Signatory (Name and designation)

Date: Place:

Acceptance Certificate for CTCL / IBT (On letterhead of the Member)

| CTCL Department Metropolitan Stock Exchange of India Limited, Building A, Unit 205(A), "D - Wing", 2 nd Floor, Agastya Corporate Park, Sunder Baug Lane, L.B.S. Road, Kurla (W), Mumbai - 400070 |
|--|
| Dear Sir, |
| I/We(Name of Trading Member) do hereby communicate that we have procured CTCL / IBT software(Product Name) from(Name of CTCL / IBT vendor or Developed In-House). We have done the necessary testing and are satisfied with the product. |
| Our Registered office address as on date: |
| Status and Address of the Regd. Office / Head Office/ Dealing Office where terminal is located: |
| Name and designation of the person in-charge of the above office: |
| I/We request you to enable the CTCL / IBT in the live environment forsegment. |
| For (Name of the Member) |
| Authorised Signatory (Name and designation) |
| Date: Place: |

(On the letterhead of the ISV)

То

| CTCL Department Metropolitan Stock Exchange of India Limited, Building A, Unit 205(A), "D - Wing", 2 nd Floor, Agastya Corporate Park, Sunder Baug Lane, L.B.S. Road, Kurla (W), Mumbai - 400070 |
|--|
| Kind Attn: |
| Sub: CTCL / IBT software procurement confirmation |
| Dear Sir, |
| This is to state that M/s(Name of the member), registered member (Member Id:CTCL Id:) of MSEI, has purchased the CTCL/IBT software for MSEI segment from us and same is installed at their premises. |
| Name of CTCL/ IBT software: |
| Software version number: |
| Kindly enable them to start trading using CTCL / IBT. |
| Thanking You, |
| Yours Sincerely, |
| For (Name of ISV) |
| Authorised Signatory (Name and designation) |
| Date: Place: |

(On Letter Head of Member)

| OF(Na | BOARD RESOLUTION PASSED BY THE BOARD OF DIRECTORS ame of the company) IN THEIR MEETING HELD ONthe (date of(Office address) |
|---|---|
| Trading (IBT) facility on its own be | can avail a Computer To Computer Link (CTCL)/ Internet based ehalf and on behalf of its clients in consonance with the Bye-Laws, this regard by Metropolitan Stock Exchange of India Limited. |
| | y one of the Directors (Name mentioned below) are hereby authorize the necessary documents that may be required by the authority for the |
| Name Designation Director Director Director | Mode of Operation Signature |
| "RESOLVED FURTHER THAT the provided to MSEI, in the presence of | Common Seal of the company be affixed on such Undertaking to be |
| Mr | , Director |
| of | " |
| Certified True Copy | |
| For | |
| Director | |
| Date: Place: | |

Request for User Id to be used for Internet Based Trading Facility

(On letterhead of the member)

To **CTCL Department**

Metropolitan Stock Exchange of India Limited, Building A, Unit 205(A), "D - Wing", 2nd Floor, Agastya Corporate Park, Sunder Baug Lane, L.B.S. Road, Kurla (W), Mumbai - 400070

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| Sr. # | Particulars | Details |
|-------|---|---------|
| 1. | Member ID: | |
| 2. | Segment: | |
| 3. | User Id: | |
| 4. | Name(s) & Designation of Contact person(s): | |
| 5. | Contact details (Phone, Fax, Email) of Contact person(s): | |
| 6. | IBT Software Name and Version Number: | |
| 7. | Empanelled ISV Name/In-House: | |

For (Name of the Member)

Authorised signatory (Name and designation)

Date: Place:

(To be executed on letterhead of the Vendor)

| I / Weand represente | d |
|--|------------|
| byand hereinafter referred to as VENDOR have sold to M/sand hereinafter referred to as VENDOR have | - , |
| having their registered office atwho are members of Metropolitan Stock Exchang | је |
| 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 MSEI.

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 reinitialising 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 MSEI 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 Trading Member 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 MSEI displaying rules/Business Rules/circulars. The web site displays the ticker/quote/order book of the MSEI 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.

| Date Place: |
|---|
| We,having our registered office atand represented byare members of the MSEI. 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 MSEI. We also undertake to get the software modified, if necessary to continue compliance with the requirements of the MSEI, DoT policy and regulations with regard to levels encryption, etc and SEBI / MSEI directives and other statutory requirements etc. as may be issued in the regard from time to time. |
| Countersigned, sealed and delivered by the Authorised representative of the MEMBER |
| Date: Place: |

Signed sealed and delivered by the Authorised representative of the VENDOR

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: -

| places as mention | oned below: - | | | |
|---|---------------------|---|----------|---|
| LOCATION | CONTACT PERSON | ADDRESS | TEL. NO. | FAX NO. |
| | | | | |
| | | | | |
| | | ink the authorized ed about the auther | | will make he will again allot new Pa |
| If you have any | contingency plan fo | or server, kindly mer | ntion. | |
| | | | | |
| (Authorized sign Name & Designa Company Stamp | ation | | | |
| Date: | | | | |

Place:

Application form for In-House CTCL / IBT / Algo software development

(On letterhead of the member)

| То |
|---|
| CTCL Department |
| Metropolitan Stock Exchange of India Limited, |
| D '11' A 11 '1 005(A) "D 1A!' " ond El |

Building A, Unit 205(A), "D - Wing", 2nd Floor, Agastya Corporate Park, Sunder Baug Lane, L.B.S. Road, Kurla (W), Mumbai - 400070

| | (Name of | | | | |
|----------|---|---|--|--|--|
| | of CTCL/IBT software using Non FIX API / FIX API forsegment, developed In-House or | | | | |
| CTCL/ | IBT procured / developed from Non-empanelled ver | ndor. | | | |
| C 4 | Deutendens | D-4-11- | | | |
| Sr. # | Particulars | Details | | | |
| 1. | Member ID: | | | | |
| 2. | Registered Office/ Correspondence address: | | | | |
| 3. | Telephone: | | | | |
| 4. | Fax No. : | | | | |
| 5. | Name(s) & Designation of | | | | |
| | Authorised Signatory: | | | | |
| 6. | Contact details (Phone, Fax, Email) of | | | | |
| | Authorised Signatory: | | | | |
| 7. | Correspondence Address of Authorised | | | | |
| | Signatory: | | | | |
| 8. | Address of the office from where CTCL facility is | | | | |
| | extended: | | | | |
| | | | | | |
| | Nature of Office: | Regd. Office / head office / dealing office | | | |
| 9. | Details of Key Personnel involved in software | Please provide profiles key personnel | | | |
| | development, system integration and | including education, experience, technical | | | |
| | maintenance | skills etc. | | | |
| 10. | Technical details – Hardware: | | | | |
| 11. | Technical details – Software: | | | | |
| 12. | Mode of connectivity between the CTCL server | | | | |
| | and the CTCL terminal: | | | | |
| | | | | | |
| 1 / \\/_ | 1/We contify that all the etatements are true and correct to the best of our knowledge. We are owner that | | | | |

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

| For | |
|----------------------|---|
| (Name of the Member) |) |
| | |
| | |

Authorised signatory (Name and designation)

Date: Place:

Application for approval of Algorithmic Trading (Algo) software developed In-House / developed from nonempanelled vendor

(To be executed on letterhead of the Member)

| To, CTCL Department Metropolitan Stock Exchange of India Limited, Building A, Unit 205(A), "D - Wing", 2 nd Floor, Agastya Corporate Park, Sunder Baug Lane, L.B.S. Road, Kurla (W), Mumbai - 400070 |
|---|
| I/We |

Segment.

| Sr. # | Particulars | Details |
|-------|---|----------|
| 1. | Member ID: | |
| 2. | Registered Office/ Correspondence address: | |
| 3. | Telephone No: | |
| 4. | Fax No.: | |
| 5. | Name(s) & Designation of Authorised Signatory: | |
| 6. | Contact details (Phone, Fax, Email) of Authorised Signatory: | |
| 7. | Algo Strategy Name and Version number: | |
| 8. | Detailed Write-up on Algo Strategy (To be provided on letterhead of the member): | |
| 9. | Whether the software providing Algo trading is being developed by the member on his own | Yes / No |
| | If not, name of software vendor developing Software | |

I/We certify that:

empanelled vendor in

- 1. The Algo software provides for routing of orders through electronic / automated risk management systems to carry out appropriate validations of all risk parameters before released to the Exchange trading system including individual Order level such as Price Range check, Market Price Protection, Quantity Limits check, Order Value checks, Automated Execution check (All executed, unexecuted and unconfirmed orders) and client level checks such as Cumulative Open Order Value check, Trading limit checks, Exposure limit checks at individual client level and at overall level for all clients. It has capacity to meet all requirements of the Exchange and SEBI as on date.
- 2. The Algo software has facility for generating and maintaining complete audit trail.
- 3. The orders generated by Algo are identified as Algorithmic Trading orders while releasing to the Exchange.
- 4. The orders generated by Algo software are offered to the market for matching and system does not execute cross trades internally.

5. The system has sufficient security features including password protection for User Id, automatic expiry of password at the end of a reasonable duration and reinitialisation of Access on entering fresh password.

I/We confirm and certify that the software for Algorithmic Trading has undergone tests by us and are satisfied that it meets the requirements specified by the Exchange and SEBI. We undertake to comply with and be bound by the Rules, Bye-laws, Regulations of the Exchange, SEBI, RBI and any other statutory and regulatory body(ies) as may be applicable from time to time.

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

I/We understand that the Exchange reserves the right to call for additional information / documents related to Algo trading at any time as it may deem fit.

| Signed sealed and delivered by the Authorised representative of the Member. |
|---|
| |

| Date: | |
|--------|--|
| Place: | |

<u>Application form for In-House CTCL / IBT software development by Prospective member</u> (On letterhead)

| To CTCL Department Metropolitan Stock Exchange of India Limited, Building A, Unit 205(A), "D - Wing", 2 nd Floor, Agastya Corporate Park, Sunder Baug Lane, L.B.S. Road, Kurla (W), Mumbai - 400070 I/We | | | | | |
|--|--|--|--|--|--|
| CTCL/I | CL/IBT software using Non FIX API / FIX API for IBT procured / developed from Non-empanelled ver | ndor. | | | |
| Sr. # | Particulars | Details | | | |
| 1. | Registered Office/ Correspondence address: | | | | |
| 2. | Telephone: | | | | |
| 3. | Fax No. : | | | | |
| 4. | Name(s) & Designation of Authorised Signatory: | | | | |
| 5. | Contact details (Phone, Fax, Email) of Authorised Signatory: | | | | |
| 6. | Correspondence Address of Authorised Signatory: | | | | |
| 7. | Details of Key Personnel involved in software development, system integration and maintenance | Please provide profiles key personnel including education, experience, technical skills etc. | | | |
| 8. | Technical details – Hardware: | | | | |
| 9. | Technical details – Software: | | | | |
| I / We certify that all the statements are true and correct to the best of our knowledge. We are aware that in case any of the statements are found to be incorrect or false, we are liable for disciplinary action. | | | | | |
| For (Name of the Prospective Member) | | | | | |
| Authorised signatory (Name and designation) | | | | | |
| Date: Place: | | | | | |

UNDERTAKING TO BE GIVEN BY PROSPECTIVE MEMBER FOR IN-HOUSE SOFTWARE DEVLOPMENT CTCL / IBT

| I / We | | , an individual / a firm | registered under the | Indian | |
|------------------------------|---|------------------------------|----------------------------------|--------|--|
| Partnership Act, 1932 / | a Company / Body Corp | orate incorporated under the | Companies Act of | | |
| 1956/ | 956/ Act, , and residing at / having our registered office at | | | | |
| | give this | SUNDERTAKING on this | day of | IN | |
| FAVOUR of Metropolita | in Stock Exchange of Ind | dia Ltd., a company incorpor | ated under the Comp | anies | |
| Act of 1956, with its Reg | gistered Office at Buildin | g A, Unit 205(A), "D - Wing" | , 2 nd Floor, Agastya | | |
| Corporate Park, Sunder | r Baug Lane, L.B.S. Roa | id, Kurla (W), Mumbai – 4000 | 070, (hereinafter calle | :d | |
| 'Exchange'). | _ | , , | • | | |
| | | | | | |

WHEREAS

- The Exchange has provided the trading software to enable its Members to trade on its trading platform.
- b) In addition, Exchange provides a computer to computer link facility (hereinafter referred to as the 'CTCL facility') by which it provides a facility for order entry, receipt of order and trade confirmation and also for receipt of data relating to its trade quotations etc.
- c) The Members of the Exchange may introduce internet trading through order routing system for trading (hereinafter referred to as 'Internet based trading facility'), after obtaining permission from Exchange.
- d) Exchange has decided that it shall make the CTCL Facility available to its Members of the Exchange / grant permission to Members of the Exchange to offer Internet based trading facility on a case to case basis subject to such terms and conditions as Exchange may impose from time to time.
- e) For the purpose of CTCL/ Internet based trading facility, the Exchange permits its Members to develop the necessary software by itself or to procure the same from such of those software vendors as may be identified by Exchange from time to time subject to due compliance with the requirements as may be stipulated by Exchange in this regard.
- f) I / we am / are desirous of availing membership of Exchange and developing the CTCL / Internet based trading software In-House/ procuring from non empanelled vendor for the purpose of trading on the Exchange and shall fulfill all the terms and conditions as may be prescribed by Exchange from time to time at its discretion in this regard.
- g) I/We have made an application an application to the Exchange for its membership.

NOW THEREFORE IN CONSIDERATION OF EXCHANGE having agreed to identify / identified me / us as a 'Prospective Member' 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:

- I/We shall abide by, comply with and be bound by the Rules, Bye-laws, and terms and conditions for CTCL and/or Internet Based Trading facility of Exchange as in existence or as may be modified / amended by the relevant authority unilaterally from time to time and any circular, order, direction, notice, instructions issued and / or as may be modified or amended from time to time by the relevant authority.
- 2. I/We shall execute, sign, subscribe, to such documents, papers, agreements, covenants, bonds and / or undertakings whether legal or otherwise as maybe required by Exchange from time to time I /We undertake to pay any such license fees/charges/royalties as may be levied by DOT/MTNL/Exchange or any other regulatory/statutory authorities from time to time.
- 3. Without prejudice to the rights, remedies whether legal or otherwise available to Exchange upon my / our non-compliance with this Undertaking, I/We shall indemnify and keep indemnified Exchange against any loss / damage suffered by it arising due to non-compliance by me/us with the provisions of this Undertaking.

- 4. I/We undertake that the API shared by the Exchange will be used in strict conformity with the terms & conditions that may be laid down by the Exchange either at time of sharing the same or any other point of time.
- 5. All material and information which has or will come into my /our possession or knowledge in connection with the development of CTCL/IBT software 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 Exchange. I / We agree to hold such material and information in strict confidence, not to make use thereof other than for the performance as specified herein, employees requiring such information 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 are fully satisfied and shall also ensure that my/our Employees are aware and comply with the above provisions. For the purpose of this clause the term data shall include amongst other things technical data which may be divulged to or by the Member during the normal course of development of the software and information relating to the operations of Exchange.
- 6. I / We shall keep full security of Exchange's programs, databases and computer records in accordance with best computing practice.
- 7. I / We agree and undertake that Exchange shall not be liable for any direct or indirect loss, damage, costs, claims and expenses whatsoever caused or contributed by any event of force majeure. For the purposes of this Clause, "Force Majeure" means and includes wars, insurrections, revolution, fires, floods, epidemic, quarantine restrictions, declared general strikes in relevant industries, act of God, act of the Government of India and any concerned State Government and such other acts or events beyond Exchange's control and further the above is without prejudice to the rights already accrued to Exchange 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.
- 8. I / We agree that no forbearance, delay or indulgence by Exchange in enforcing the provisions of this Undertaking shall prejudice or restrict the rights of Exchange 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 Exchange is exclusive of any other right, power or remedy available to Exchange and each right, power or remedy shall be cumulative.
- 9. I / We undertake that any declaration or other notice to be given by me/us to Exchange shall be sent by registered letter or telex/cable or facsimile transmission to the address first mentioned above.
- 10. 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 Exchange from time to time.
- 11. I/We also agree that in the event of my/our non-compliance with any of the provisions as mentioned above, Exchange shall take such action against us as it may deem fit in this regard.
- 12. I/We also agree that in the event of exchange approving my/our membership, I/We shall submit all the necessary documents required for CTCL/IBT approval.
- 13. The above undertaking will be binding on my / our successors and permitted assignees.

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 | Before me |
|---------------------------------|-----------|
| | |
| For and an habalf of | - |
| For and on behalf of | |

Application form for permission for providing Direct Market Access (DMA) to clients (To be executed on letterhead of the Member)

| I/We, | is/are a tr | rading member/s | of | segment o | of the |
|---|-------------|-----------------|--------------|----------------|--------|
| Metropolitan Stock Exchange of India | Limited, h | ereby apply for | the approval | of the Exchang | je for |
| providing DMA facility and services to ou | ır clients. | | | | |

General

| Sr. # | Particulars | Details |
|-------|--|---------|
| 1. | Name and Id of the Trading Member | |
| 2. | SEBI Registration number: | |
| 3. | Segment: | |
| 4. | User Id: | |
| 5. | Registered Office | |
| 6. | Name of the Authorised Signatory and designation. | |
| 7. | Address of the DMA order routing server. | |
| 8. | Name of the Service Provider for providing the DMA facility in cases where the proposed DMA facility is not being provided by the member on his own. | |
| 9. | [To be filled in case of facility availed through third party network service provider (SP)] Name of the Contact Person of SP: Contact Address of SP: Telephone No: Fax No: | |
| 10. | Name of software vendor developing software in case the software for DMA is not developed by the member on his own. | |
| 11. | DMA software name and Version number: | |

Network Security, Standards for interfaces and Protocols:

| Sr. No. | Particulars | Whether complied (Yes/No) |
|------------|---|---------------------------|
| 1 | Whether the Trading Member's server, routing the DMA orders to the Exchange trading system is located in India. | Yes / No |
| 2 | Whether the system has provision for security, reliability and confidentiality of data through use of encryption technology in line with Paragraph 5.5 of CHAPTER 5 of Master Circular - CTCL. (Please enclose relevant details separately). | Yes / No |
| 3 | Whether proper audit trail, transaction logs, identification of user ID, activities / alerts logs, unique numbering of orders / trades as stipulated by SEBI Circular MRD/ DoP/SE/Cir- 7 /2008 dated April 03, 2008 are maintained in the system. (Please enclose relevant details separately). | Yes / No |
| 4 | Whether adequate provisions for back-up systems and data storage capacity are in place with the member as stipulated by Paragraph 5.5 of CHAPTER 5 of Master Circular - CTCL. (Please enclose relevant details separately). | Yes / No |
| 5 | Whether password maintenance and authentication is performed at third party network service providers end. | Yes / No |

| 6 | If yes, whether appropriate agreement with third party network | Yes / No / NA |
|---|---|---------------|
| | service provider is in place for ensuring secured access and | |
| | communication. | |
| | (If so, please provide copies of the Agreement/MoU entered into | |
| | with the third party network service provider) | |

Systems Operations and Risk Management:

Whether the requirements of systems and software as stipulated by SEBI and MSEI in this regard are complied with (System Audit report duly certified by Exchange empanelled auditor should be enclosed).

A comprehensive write-up on the Direct Market Access (DMA) system shall be enclosed.

Detailed network diagram to be submitted.

We confirm and certify that the software for DMA has been tested by us to our satisfaction and we undertake to comply with and be bound by the Rules, Bye-laws, Regulations of the Exchange, SEBI, RBI and any other statutory and regulatory body(ies) as may be applicable from time to time.

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

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

| Date: |
|--------|
| Place: |

Terms and Conditions - DMA facility

PART - A: DMA Facility used by the Client

- 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 or the Stock Exchange as may be applicable from time to time.
- 2 The client shall ensure that DMA facility provided by the Trading Member 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 Trading Member. 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 Trading Member'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 Trading Member 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 Trading Member 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.
- 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 Trading Member 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 Trading Member. The Trading Member 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 Trading Member 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 Trading Member 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 Trading Member 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, Trading Member 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 Trading Member's DMA facility through vendor systems or service providers and the Trading Member 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 Trading Member 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 Trading Member shall have the right to withdraw the DMA facility in case of:
 - o Breach of the limits imposed by the Trading Member or any regulatory authority.
 - On account of any misuse of the DMA facility by the client or on instructions from SEBI/Exchanges.
 - o Any other reason, at the discretion of the Trading Member

Trading Member shall endeavour to give reasonable notice to the client in such instances.

- 17 The Trading Member 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/ Trading Member/ 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 Trading Member 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.
- 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 and applicable stock exchange(s) as may be applicable from time to time.

- 3 Where the DMA facility provided by the Trading Member is used 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 Trading Member:
 - The investment manager has due authority to deal on behalf of the client(s) through the Trading member, specifying the roles and responsibilities of the investment manager in execution of transactions on behalf of the client(s).
 - The investment manager shall comply with any applicable laws, rules and regulations affecting or relating to trading operations.
 - The investment manager and the client(s) are bound by the terms and conditions hereof;
 - The investment manager using the DMA facility for routing client(s) orders shall not cross orders of their client(s) with each other. Accordingly, all orders should be offered in the market.
 - 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 Trading Member. All orders originating from such facility / system shall be deemed to be authorized by the client.
- Where the investment manager accesses or proposes to access the Trading member'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 Trading Member 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 Trading Member 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 Trading Member 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 Trading member. The Trading Member 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 Trading Member 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 Trading Member 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 honouring their DMA obligation, Trading member 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 Trading Member's DMA facility through vendor systems or service providers and the Trading Member 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 Trading member 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 Trading Member shall have the right to withdraw the DMA facility in case of:
 - Breach of the limits imposed by the Trading member or any regulatory authority.
 - On account of any misuse of the DMA facility by the client/ investment manager or on instructions from SEBI/Exchanges.
 - Any other reason, at the discretion of the Trading Member

Trading Member shall endeavour to give reasonable notice to the client in such instances.

- 17 The Trading Member 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/ Trading Member / 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 C: Details to be provided by investment manager

(On the letter head of the Investment Manager)

| Sr. No. | Particulars | Details |
|---------|--|---------|
| 1 | Name of the Investment Manager | |
| 2 | Details of the Investment Manager | |
| 3 | Name of the Home Regulator | |
| 4 | Country of Jurisdiction of Home Regulator | |
| 5 | Registered/Regulated in Home Jurisdiction as | |
| 6 | SEBI Registration No | |

Client(s) Details:

| Sr. No. | Name of Entity | Name of Regulator | Regulated in India as | Registration No | Pan No |
|---------|-------------------|----------------------|-----------------------|--------------------|--------|
| | | | | | |

Application Form for use of Algorithmic Trading (Algo) (On the letter head of the member)

| 10 | |
|-------------|-------------------|
| CTCL | Department |

Metropolitan Stock Exchange of India Limited, Building A, Unit 205(A), "D - Wing", 2nd Floor, Agastya Corporate Park, Sunder Baug Lane, L.B.S. Road, Kurla (W), Mumbai - 400070

| Dear Sir, | | | |
|-----------|--|--|--|
| | | | |

| I / We | _(Name | of | member |) hereby | request | approva | l of | the |
|---|-----------|------|-----------|----------|---------|----------|------|------|
| Exchange for using Algorithmic Trading (Algo) through | gh CTCL | | | - | - | | | |
| (Name of the Algorithmic Trading Software product a | along wit | th v | ersion nu | mber) on | below m | entioned | CTCI | _ lc |
| inSegment. | | | | | | | | |

| Sr. # | Particulars | Details |
|-------|--|---------|
| 1. | Member ID: | |
| 2. | Product Type: | |
| | > ALGO | |
| 3. | Category: | |
| | > ČTCL | |
| 4. | Sub Category: | |
| | Approved Algo CTCL | |
| | > Approved Algo at Colo | |
| 5. | Product Feature/Protocol: | |
| | > DC/ IML/ TCP/ UDP/ OTHERS | |
| 6. | Operating System: | |
| | > Linux | |
| 7 | > Windows | |
| 7. | Segment: Capital market/Equity | |
| 8. | Derivatives/Currency Derivatives Name of the Algo Strategy: | |
| 9. | Version No.: | |
| 10. | Vendor Details: | |
| 11. | Market Data Type: | |
| ' ' ' | ► TBT | |
| | > NON TBT | |
| | > Both | |
| 12. | Algo Type: | |
| 12. | 1. Execution Algo | |
| | Arbitrage Algo | |
| | 3. Alpha Seeking Algo | |
| | 4. High Frequency Algo | |
| | 5. Scalping Algo | |
| | 6. Other Algos | |
| 13. | Algo Used for : | |
| | ▶ PRO | |
| | Client | |
| | ➢ Both | |
| 14. | Registered Office/ Correspondence address: | |
| 15. | Telephone No: | |

| 16. | Fax No.: | |
|-----|---|---|
| 17. | Name(s) & Designation of Authorised Signatory: | |
| 18. | Contact details (Phone, Fax, Email) of Authorised Signatory: | |
| 19. | Address of the office where Algo will be provided: Nature of Office | Regd. Office / Head Office / Dealing Office |
| 20. | Technical details a. Hardware b. Software: | |
| 21. | Mode of connectivity between the CTCL server and the Exchange (VSAT/Leased Line): | |
| 22. | User Id for using Algo: | |
| 23. | Algo Strategy Name and Version number: Detailed Write-up on Algo Strategy (To be provided on letterhead of the member): | |

I/We confirm and certify that the software for Algorithmic Trading has undergone tests by us and are satisfied that it meets the requirements specified by the Exchange and SEBI. We undertake to comply with and be bound by the Rules, Bye-laws, Regulations of the Exchange, SEBI, RBI and any other statutory and regulatory body(ies) as may be applicable from time to time.

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

I/We understand that the Exchange reserves the right to call for additional information / documents related to Algo trading at any time as it may deem fit.

| Stamp & Signature of the authorized represer | ntative of the Member |
|--|-----------------------|
|--|-----------------------|

| Date: | | | |
|--------|--|--|--|
| Place: | | | |

Trading member's undertaking for use of Algorithmic Trading (Algo)

| I / We | ., an individual / a firm registered under the Indian Partners | ship |
|---|--|------|
| Act, 1932 / a Company / body corporate in | corporated under the Companies Act 1956/, and resid | ding |
| at / having registered office at. | give this UNDERTAKING on this | |
| day of20 IN FAVOUR of Metropo | olitan Stock Exchange of India Limited, a company | |
| incorporated under the Companies Act of | 1956, with registered office at Building A, Unit 205(A), "D - | - |
| Wing", 2nd Floor, Agastya Corporate Park, | , Sunder Baug Lane, L.B.S. Road, Kurla (W), Mumbai – | |
| 400070, India (hereinafter referred to as 'Ex | xchange'). | |

WHEREAS

- a) The Exchange has provided a trading software to enable its members to trade on the Exchange.
- b) The Exchange allows with prior approval, 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 the Exchange trading system.
- c) The Exchange also decides to permit to the interested users of CTCL, an Algorithmic Trading Facility (hereinafter referred to as the "Algo") which means "Any order that is generated using automated execution logic", buy / sell orders are automatically generated and entered by the software / program facility into the Exchange trading system to be matched by the Exchange's system and such permission is subject to terms and conditions as may be specified by the Exchange from time to time.
- d) The Exchange allows to avail the Algo facility by fulfilling all the terms and conditions as may be prescribed from time to time at its discretion.

NOW THEREFORE IN CONSIDERATION OF THE EXCHANGE having agreed to allow me / us to avail the Algo, 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 Algo available to the Approved User only after obtaining the prior written permission of the Exchange and subject to such terms and conditions as may be prescribed by the Exchange/ SEBI and / or any other Regulatory body(ies) from time to time.
- 2. That in addition to such other terms and conditions as may be prescribed from time to time by the Exchange, all the provisions of the Rules, Byelaws, Regulations and Circulars issued by Exchange from time to time relating to use and operation of the Exchange Trading System shall also mutatis mutandis become applicable to the use and operation of the Algo.
- 3. That notwithstanding anything contained in this Undertaking none of my / our liabilities and obligations as a member of the Exchange shall be affected nor shall be prejudiced in any manner whatsoever, by using Algo for entering orders on the trading system of the Exchange.
- 4. That without prejudice to the generality of above clause (3) of this Undertaking, I / we shall be responsible to settle all the trades executed by the Approved User on my / our behalf whether such trades were executed with or without my permission / knowledge and that I / we shall be bound to complete / fulfill all my / our obligations / liabilities / commitments arising out of the trades executed by the Approved Person on my / our behalf, including the trades executed by using Algo.
- 5. That I / We have proper procedures, systems and technical capability to carry out trading through the use of Algo,

- 6. That I / We have procedures and arrangements to safeguard algorithms from misuse or unauthorized access.
- That I / We have real-time monitoring systems to identify algorithms that may not behave as expected. I / We shall keep Exchange informed of any such incidents of unexpected behaviour immediately.
- 8. I / We shall inform the Exchange on any modification or change to the approved Algos or system used for approved Algo.
- 9. I / We shall be solely responsible for the network infrastructure and connectivity for availing Algo made available to me.
- 10. I / We shall be solely responsible for all the losses, damages or other costs and consequences arising in any manner for the use of Algo and shall not hold the Exchange responsible in any manner whatsoever.
- 11. I / We shall adhere to the connectivity diagram approved by the Exchange and shall not make any changes in the connectivity.
- 12. I / We shall be solely responsible and liable for the consequences in case of any breach of this undertaking and the Exchange shall be entitled to take such appropriate action as deemed fit against me / us.
- 13. I / We shall not extend Algo to any other person / entity and / or location unless I / We obtain prior written permission from the Exchange.
- 14. I / We shall ensure that all algorithmic orders are necessarily routed through my / our servers located in India.
- 15. I / We shall maintain logs of all trading activities to facilitate audit trail. I / We shall maintain record of control parameters, orders, trades and data points emanating from trades executed through Algo.
- 16. That the Exchange, at its absolute discretion, decides to make the Algo available to me / us only, from the date of enabling the Algo till such time as it may deem fit and further that the Algo may at any time be withdrawn by the Exchange at its discretion without giving me / us any notice or any reasons whatsoever.
- 17. This Undertaking shall be binding upon my / our heirs, successors, legal representatives and assigns.
- 18. 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 the Exchange from time to time.

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

Signed by, for and on behalf of:

Before me

(On the letter head of the vendor)

| Met Bui Aga | CL Department tropolitan Stock Exchange of India Limited, Iding A, Unit 205(A), "D - Wing", 2 nd Floor, astya Corporate Park, Sunder Baug Lane, .S. Road, Kurla (W), Mumbai - 400070 | | | | |
|---------------------------|--|--|--|--|--|
| Kin | d Attn: | | | | |
| Sub | o: Algorithmic Trading(Algo) Software procurement confirmation | | | | |
| Dea | ar Sir, | | | | |
| This is to state that M/s | | | | | |
| We | certify that: | | | | |
| 1. | The Algo software provides for routing of orders through electronic / automated risk management systems of the Trading Member to carry out appropriate validations of all risk parameters before released to the Exchange trading system including individual Order level such as Price Range check, Market Price Protection, Quantity Limits check, Order Value checks, Automated Execution check (All executed, unexecuted and unconfirmed orders) and client level checks such as Cumulative Open Order Value check, Trading limit checks, Exposure limit checks at individual client level and at overall level for all clients. It has capacity to meet all requirements of the Exchange and SEBI as on date. | | | | |
| 2. | The Algo software has facility for generating and maintaining complete audit trail. | | | | |
| 3. | The orders generated by Algo are identified as Algorithmic Trading orders while releasing to the Exchange. | | | | |
| 4. | The orders generated by Algo software are offered to the market for matching and system does not execute cross trades internally. | | | | |
| 5. | The system has sufficient security features including password protection for User Id, automatic expiry of password at the end of a reasonable duration and reinitialisation of Access on entering fresh password. | | | | |
| 6. | The Algo software and Approved Strategy has been demonstrated to the Exchange during approval process. We further certify that there are no changes / upgrades to the Algo software and Approved Strategy post approval by the Exchange. | | | | |
| Kin | dly enable them to start trading using Algo Trading as per the above mentioned Approved Strategy. | | | | |
| | anking You, urs sincerely, | | | | |
| Aut | horised Signatory | | | | |

Date: Place:

Application Form for IBT ID to be used for Wireless Trading

(On letterhead of the member)

То

CTCL Department

Metropolitan Stock Exchange of India Limited, Building A, Unit 205(A), "D - Wing", 2nd Floor, Agastya Corporate Park, Sunder Baug Lane, L.B.S. Road, Kurla (W), Mumbai - 400070

| Sr. # | Particulars | Details |
|-------|---|---------|
| 1. | Member ID: | |
| 2. | Segment: | |
| 3. | User Id : | |
| 4. | Name(s) & Designation of Contact person(s): | |
| 5. | Contact details (Phone, Fax, Email) of Contact person(s): | |
| 6. | IBT Wireless Trading Software Name and Version Number: | |
| 7. | Empanelled IBT ISV Name/In-House: | |

For (Name of the Member)

Authorised signatory (Name and designation)

Date: Place:

Trading Member's Undertaking for Securities Trading using Wireless Technology

| I / We | , an individual / a firm registered under the Indian Partnership |
|------------------------------|--|
| Act, 1932 / a Company / bod | y corporate incorporated under the Companies Act 1956/, and residing a |
| /having registered office at | give this UNDERTAKING on this |
| day of | . 20 IN FAVOUR of Metropolitan Stock Exchange of India Limited, a |
| company incorporated under | the Companies Act of 1956, with registered office at Building A, Unit |
| 205(A), "D - Wing", 2nd Floo | r, Agastya Corporate Park, Sunder Baug Lane, L.B.S. Road, Kurla (W), |
| Mumbai - 400070, India (her | einafter referred to as 'Exchange') . |

WHEREAS,

- a) The Exchange has provided the trading software to enable its Members to trade on its trading platform.
- b) The Exchange had allowed its trading members with prior approval, to use front end software like Computer-to-Computer Link ('CTCL') and Internet Based Trading ('IBT') trade on the Exchange trading system.
- c) The Exchange had also allowed its trading members providing/using IBT facility to offer the facility of Securities Trading using Wireless Technology (hereinafter referred to as the 'Wireless Trading'), to its clients subject to submission of this Undertaking.
- d) We are desirous of providing the Wireless Trading facility to our clients in compliance with relevant Circulars of SEBI and 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 in addition to the set of instructions mentioned in Exchange's Master Circular – CTCL.

- 1. 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.
- 2. I / We undertake and agree to adhere to the provisions of the Bye-laws, Rules, Regulations and Circulars of Exchange and the Regulations, Guidelines and Circulars issued by SEBI from time to time relating to use, operation of the Trading System, CTCL, IBT and Wireless Trading.
- 3. 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.
- 4. 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 unauthorized persons.
- 5. 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.
- 6. I / We undertake to offer facility of Wireless Trading to any client only after additional provisions specifying possible risks, responsibilities and liabilities associated with Wireless Trading are incorporated in the Broker-Client Agreement, if applicable, as an addendum signed by both the parties or by bringing such risk, responsibilities and liabilities to the notice of the client, and taking his concurrence on the same.

- 7. 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.
- 8. 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.
- 9. I / We undertake and agree to ensure that Session login details are not stored on the devices used for IBT and Wireless Trading.
- 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 wireless devices.
- 11. I / We shall ensure that server routing orders placed through Wireless Trading System to the exchange trading system shall be located in India.
- 12. 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.

This Undertaking shall be binding upon my /our heirs, successors, legal representatives and assigns.

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

Signed by, for and on behalf of:

Before me

Application Form for CTCL ID to be used for Smart Order Routing

(On letterhead of the member)

To **CTCL Department**

Metropolitan Stock Exchange of India Limited, Building A, Unit 205(A), "D - Wing", 2nd Floor, Agastya Corporate Park, Sunder Baug Lane, L.B.S. Road, Kurla (W), Mumbai – 400070

| Sr. # | Particulars | Details |
|-------|--|---------|
| 1. | Member ID: | |
| 2. | Segment: | |
| 3. | User Id: | |
| 4. | Name(s) & Designation of Contact person(s): | |
| 5. | Contact details (Phone, Fax, Email) of Contact person(s): | |
| 6. | CTCL Smart Order Routing Software Name and Version Number: | |
| 7. | Vendor Name/In-House: | |

| (Name of the Member) |
|---|
| Authorised signatory (Name and designation) |

Date: Place:

For

Vendor Certificate for Smart Order Routing System (On letterhead of the Vendor)

| 1/ | We, having our registered office atand |
|-----------|--|
| rep | resented by (hereinafter referred to as VENDOR) have sold to M/s (hereinafter referred to as VENDOR) have sold to M/s (hereinafter referred to as VENDOR) have sold to M/s (hereinafter referred to as VENDOR) have sold to M/s. |
| Ex | change of India Limited, (hereinafter referred to as MEMBER), a software for Smart Order Routing DR). |
| | E confirm that, the software provided by us complies with the following provisions in particular as uired by the MSEI/SEBI: |
| a) | The software application used for SOR facility adheres to the best execution policy of the Member and would route orders in a neutral manner. The software application used for Smart Order Routing ensures that Smart Order Routing is not used to place orders at venues other than the recognized stock exchange and that we shall ensure that all orders entered into the smart order routing system are offered to the market for matching and no cross trades are generated. |
| b) | Adequate risk monitoring and control measures have been incorporated in the system and are in compliance with the requirements prescribed by SEBI and MSEI. |
| c) | The member's server internally generates unique numbering for all client orders/ trades and provision for maintenance of all transactions / activities / alerts log with audit trail is available. |
| Sig | ned sealed and delivered by the Authorised representative of the VENDOR |
| Da Pla | te: ace: |
| | |

Trading Member's Undertaking for use of Smart Order Routing

| I / We | . , an individual / a firm registered under the Indian Partnership |
|--|--|
| Act, 1932 / a Company / body corporate | incorporated under the Companies Act 1956 / and residing at |
| / having registered office at | give this UNDERTAKING on this |
| day of 20 1N I | FAVOUR of Metropolitan Stock Exchange of India Limited, a |
| company incorporated under the Compa | anies Act of 1956, with registered office at Building A, Unit |
| 205(A), "D - Wing", 2nd Floor, Agastya | Corporate Park, Sunder Baug Lane, L.B.S. Road, Kurla (W), |
| Mumbai – 400070, India (hereinafter refe | erred to as 'Exchange') |

WHEREAS

- a) The Exchange has provided trading software to enable its members to trade on the Exchange.
- b) The Exchange has allowed its trading members with prior approval, to use front end software like Computer-to-Computer Link (hereinafter referred to as the 'CTCL') to facilitate them to trade on the Exchange trading system.
- c) The Exchange has prescribed framework for the users of CTCL, to place orders, through Smart Order Routing system / software which would allow the Member's Trading Engines to systematically choose the execution destination based on relevant factors such as price, costs, speed, likelihood of execution and settlement, size, nature or any other consideration relevant to the execution of the order.
- d) The Member is desirous of providing the Smart Order Routing facility to constituents in compliance with the relevant Circulars of SEBI and the Exchange.

NOW THEREFORE IN CONSIDERATION OF THE EXCHANGE having received my / our application for Smart Order Routing, I / we hereby IRREVOCABLY AND UNCONDITIONALLY UNDERTAKE and agree to abide by and be bound by the following terms and conditions in addition to the set of instructions mentioned in Exchange's Master Circular – CTCL.

- 1. That Exchange, at its absolute discretion, may make the Smart Order Routing facility available to me / us only from the date of my / our enablement on the Smart Order Routing facility till such time as it may deem fit and further that the Smart Order Routing facility may at any time be withdrawn by Exchange at its discretion without giving me / us any notice or any reasons whatsoever.
- 2. I / We undertake and agree to adhere to the provisions of the Bye-laws, Rules, Regulations and Circulars of Exchange and the Regulations, Guidelines and Circulars issued by SEBI from time to time relating to operation and use of the Trading System, the CTCL facility and the Smart Order Routing facility.
- 3. I/We undertake to ensure that Smart Order Routing shall route orders in a neutral manner.
- 4. I / We shall ensure that necessary Terms and Conditions are provided to the clients who wish to avail SOR facility before enabling them for SOR facility.
- 5. I / We shall formulate best execution policy and communicate it to my Client along with Terms and Conditions that may be specified by the Exchange, from time to time, in this regard.
- 6. I / We shall adhere to the best execution policy while using Smart Order Routing.
- 7. I / We shall give a notice of at least 15 days to our Constituents prior to implementation of any material change in the order execution policy.
- 8. I / We shall intimate the Exchange prior to addition / removal of recognised Stock Exchange(s) in my / our Smart Order Routing system.
- 9. I / We shall ensure that the Smart Order Routing facility shall be provided to all class of investors who are desirous of availing the same.

- 10. I / We shall maintain logs of all activities to facilitate audit trail and maintain record of orders, trades and data points for the basis of decision.
- 11. In case the constituent has availed Smart Order Routing facility and does not want to use the same for a particular order, the same shall be well documented by me / us.
- 12. I / We shall ensure that Smart Order Routing is not used to place orders at venues other than the recognised stock exchanges. I/We shall ensure that all orders entered into the smart order routing system are offered to the market for matching and no cross trades are generated.
- 13. I / We shall carry out appropriate validation of all risk parameters before the orders are placed in the Smart Order Routing system.
- 14. I / We shall ensure that alternative mode of trading system is available in case of failure of Smart Order Routing facility.
- 15. I / We shall ensure that server routing orders placed through Smart Order Routing system to the exchange trading system shall be located in India.
- 16. I / We agree to undertake periodic System Audit of the Smart Order Routing system and software as specified by the Exchange and to submit certificate / report in this regard to the Exchange in accordance with its requirements.

This Undertaking shall be binding upon my /our heirs, successors, legal representatives and assigns. **IN WITNESS WHEREOF** this Undertaking is executed by the undersigned on the day, month, year and the place first mentioned above.

Before me

Terms and Conditions -SOR facility

- 1. The Trading Member shall ensure that execution of Client orders placed through the Smart Order Routing ("SOR") system is in accordance with its best execution policy which is submitted by the Trading Member to Metropolitan Stock Exchange of India Limited ("MSEI or Exchange") and which is duly disclosed by the Trading Member to the Client.
- 2. The Trading Member and the Client shall be bound by all the Rules, Byelaws and Regulations of the Exchange and circulars issued there under and Rules and Regulations of SEBI and relevant notifications of Government authorities as may be in force from time to time in relation to SOR facility.
- 3. The Trading Member shall ensure that it has formulated its best execution policy in accordance with requirements provided by SEBI/Exchanges from time to time.
- 4. The Trading Member shall ensure that the orders placed through Smart Order Routing facility are routed in a neutral manner.
- 5. The Trading Member shall give an advance notice of at least 15 days to the Client prior to implementation of any material change in its order execution policy.
- 6. The Trading Member shall demonstrate to the Clients at their request, that it had ensured execution of Clients orders in accordance with its best execution policy.
- 7. In case the Clients does not want to use the Smart Order Routing facility for a particular order, Trading Member shall ensure to carry out instructions of the Clients and ensure that the same is well documented.
- 8. The Trading Member shall ensure that alternative mode of trading system is available in case of failure of Smart Order Routing facility and that such alternative mode is used under intimation to the Client.
- 9. The Trading Member shall maintain logs of all activities to facilitate audit trail. Trading Member shall also ensure that record of orders, trades and data points for the basis of decision are maintained.
- 10. The Trading Member and the Client should be aware of the Bye-laws, Rules and Regulations of the Exchange relating to dispute resolution through arbitration mechanism of the Exchange and agree to abide by the said provisions.
- 11. The Exchange may alter, amend and / or modify these terms and conditions, from time to time and shall intimate the same to Trading Members.

UNDERTAKING TO BE GIVEN BY TRADING MEMBER/ STOCK BROKER

| I/W | |
|-----------|---|
| | rtnership Act, 1932 / a Company / body corporate incorporated under the Companies Act of 1956 and |
| | iding at / having our registered office atgive |
| Me hav | s UNDERTAKING on thisday ofatIN FAVOUR of tropolitan Stock Exchange of India Ltd., a company incorporated under the Companies Act,of 1956, ving registered office at Building A, Unit 205(A), "D - Wing", 2 nd Floor, Agastya Corporate Park, nder Baug Lane, L.B.S. Road, Kurla (W), Mumbai – 400070 (hereinafter called 'Exchange'). |
| WH | HEREAS |
| a) | The Exchange has provided the trading software to enable its Members to trade on its trading platform. |
| b) | The Exchange vide its Circular No. MSEI/CTCL/925/2012 dated December 31, 2012 had provided guidelines/directions on Computer to Computer Link (CTCL)/Internet Based Trading (IBT)/Algorithmic Trading (Algo)/Direct Market Access (DMA)/Securities Trading using Wireless Technology/Smart Order Routing (SOR) (hereinafter referred as 'CTCL Facility'), In-House CTCL software development by member and ISV empanelment. |
| c) | SEBI vide their circular no: CIR/MRD/DP/24/2013 dated: August 19,2013 issued detailed guidelines on testing of software used in or related to trading and risk management to be adhered by the Stock Exchanges, Stock Brokers/ Trading Members and their vendors. |
| d) | The Exchange had circulated the said SEBI circular for benefits of its members vide circular no. MSEI/CTCL/1395/2013 dated. August 21, 2013. |
| e) | The undersigned member is already using or intending to use various software for trading and risk management as mentioned and hereby agrees to undertake and the abide by the following. |
| app | W THEREFORE IN CONSIDERATION OF THE EXCHANGE having agreed to consider my blication to avail the CTCL Facility, I / We hereby IRREVOCABLY AND UNCONDITIONALLY DERTAKE and agree to abide by and be bound by the following terms and conditions: |
| 1. | I / We undertake that M/s(Name of Trading Member) 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 securities market. |
| 2. | I / We undertake that M/s (Name of Trading Member) 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. |
| 3. | I / We undertake that the absolute liability arising from failure to comply with the above provisions shall lie entirely with M/s(Name of Trading Member). |
| 4. | I / we shall execute, sign and subscribe to such other documents, papers, agreements, covenants, |

bonds, and/or undertakings as may be prescribed or required by Exchange/SEBI from time to time.

- 5. I/We also agree and understand that in the event of my/our non-compliance with any of the provisions as mentioned above, Exchange shall take such action against us as it may deem fit in this regard including suspension, penalties, fines, etc.
- 6. I/ We shall indemnify and keep indemnified the Exchange, their directors, managers, officers, employees and agents harmless against every and all claims, demands, actions, proceedings, damages, liabilities, losses, costs and expenses suffered or incurred by them, which arises out of my/our usage of CTCL Facility.
- 7. I/We agree that this undertaking shall be governed by the laws of India and Courts at Mumbai shall have exclusive jurisdiction in all such matters arising out of this undertaking.
- 8. I/we hereby agree to abide by the Bye-laws, Rules, Regulations, Circulars and/or any other amendments issued by the Exchange/ SEBI from time to time.

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 |
| Witness 1: |
| Witness 2: |

System Audit Report - Format

(On the letterhead of system auditor)

Date:

Name of Trading Member:

Member Id:

- 1. CTCL Audit Checklist (Part I)
- 2. IBT Audit Checklist (Part I + Part II)
- 3. Wireless Trading Audit Checklist (Part I + Part II + Part III)
- Algo Audit Checklist (Part I + Part IV)
 DMA Audit Checklist (Part I + Part V)

PART I

| Sr. No. | Area of Audit | | | Results & Observations | Auditor's Remark |
|------------|--|--|-----------------------------------|------------------------|---------------------|
| Α. | System Features & Functionality | | | Results | Opinions |
| 1. | Software Details | | | | |
| | Particulars | Name | Version No | | |
| | Application software | | | | |
| | Software developed by | | | | |
| | Gateway/Adapter | | | | |
| | Risk Administration / Manager | | | | |
| | Front End / Order Placement / | | | | |
| | Algo Strategy | | | | |
| | Database details | | | | |
| | | | | | |
| 2. | The installed system features are The Member ensures that software system being approved by the Exception Price Broadcast The system has a feature for reconstruction of the system has a feature: a) Which allows order entry and b) Which allows for modification | e version number i hange. ceipt of price broad | s used to identify the lcast data | | |
| | Trade Confirmation: The system has a feature which er | | · | | |
| 3. | The installed system provides the order input process | | | | |
| | Order Entry The system has order placement matching the system parameter | | low only orders | | |
| | Order Modification The system allows for modificati | on of orders placed | d. | | |

| | 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. | |
| 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 | |
| 6. | routed through it? 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 | |
| | 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 | |
| | lds. | |
| | 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 MSEI. | |
| | Approved Users: | |
| | Only users approved by MSEI are allowed to access the system and | |
| | documentation regarding the same is maintained in the form of | |
| | a) User Approval Applicationb) Copy of User Qualifications | |
| | 2, 35pj 5. 335. Qualifolis | |
| | 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 MSEI guidelines | |
| | Reissue of User Ids: | |
| | NEISSUE UI USEI IUS. | |

| | Heavilde are rejected as you the MCCI evidelines | <u> </u> | 1 |
|-----|---|----------|----------|
| | User lds are reissued as per the MSEI guidelines. | | |
| | Locked User Accounts: | | |
| | Users whose accounts are locked are unlocked only after documented unlocking requests are made. | | |
| 9. | Whether all successful and failed login attempts are logged with details like IP address and other data to enable traceability | | |
| B. | Risk Management System | Results | Opinions |
| 10. | The installed system is capable of assessing the risk of the client as | rtocano | Оринопо |
| | 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. | | |
| 11. | Whether the system carries out appropriate validations of the following risk parameters including Credit checks before the orders are released to the Exchange: a) Exposure limit b) Margin limit c) Order Quantity Limits d) Order Value Limits e) Daily Price Range Checks f) Cumulative limit on value of unexecuted orders | | |
| 12. | The installed system provides a system based event logging and | | |
| | system monitoring facility which monitors and logs all activities / events arising from actions taken on the gateway / database server, authorized user terminal and transactions processed for clients or otherwise and the same is not susceptible to manipulation. The installed systems has a provision for On-line surveillance and risk management as per the requirements of MSEI 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 MSEI and includes reports / logs on a) Number of Authorized Users b) Activity logs c) Systems logs d) Number of active clients | | |
| 13. | 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. | | |
| 14. | System-based control on the pre-defined trading limits set by the Member. | | |
| 15. | 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? | | |

| 16. | Facility to prompt the user when he puts in orders that are over and above | | |
|-----|---|---------|----------|
| | the normal limits set by the Member. | | |
| C. | Session Security | Results | Opinions |
| 17. | Whether system has secure end-to-end encryption for all data transmission between the client and the member system through a Secure Standardized Protocol. A procedure of mutual authentication between the client and the member server is implemented? | | |
| 18. | 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. | | |
| 19. | 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 | Opinions |
| 20. | Does the organization's policy and procedure document have a password policy? | | |
| 21. | The installed system Authentication mechanism is as per the guidelines of the MSEI a) The installed system's 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. | | |
| 22. | System authenticates user with a User Name and password as first level of security. | | |
| 23. | System mandates changing of password when the user logs in for the first time? | | |
| 24. | Automatic disablement of the user on entering erroneous password on five consecutive occasions. | | |
| 25. | The system provides for automatic expiry of passwords at the end of a reasonable duration (maximum 6 months) and re-initialisation of access on entering fresh passwords. | | |
| 26. | Prior intimation is given to the user before such expiry? | | |
| 27. | System controls to ensure that the password is alphanumeric (preferably with one special character), instead of just being alphabets or just numerical. | | |
| 28. | System controls to ensure that the changed password cannot be the same as of the last 6 passwords. | | |
| 29. | System controls to ensure that the Login id of the user and password should not be the same. | | |
| 30. | System controls to ensure that the Password should be of minimum six characters and not more than twelve characters. | | |
| 31. | User is deactivated if the same is not used for a continuous period of 12 (Twelve) months from date of last use of the account. | | |
| 32. | System allows user to change their passwords at their discretion and | | |

| 33. | 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. | | |
|-----|---|----------|----------|
| E. | Infrastructure & Capacity Management | Results | Opinions |
| 34. | System has built-in high system availability to address any single point failure. | | |
| 35. | Service has adequate bandwidth and multiple links to ensure reliability and redundancy. | | |
| 36. | Are the resources monitored, tuned and calculations made for future capacity requirements to ensure the required performance. | | |
| 37. | Adequate un-interrupted power supply for smooth operation of the System is available at the Site? | | |
| 38. | Whether backup network link is available in case of failure of the primary link to the MSEI? | | |
| 39. | Firewall | | |
| | Whether suitable firewalls are implemented? | | |
| 40. | Anti virus | | |
| | Is a malicious code protection system implemented? If Yes, then | | |
| | is a mailclous code protection system implemented? If Yes, then | | |
| | Are the definition files up-to-date? | | |
| | Any instances of infection? | | |
| | Last date of virus check of entire system. | | |
| 41. | Additional Access Control Security | | |
| | The installed system provides a dual factor authentication system for access to the various components. | | |
| | Extra Authentication Security | | |
| | a) The systems uses additional authentication measures like smart | | |
| | cards, biometric authentication or tokens etc. | | |
| | b) The system has a second level of password control for critical | | |
| F. | features. Backup & Recovery Procedures | Results | Opinions |
| | Does the organization's documented policy include a backup policy and | INESUIIS | Opinions |
| 72. | procedures? | | |
| 43. | 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 | | |
| 44. | capabilities? The Installed systems backup capability is adequate as per the | | |
| 44. | requirements of the MSEI for overcoming loss of product integrity. | | |
| | Are backups of the following system generated files maintained as per the | | |
| | MSEI 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 | | |
| 1 | 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 | Opinions |
| 45. | Does the Organisation have a suitable documented Business Continuity or Disaster Recovery or Incident Response process commensurate with the organization size and risk profile to ensure a high degree of availability of the installed system | | |
| | Is there any documentation on Business Continuity / Disaster Recovery / Incident Response? | | |
| | Does a BCP / DRP plan exist? | | |
| | If a BCP/DRP plan exists, has it been tested? | | |
| | Are there any documented incident response procedures? | | |
| | Are there any documented risk assessments? | | |
| 10 | Does the installation have a Call List for emergencies maintained? | | |
| 46. | 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 MSEI? | | |
| | Is the backup network link adequate in case of failure of the primary link connecting the users? | | |
| | Is there an alternate communications path between customers and the firm? | | |
| | Is there an alternate communications path between the firm and its employees? | | |
| | Is there an alternate communications path with critical business constituents, banks and regulators? | | |
| 47. | 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 quitable backups for failure of any of the suitiest system | | |
| | 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? | | |
| 48. | In case of failure of Internet, the alternate channel of communication has | | |
| | adequate capabilities for client identification and authentication. | | |
| Н. | Operational Integrity | Results | Opinions |
| 49. | Does the organization's policy and procedure document have an access | | |
| | control policy for users of the service? | | |
| 50. | 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. | | |
| 51. | Physical Security | | |
| | | | |
| | Whether adequate controls have been implemented for admission of | | |
| | personnel into the server rooms / place where servers / hardware / | | |
| | systems are located and whether audit trails of all the entries/exits at the | | |
| | server room / location are maintained? | | |
| 52. | To ensure information security for the Organisation in general and | | |
| | the installed system in particular policy and procedures as per the | | |
| | MSEI 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 MSEI requirements? | | |
| | a) Information Security Policy | | |
| | b) Password Policy | | |
| | c) User Management and Access Control Policy | | |
| | d) Network Security Policy | | |
| | e) Application Software Policy | | |
| | f) Change Management Policy | | |
| | g) Backup Policy | | |
| | h) BCP and Response Management Policy | | |
| | i) Audit Trail Policy | | |
| | | | |
| | Does the organization follow any other policy or procedures or | | |
| | documented practices that are relevant? | | |
| 53. | 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. | | |
| | | | |

| 54. | Are documented practices available for various system processes |
|-----|---|
| | Day Begin |
| | Day End |
| | Other system processes a) Audit Trails b) Access Logs c) Transaction Logs d) Backup Logs e) Alert Logs f) Activity Logs g) Retention Period |
| 55. | h) Data Maintenance 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 |
| 56. | To ensure system integrity and stability all changes to the installed system are planned, evaluated for risk, tested, approved and documented. |
| | Planned Changes a) Are changes to the installed system made in a planned manner? b) Are they made by duly authorized personnel? c) Risk Evaluation Process d) Is the risk involved in the implementation of the changes duly factored in? |
| | Change Approval Is the implemented change duly approved and process documented? |
| | Pre-implementation process Is the change request process documented? |
| | Change implementation process Is the change implementation process supervised to ensure system integrity and continuity |
| | Post implementation process Is user acceptance of the change documented? |
| | Unplanned Changes In case of unplanned changes, are the same duly authorized and the manner of change documented later? |
| | In case of members self developed system SDLC documentation and procedures if the installed system is developed |

| | In-House. | | |
|-----|--|---------|----------|
| I. | Approvals, Undertaking, Policies and Other Area | Results | Opinions |
| 57. | Insurance The insurance policy of the Member covers the additional risk of usage of system and probable losses in case of software malfunction. | | · |
| 58. | Settlement of Trades | | |
| | The installed system provides a system based reports on | | |
| | contracts, margin requirements, payment and delivery obligations | | |
| | M : B : 4.6.4 | | |
| | Margin Reports feature | | |
| | Should allow for the reporting of client wise / user wise margin requirements as well as payment and delivery obligations. | | |
| 59. | Database Security | | |
| 55. | 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. | | |
| 60. | Whether system has adequate safety features to ensure it is not susceptible to internal / external attacks? | | |
| 61. | 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? | | |
| 62. | 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 | | |
| 63. | Whether all the user ids created in the server of the trading member have | | |
| | been mapped to 12 digit codes on a one-to-one basis and a record of the | | |
| | same is maintained? | | |
| | If no, please give details | | |
| J. | Software Testing Verification | Results | Opinions |
| 64. | Verification of software testing done by Member in Exchange | | |
| | provided Test environment | | |
| | Man | | |
| | 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 | | |
| 65. | Provided Test environment Verification of participation by Member in Periodic Meek Trading | | |
| 00. | Verification of participation by Member in Periodic Mock Trading session conducted by Exchange | | |
| | 140 U | | |
| | Whether member has participated in Mock Trading sessions conducted by | | |
| | | | |
| | Exchange (Minimum 1 before approval) | | |

| Deta Sr # | ils Mock Trading Date | Segment | User ID | CTCL/IBT/Wireless Trading/DMA/ALGO |
|-----------------|-----------------------|-------------|------------|--|
| Nudi | t Trail and | Database of | f the te | in the verification of Logs, Reports, ests performed by member while session conducted by Exchange |

PART II

| Sr. No. | Area of Audit | Results & Observations | Auditor's Remark |
|------------|--|------------------------|---------------------|
| | System Features & Functionality | Results | Opinions |
| 1. | View Order status i.e. the orders that have not yet traded or partially traded or cancelled | | |
| | Order Confirmation | | |
| 2. | Acceptance / rejection of an order / trade is communicated to the IBT client. | | |
| 3. | Order Capture / Status should capture the following information: Order Id generated by the Exchange | | |
| | IBT Client ID and type of IBT Client | | |
| | Date and Time of order placement | | |
| | Scrip name / code / symbol | | |
| | Action (Buy/Sell) | | |
| | Quantity (ensure market lot) | | |
| | Order type (Regular Lot / Stop Loss or such orders as allowed by Exchange) | | |
| | Order validity (type as permitted by exchange such as Day, EOS, IOC)e | | |
| | Price (Ensure DPR -price band / circuit limit and minimum tick size as allowed by Exchange) | | |
| | Execution status | | |
| | System captures the IP address (from where the orders are originating) for all IBT orders | | |
| 4. | Is the trade confirmation sent to the client via e-mail? | | |
| 5. | Can the IBT client choose the interval of receiving the e-mail? | | |
| 6. | Whether a unique identification number as prescribed by Exchange (i.e. 11111111111 in CTCL Unique number) is sent with each IBT Order? | | |
| 7. | Two-factor authentication for login session has been implemented for all IBT orders emanating using Internet Protocol? | | |

| | Risk Management System | Results | Opinions |
|-----|--|---------|----------|
| 8. | Whether System-based control is implemented by the Member for the Margin, Order Quantity and Value? | | |
| 9. | IBT Member shall ensure that logic / priorities used by the Exchange are followed by the System for treating IBT Client Orders. | | |
| | Session Security | Results | Opinions |
| 10. | In case of no activity by the IBT client, the system provides for automatic trading session logout. | | |
| | Password Security | Results | Opinions |
| 11. | Does the organization's policy and procedure document have an access control policy for users of the service? | | |
| 12. | Whether all successful and failed login attempts are logged with details like IP address, MAC address and other data to enable traceability | | |
| | Operational Integrity | Results | Opinions |
| 13. | The IBT member ensures that a specific email id to receive mails from IBT Clients is communicated to all clients. | | |
| 14. | Member has documented and implemented a procedure to escalate the issue if the email is not responded within one working day. | | |
| | Approvals, Undertaking, Policies and Other Area | Results | Opinions |
| 15. | Display of Investor protection rule, Arbitration rule and rules effecting member - client relationship on approved IBT member's website. | | |
| 16. | The web site of IBT approved member provides and displays prominently hyper link to the web site/page on the web site of the MSEI displaying rules/Business Rules/circulars. | | |

Part III

| Sr. No. | Area of Audit | Results & Observations | Auditor's Remark |
|------------|---|------------------------|---------------------|
| | System Features & Functionality | Results | Opinions |
| 1. | The installed Wireless Trading system provides a system based control | | |
| | facility over the trade confirmation process | | |
| | Trade Confirmation and Reporting Feature | | |
| | Should allow confirmation and reporting of the orders that have resulted in trade | | |
| | As it may not be possible to give detailed information about the order | | |
| | status on a hand held device e.g. mobile phones, it should be ensured | | |
| | that minimum information may be given with addresses of the Internet web site / web page where detailed information would be available. | | |
| 2. | The installed Wireless Trading system provides a system based control facility over the order input process | | |
| | Order Identification Methodology | | |
| | A unique identification number for each Wireless Trading | | |
| | System captures the IP address (from where the orders are originating) for all Wireless Trading orders? | | |
| 3 | Whether a unique identification number as prescribed by Exchange | | |
| ا | (i.e. 3333333333 in CTCL Unique number) is sent with each Order | | |
| | originating from a wireless device? | | |
| 4. | Whether audit trails are provided to the user on the wireless device? | | |
| | Session Security | Results | Opinions |

| 5 | In case of no activity by the Wireless Trading client, the system provides for automatic trading session logout. | |
|----|--|--|
| 6. | In case of Wireless Trading whether provision has been made to lock the trading application in case of loss of the hand held device? | |
| 7. | It must be ensured that the session login details should not be stored on the devices used for Wireless Trading. | |

Part IV

| Sr. No. | Area of Audit | Results & Observations | Auditor's Remark |
|------------|--|------------------------|---------------------|
| | Operational Specifications | Results | Opinions |
| 1. | Whether all algo orders are necessarily routed through member's | | |
| | servers located in India? | | |
| | Risk Management System | Results | Opinions |
| 2. | Whether the Algo software provides for routing of orders through electronic / automated risk management systems of the member to carry out appropriate validations of all risk parameters before released to the Exchange trading system including individual Order level such as: a) Price check – Algo orders shall not be released in breach of the price bands defined by the Exchange for the security / contract. b) Quantity check – Algo orders shall not be released in breach of the quantity limit as defined by the Exchange for the security / contract. c) Order Value check - Algo orders shall not be released in breach of the 'value per order' as defined by the Exchange. d) 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. | | |
| | e) Automated Execution check – An Algo shall account for all executed, unexecuted and unconfirmed orders, placed by it before releasing further order(s). Further, the Algo system shall have pre-defined parameters for an automatic stoppage in the event of Algo execution leading to a loop or a runaway situation. f) Market Price Protection – Algo users shall not send MARKET | | |
| | order (i.e. order without any price) to Exchange. Algo users should send Market protection order instead of Market Order. The Market Protection order will be a LIMIT order with a price which will be computed automatically based on plus or minus 'x%' of LTP within the maximum range of DPR/dummy circuit filter. g) Cumulative limit on value of unexecuted orders. | | |
| 3. | Whether member has real-time monitoring systems to identify | | |
| 0. | algorithms that may not behave as expected? | | |

| 4. Whether orders generated by Algo are identified as Algorithmic Trading orders while releasing to the Exchange. For identification of Algo orders, members are required to ensure that the 13th digit of CTCL Terminal Information, which indicates whether the order is generated through Algo software or not, should be '1' if order is generated through Algo software. Operational Integrity Results | pinions |
|--|---------|
| For identification of Algo orders, members are required to ensure that the 13th digit of CTCL Terminal Information, which indicates whether the order is generated through Algo software or not, should be '1' if order is generated through Algo software. | ninions |
| the 13th digit of CTCL Terminal Information, which indicates whether the order is generated through Algo software or not, should be '1' if order is generated through Algo software. | ninions |
| the order is generated through Algo software or not, should be '1' if order is generated through Algo software. | ninions |
| order is generated through Algo software. | ninions |
| | ninions |
| | |
| 5. Whether Algo software has facility for generating and maintaining complete audit trail | |
| Logs of all trading activities is available to facilitate audit trail. | |
| Whether record of control parameters, orders, trades and data points emanating from trades executed through Algo are maintained by member. | |
| Whether all logs generated are secured from unauthorised modifications? | |
| 6. Whether orders generated by Algo software are offered to the market for matching and system does not allow any crossing of orders with each other that are routed through it? | |
| 7. Whether system has sufficient security features including password protection for User Id, automatic expiry of password at the end of a reasonable duration and reinitialisation of Access on entering fresh password? | |
| Whether registration and de-registration of users id are carried out as per the approved policy? | |
| 8. Whether member has procedures and arrangements to safeguard Algo | |
| from misuse or unauthorized access? | |
| Whether adequate controls have been implemented for admission of | |
| personnel into the server rooms / place where algo servers are located and whether audit trails of all the entries / exits at the server room / | |
| location are maintained? | |
| Any changes / upgrades done to the Algo software and system post approval by the Exchange. | |
| 10. Whether member has proper procedures, systems and technical | |
| capability to carry out trading through the use of Algo? | |

Part V

| Sr. No. | Area of Audit | Results & Observations | Auditor's Remark |
|------------|--|------------------------|---------------------|
| | Operational Specifications | Results | Opinions |
| 1. | Whether the Trading Member's server, routing the Direct Market Access (DMA) orders to the Exchange trading system is located in India? | | |
| 2. | Whether a unique identification number as prescribed by Exchange (i.e. 22222222222 in CTCL Unique number) is sent with each DMA Order? | | |
| 3. | Whether the DMA server application has the facility to enable & disable a DMA client? | | |
| 4. | Whether the DMA server application handles the order on first-cum-first basis across all DMA clients? | | |
| 5. | Whether the Trading Member's server application has an appropriate | | |

| | flag to identify separately DMA orders / trades? | | |
|-----|---|---------|----------|
| 6. | Does the DMA System have a facility to maintain and retain all orders, | | |
| | trades, alert logs / activity logs with audit trail facility for at least 5 | | |
| 7. | years? | | |
| 7. | Whether Position Limits specified for respective segment as specified by the Exchange / regulatory authorities: | | |
| | a) Market-wide across all clients | | |
| | b) Client-wise | | |
| 8. | Based on the Margin requirements as set out by the Exchange from | | |
| | time to time, the DMA application is able to limit the Net position of a | | |
| | DMA client that can be outstanding. | | |
| 9. | Whether appropriate limits for securities subject to FII limits as | | |
| | specified by the Exchange / Regulatory authorities can be set and DMA | | |
| | server application will notify the DMA client and / or control such orders | | |
| 10 | before release to the Exchange | | |
| 10. | Whether provision is made in the DMA application for Trading member to set any other risk parameter? If yes, please provide details | | |
| 11 | Is there an adequate facility for issuing contract notes to the client | | |
| | within 24 hours of the trade execution? | | |
| | Client Authorizations & Terms and Conditions | Results | Opinions |
| 12. | Are the clients availing DMA facility authorized after fulfilling Terms and Conditions as per Exchange requirements? | | |
| 13. | Whether individual users at the client end are also authorized based on minimum criteria? | | |
| 14. | Are the Terms and Conditions as prescribed in Exchange Circular in | | |
| | place? | | |
| | Whether the Exchange prescribed Terms and Conditions and formats | | |
| | as prescribed in Exchange Circular has been / will be adopted? | | |
| | Or The Terms and Conditions and formats will be modified? | | |
| 15. | | | |
| 10. | Whether the DMA application is so designed that it allows execution of | | |
| | designated DMA client's orders only DMA client should not have the | | |
| | designated DMA client's orders only. DMA client should not have the facility to change it to any other persons/entity? | | |

Summary Sheet

| Sr. No. | Area of Audit | Control / Processes | Compliance S/M/W | Report Reference |
|------------|---------------------------------|-----------------------------|---------------------|---------------------|
| | | Gateway & System Parameters | | |
| 1 | System Features & Functionality | Application Features | | |
| | | Order Management | | |
| 2 | Risk Management System | Application Features | | |
| | | System Parameters | | |
| 3 | Session Security | Session Security Parameters | | |

| | | Encryption Technologies | |
|----|---|--|--|
| | Password Security | Policies & Procedures | |
| 4 | · | Password Implementation | |
| | | Network & Redundant Connectivity | |
| 5 | Infrastructure & Capacity Management | Scalability | |
| | | Dependability | |
| 6 | Backup & Recovery Procedures | Policies & Procedures | |
| | | Backup & Archival process | |
| | | Policies & Procedures | |
| 7 | Business Continuity & Disaster Recovery | System Failure Backup | |
| | | Disaster Recovery | |
| 8 | Operational Integrity | Server Room / Network Room / Information Security | |
| | Operational integrity | Qualified Personnel & Problem Escalation | |
| | | Change Management | |
| 9 | Vulnerability Assessment | Database | |
| | | Operating System | |
| 10 | Software Testing | Testing in Exchange provided Test environment | |
| | | Testing & participation in Exchange conducted Mock Trading | |
| | Any Other area/aspect which in the auditors opinion is not | | |
| 11 | 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:_____(S / M / W)

Note: Process Area Controls Evaluation Criteria

| Control Evaluation Criteria | Description |
|-----------------------------|--|
| Strong | 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 | 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 | 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. |
| It is hereby confirmed and certifie | d that system audit of the software and systems used by |

| It is hereby confirmed and certified that system audit of the software and systems used by , a member of Metropolitan Stock Exchange of India Limited ('Exchange') has | |
|--|----|
| been conducted by me and have been found to be in compliance with the requirements stipulated to SEBI and Exchange. The software and system have capacity to meet all requirements of the Exchange and SEBI as on date. | by |
| We certify that none of the current Directors / Partners / Promoters of the member are directly or indirect related with any of the Directors / Promoters / Partners of(Name Auditing Firm) and there is no conflict of interest with respect to the member being audited. | • |
| Signature | |
| (Name of the Auditor & Auditing firm) CISA / DISA / CISM / CISSP Reg. No. : | |

Date: Place:

Stamp/Seal:

System Auditors' Certificate

(On the letterhead of System Auditor)

| 10 | |
|-------------|-------------------|
| CTCL | Department |

Metropolitan Stock Exchange of India Limited, Building A, Unit 205(A), "D - Wing", 2nd Floor, Agastya Corporate Park, Sunder Baug Lane, L.B.S. Road, Kurla (W), Mumbai - 400070

| Sr# | Particular | <u> </u> | | | | Details |
|-----|--|------------------|-----------|----------------------|---------------------------|----------------------|
| 1 | Category | | | | | (New / Modification) |
| 2 | 5 ; | | | | (creative meaninestation) | |
| | Test environment | | | | | |
| | | | | | | |
| | | | as been t | ested by member ir | n Exchange provided | |
| | Test enviro | onment | | | | |
| | Mombor Id | & Hearld u | ead by m | ember for testing in | the Evehance | |
| | | est environn | | ember for testing in | the Exchange | |
| | provided : | 000 011111101111 | | | | |
| | | | | | tion of Logs, Reports, | |
| | | | | tests performed by | member in Exchange | |
| | | est environn | | | | |
| 3 | | | tion by M | ember in Mock Tra | ding session conducted | |
| | by Exchan | ge | | | | |
| | Mock | Segment | User | CTCL/IBT/Wirele | 99 | - |
| | Trading | Cogmone | ID | Trading/DMA/AL | | |
| | Date | | | 3 | | |
| | | | | | | |
| | | , | | | ion of Logs, Reports, | |
| | | | | tests performed by | | |
| 4 | participatin | ig in Mock i | rading se | ssion conducted by | Exchange | |
| 4 | Particula | re | | Name | Version No | |
| | | _ | | Ivaille | Ve131011110 | |
| | Application software Software developed by Gateway/Adapter | | | | | |
| | | | | | | |
| | | inistration / I | Manager | | | |
| | | l / Order Pla | cement / | | | |
| | Algo Stra | | | | | |
| | Database details | | | | | |

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

Signature

(Name of the Auditor & Auditing firm) CISA / DISA / CISM / CISSP Reg. No. :

Date: Place:

Stamp/Seal:

<u>Application for the MSEI CTCL Test Environment Facility</u> (To be provided on letterhead)

| Tc |) | | | | |
|----|-----------|----|-----|----|-----|
| C1 | CL | De | par | tm | ent |

Metropolitan Stock Exchange of India Limited, Building A, Unit 205(A), "D - Wing", 2nd Floor, Agastya Corporate Park, Sunder Baug Lane, L.B.S. Road, Kurla (W), Mumbai - 400070

| I/We | (Name of | ISV/ISV/OI/Member) | herehv | annly f | or i | ISE | ٥f |
|--------------------------------------|----------|--------------------------|--------|---------|------|-----|----|
| MSEI CTCL Test Environment facility. | (Name of | 10 V/10 V OI/IVICITIDET) | ПСГСБУ | арріу і | OI C | 13C | O1 |
| | | | | | | | |

| WOE! | orez reacziwienimenciasimy. | |
|-------|--|--|
| Sr. # | Particulars | Details |
| 1. | Test Environment Required for Segment | ☐ Equity/ Capital Market☐ Equity Derivatives/Futures &Options☐ Currency Derivatives |
| 2. | API Connectivity Details | ☐ Non FIX API ☐ FIX API |
| 3. | Purpose for Test Environment | ☐ Software development ☐ Testing of 'CTCL Facility' software of Empanelled ISV (Please provide details in Point No.4) |
| 4. | a) Name of Empanelled ISV b) Name and Version No. of 'CTCL Facility' Software (Provide details if applying for Testing of 'CTCL Facility' software of Empanelled ISV else NOT APPLICABLE) | |
| 5. | Exchange Connectivity Details Connectivity (Leased Line(POP)/ISDN/Internet) Make of Router: Router IP Address: Computer IP Address: Global IP Address for Internet: (Applicable only if connectivity is Internet) | |
| 6. | Registered Office/ Correspondence address : | |
| 7. | Telephone & Fax No.: | |
| 8. | Name(s) & Designation of Authorised Signatory: | |
| 9. | Contact details (Phone, Fax, Email) of Authorised Signatory: | |
| 10. | Correspondence Address of Authorised | |

| | Signatory: | |
|-----|---|--|
| 11. | Address of the office from where CTCL Test Environment facility will be extended: | |

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

I / We understand that the Exchange reserves the right to modify or withdraw this facility.

For (Name of the ISV/ISVOI/Member)

Authorised signatory (Name and designation)

Date: Place:

Application for API for Tick by Tick Trading Market Data (MarketXstream) Facility

(To be provided on letterhead of Trading Member)

I/We.....(Name of Trading Member) hereby apply for API for Tick

by Tick Trading Market Data (MarketXstream) for ECM / EDS / CDS segment.

| 10 | |
|-------------|------------|
| CTCL | Department |

Metropolitan Stock Exchange of India Limited, Building A, Unit 205(A), "D - Wing", 2nd Floor, Agastya Corporate Park, Sunder Baug Lane, L.B.S. Road, Kurla (W), Mumbai - 400070

| Sr. # | Particulars | Details |
|-------|---|---------|
| 1. | Member Id: | |
| 2. | Registered Office/ Correspondence address: | |
| 3. | Telephone & Fax No.: | |
| 4. | Name(s) & Designation of Authorised Signatory: | |
| 5. | Contact details (Phone, Fax, Email) of Authorised Signatory: | |
| 6. | Correspondence Address of Authorised Signatory: | |
| 7. | Name of Software Vendor who will devlope the Software/Technical component for MarketXstream API | |

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

I / We understand that the Exchange reserves the right to modify or withdraw this facility.

For (Name of the Trading Member)

Authorised signatory (Name and Designation)

Date: Place:

Application for API for Tick by Tick Trading Market Data (MarketXstream) Facility

(To be provided on letterhead of empanelled ISV)

| Metrop Buildin Agasty | Department politan Stock Exchange of India Limited, ng A, Unit 205(A), "D - Wing", 2 nd Floor, ya Corporate Park, Sunder Baug Lane, Road, Kurla (W), Mumbai - 400070 | |
|-----------------------------|--|---------|
| | (Name of the ISV) ng Market Data (MarketXstream) for ECM / EDS / CDS segme | |
| Sr. # | Particulars | Details |
| 1. | Registered Office/ Correspondence address : | |
| 2 | Telephone & Fay No : | |

| O // | . 3 | Dotailo |
|------|--|---------|
| 1. | Registered Office/ Correspondence address : | |
| 2. | Telephone & Fax No.: | |
| 3. | Name(s) & Designation of Authorised Signatory: | |
| 4. | Contact details (Phone, Fax, Email) of Authorised Signatory: | |
| 5. | Correspondence Address of Authorised Signatory: | |

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

|--|

| Date |
|--------|
| Place: |

CRITERIA FOR REGISTRATION OF ISVOI

| Sr. # | Criteria | Response to Criteria |
|-------|---|--|
| 1. | The firm / company should be in existence for at least 3 years | Please provide necessary proof like certificate of Incorporation / Deed of partnership |
| 2. | Applicant should have permanent location/office within India | Please provide details |
| 3. | Suitable organization structure, promoters and their background. | To be enclosed |
| 4. | Applicant has to be financially sound to meet the legal indemnity | Complete details including audited balance sheets for last three years to be enclosed |
| 5. | The software developed by Applicantshould not under any litigation | |
| 6. | Whether the Applicant has any affiliation with other entities like brokers / subbrokers etc. including beneficial interests held by / in such brokers / sub-brokers etc. | If Yes, Please mention name of all suchentities with required details |
| 7. | Whether applicant is having previous experience in similar product development / implementation. | If yes, provide name and project / productdetails with reference |
| 8. | Whether Applicant has requisite skills within the organization in relation to product development, system integration and maintenance | Please provide details with key personnelprofile |
| 9. | Whether Applicant is certified for ISO 9001:2008 or CMM Certification | Provide copy of certificate |
| 10. | Whether the Applicant has adequate infrastructure in terms of: Hardware & software facilities. Communication & networking facilities within the organization General office facilities in terms ofoffice space and infrastructure Staff | Please provide the existing and planned infrastructure. |
| 11. | Whether Applicant has developed and implemented CTCL / Order Management Solution for connecting to international exchanges. | If yes, please provide details of the project and exchange. |

APPLICATION FOR REGISTRATION AS AN ISVOI

(to be executed on letter head of the ISVOI)

To **CTCL Department**

Metropolitan Stock Exchange of India Limited Building A, Unit 205A, 2nd Floor, Piramal Agastya Corporate Park, L.B.S Road, Kurla West, Mumbai – 400 070.

| Sr. # | Particulars | Details |
|-------|--|--|
| 1. | API required from Exchange: (NonFIX API / FIX API) | |
| 2. | API Required for Segment | |
| 3. | Name of the ISVOI: | |
| 4. | Registered Address: | |
| 5. | Legal form of Organisation: | Certificate of Registration / Partnership deedto be enclosed |
| 6. | Country of Incorporation: | |
| 7. | Telephone No.: | |
| 8. | Fax No.: | |
| 9. | Name(s) & Designation of Authorised Signatory: | |
| 10. | Contact details (Phone, Fax, Email) of Authorised Signatory: | |
| 11. | Correspondence Address of Authorised Signatory: | |
| 12. | Organisational structure: | To be enclosed |
| 13. | Total Staff: | |
| 14. | Directors: | |
| 15. | Technical Staff - Hardware: | |

| | 1 | |
|-----|--|---|
| 16. | Technical Staff - Software: | |
| 17. | Technical Staff - Support: | |
| 18. | Technical Staff - Others: | |
| 19. | No. of support offices in India: | Complete details to be enclosed |
| 20. | Details of promoters and their background: | To be enclosed |
| 21. | No. of years in the IT Business: | |
| 22. | IT Turnover for last three years: | Complete details including audited balance sheets to be enclosed |
| 23. | Technical Details — Hardware Infra Structure available within Organisation: | To be enclosed |
| 24. | Technical Details — Software Infra Structure available within Organisation: | To be enclosed |
| 25. | Technical Details — Communication / Networking Infra Structure available within Organisation: | To be enclosed |
| 26. | Complete details of Projects implemented along with References | (Give details) |
| 27. | Relationship with other Stock/Commodity Exchanges: Name of the Exchange(s): Nature of Relationship: Details regarding Trading Solution | (Give details) |
| | Provided: | |
| 28. | Relationship with Indian Software Companies Name of the Software Company: Nature of Relationship: Start date / year of Relationship: | (Give details) |
| 29. | Complete details of Proposed Solution along with Platforms used: | Comprehensive write-up explaining features of the solution, programming language, OS platform, Database details and network diagram to be provided. |
| 30. | Name and reference of Exchange (MSE) trading members where solution is | |

| | implemented, if any: | |
|-----|--|----------------------------|
| 31. | Proposed Price (indicative per user & site license fee) for providing the Solution to the Members of the Exchange: Price for Workgroup edition: | (Give details) |
| 32. | Response to Criteria: | To be enclosed as Annexure |

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

| Signed | sealed | and | delivered | by the | Authorised | signatory | of the | Vendor |
|----------------|--------|-----|-----------|--------|------------|-----------|--------|--------|
| Date Place: | | | | | | | | |
| | | | | | | | | |

Date:

ISVOI Standard Terms & Conditions

(On the letterhead of ISVOI)

To Metropolitan Stock Exchange of India Limited Building A, Unit 205A, 2nd Floor, Piramal Agastya Corporate Park, L.B.S Road, Kurla West, Mumbai – 400 070.

| Sub: | <u>Terms of Conduct for Registration as Independent Software Velndia (ISVOI)</u> | ndors from Outside |
|---------|--|-------------------------|
| applica | , having our registered office at ation to the Exchange for ISVOI registration. We agree that these Te art of the application dated made by us to the Exchange andent Software Vendor from outside India (ISVOI). | rms and Condtions forms |

Terms and Conditions:

We hereby declare and agree that

- We have obtained all approvals, permits, licenses, consents, registrations, authorizations and the like under the applicable Laws, regulations, orders, directions or notifications / clarifications issued by any Governmental Authority, statutory authority, agency or instrumentality in India and any other jurisdiction as may be applicable for developing and vending CTCL/IBT software and are under no legal or other disability for doing so.
- 2. We are an entity duly organized, and validly existing under the laws and have all requisite corporate power and authority to carry on its business of software development and vending.
- 3. We have full corporate power and authority to execute, deliver and undertake any Agreements/ Undertakings.
- 4. We hereby declare that we fulfill the criteria for Registration as ISVOI as required by Exchange/ Any other regulatory authority.
- 5. We shall pay such charges to Exchange as may be specified by the Exchange from time to time and as may be levied by DOT/MTNL/ any other regulatory/statutory authorities from time to time.
- 6. All material and information which has or will come into our possession or knowledge in connection with the release of the API or the performance hereof, consists of confidential and proprietary data, whose disclosure to or use by third parties will damage or cause loss to the Exchange. We shall hold such material and information in strict confidence, not to make use thereof other than for the purpose mentioned above, to release it only to our employees requiring such information and that too only with the written consent of the Exchange, and not to release or disclose it to any other parties. We shall take appropriate action with respect to our employees to ensure that the obligations of non-use and non-disclosure of confidential information are fully satisfied and shall also ensure that our employees are aware and comply with the above provisions.

- 7. We shall not in any way represent that the software developed by us is a part of the trading software of the Exchange.
- 8. We shall keep full security of Exchange's programs, databases and computer records in accordance with best computing practice.
- 9. We shall not share the API/technical specifications with any third party without any specific approval from the Exchange.
- 10. We shall not make use of the API/technical specifications for any commercial gains except for the purpose as mentioned in our Application.
- 11. We shall not in any way represent that the software developed is the empanelled products of the Exchange.
- 12. We shall promptly inform the Exchange
 - a) If we enter into a compromise with our creditors or liquidation or insolvency proceedings have been commenced against us (and which is not vacated within 60 days of such commencement) or otherwise we take steps to wind up (otherwise than as a result of a solvent intra-group restructuring); or
 - b) If we undergo a change of control including any change wherein the management vests with a party (or group of persons) whom the Exchange (acting reasonably) considers a direct or indirect competitor; or
 - c) If there is any change in any of the criteria based on which we have been identified as Registered ISVOI by the Exchange.
- 13. We shall submit such details as required by the Exchange including the details regarding the number of the Trading Members of the Exchange to whom we have provided the license touse the software and number of license provided to the Trading Members of the Exchange. The details shall be submitted by us on a periodical basis.
- 14. The Exchange 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. The source code of the Software shall be available at both, my/ our site as well as the Member's site for verification.
- 15. We shall execute, sign, and subscribe to such other documents, papers, agreement, covenants, bonds, and/or undertakings as may be prescribed or required by the Exchange from time to time.
- 16. The Exchange has the right to stop sharing of the API/technical specifications for any segment without giving any reason.
- 17. Our use of the API shall be within the scope as mentioned in above.
- 18. We are not black listed/proceeded against by any Exchange /SRO or Regulator in any jurisdiction where we operate.

- 19. The software proposed to be developed by us using the API provided by the Exchange will not infringe the Intellectual Property Rights of any third party.
- 20. Whatever contained herein above and the application is true, complete and accurate and will continue so to be during the entire period of registration as an ISVOI and we shall promptly inform Exchange if any such statement becomes untrue on a later date.
- 21. Our registration with Exchange and the privileges, obligation and liabilities arising there under shall be governed by laws of India. We also agree that any dispute connected to or arisingfrom registration shall be subject to exclusive jurisdiction in Mumbai, India.

| Stamp & Signature of the authorized representative of the ISVOI |
|---|
| (Name and Designation) |

Place: