



CTCL Department

Circular No.: MSE/CTCL/19879/2026

October 09th, 2026

Master Circular – Computer to Computer Link (CTCL)

The Exchange has reviewed the half-yearly Master Circular No. MSE/CTCL/18976/2026 dated April 30, 2026, pertaining 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), in-house development of CTCL software by Members, and ISV empanelment across all applicable segments.

With a view to providing Members with easy and consolidated access to the applicable regulatory framework, requirements and compliance obligations at one place, the Exchange has prepared the present Master Circular on CTCL. The Master Circular consolidates and supersedes the provisions, regulatory requirements, directions, procedures and compliance obligations prescribed through earlier circulars issued by the Exchange in respect of the aforesaid trading mechanisms.

Any non-compliance with the provisions of the Master Circular or applicable regulatory requirements may attract regulatory action and/or disciplinary measures by the Exchange, in accordance with the applicable Rules, Regulations, Byelaws and circulars.

In case of general queries kindly contact Customer Service on 022 – 61129010 or send an email to customerservice@mse.co.in. / ctcl@mse.co.in

On behalf of Metropolitan Stock Exchange

Darshan Arwade
AVP
Market Operations

Encl: Master Circular - CTCL

Master Circular – Computer to Computer Link (CTCL)

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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 for 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 UserId 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 [checklist](#) 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 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 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 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 segments will also be required to pay one-time fee and annual charges for each new segment separately while applying for empanelment in respective segments and thereafter.

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 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 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 segments 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.

2.4.4 Other Terms and Conditions

- 2.4.5 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.
- 2.4.6 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.

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.MSE.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 [checklist](#) 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 notes 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 www.MSE.in. 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 with 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.

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 [checklist](#) given in Part E of **Annexure 1**.
- 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 include 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 indicate duration of testing, nature of changes to the software and new functionalities introduced etc. The members shall test 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 mentioned below shall be payable by members:

	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
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- 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 members' 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 segments 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.

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 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 of 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 have been detailed in the following manner:
 - Application Eligibility
 - Terms and Conditions
 - Operational Specifications including password maintenance and authentication of other
 - requirements
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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 [checklist](#) 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.MSE.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 referred to 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 behalf of 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 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 the Trading Member with 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 to ensure secure 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, and 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 one-time Non-Refundable Fee and Recurring Annual charges as mentioned in paragraph 4.4 of CHAPTER 4.

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 Members 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’s 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 control:
 - 6.1.3.6 Price check – Algo orders shall not be released in breach of the price bands defined by the Exchange for the security / contract.
 - 6.1.3.7 Quantity check – Algo orders shall not be released in breach of the quantity limit as defined by the Exchange for the security / contract.
 - 6.1.3.7.1 Order Value check - Algo orders shall not be released in breach of the “Value per order” as defined by the Exchange.
 - 6.1.3.7.2 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.
 - 6.1.3.7.3 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.
 - 6.1.3.7.4 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.

- 6.1.3.8 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.
- 6.1.3.9 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.
- 6.1.3.10 Members shall ensure that the Algo is used only by a person approved by the Exchange to operate CTCL terminal (“Approved User”).
- 6.1.3.11 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.
- 6.1.3.12 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.
- 6.1.3.13 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 Algorithmic trading does not result in shortages in margin deposit or settlement obligation.
- 6.1.3.14 Members shall also ensure that all risk management measures like price / volume parameters, open position limits, etc. are strictly adhered to by Algo.
- 6.1.3.15 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.
- 6.1.3.16 Members shall ensure that the trades routed through Algos are not in the nature of abnormal / manipulative trades.
- 6.1.3.17 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.
- 6.1.3.18 The members 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.
- 6.1.3.19 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.

6.1.3.20 All other compliance requirements will apply to 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 requests from the client.
- 6.2.4 The letter of request 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's or 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 of 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-mentioned 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 checklist 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 Members desirous of developing In-House Algo software shall apply for approval as per requirements mentioned in CHAPTER 3 for In-House software development 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 non-empanelled 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 of 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’s 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 Members 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 one-time NonRefundable Fee and Recurring Annual charges as mentioned in paragraph 4.4 of CHAPTER 4.

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 of 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 themselves of Wireless Trading facility shall apply to the Exchange by submitting the documents as per the checklist 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 facilityof 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 approvedtrading system auditors qualified to undertake such system audit is available on Exchange website www.MSE.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 mustcontain 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, members 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 one-time NonRefundable Fee and Recurring Annual charges as mentioned in paragraph 4.4

Smart Order Routing

Smart Order Routing (SOR) is 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 of 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 of Members

- 8.3.1 The software and system proposed for Smart Order Routing shall be duly certified by 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 Members 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 one-time Non-Refundable Fee and Recurring Annual charges as mentioned in paragraph 4.4 of CHAPTER 4.

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) of information as per the format prescribed by Exchange. Members are required to populate the 15-digit CTCL terminal details in the order structure for every order emanating from CTCL terminal.

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	111111111111
IBT Terminal (Securities Trading using Wireless Technology)	333333333333
DMA Terminal	222222222222

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 should 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 members.

#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 (MSE) Undertaking

1. The Undertaking is to be executed on non-judicial stamp paper/s or on paper franked from Stamp Office / authorised banks, for a value of ` 500/-
2. Further the Undertaking (including all annexures / schedules) has to be notarised before a NotaryPublic.
3. 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 handwritten / 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. _____ forms part and parcel of this Undertaking executed by me/us Mr. /Mrs. /M/s. _____ having my/our residence/office at _____ on this the _____ day of _____ 20____ at _____ IN FAVOUR of Metropolitan Stock Exchange of India 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, stockbrokers, 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 Stockbroker. Further, the directors / partners of Auditor firm shall not be related to any Stockbroker 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.