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8.1
Empanelment of ISVs

1.1 Empanelment of ISVs

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

1.2 Criteria for Empanelment as an ISV

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

1.3 Documentation for ISV Application

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

1.4 Procedure of ISV Empanelment

1.4.1 On receipt of the above duly completed documents and applicable charges, the Exchange will verify the eligibility of the applicant and on meeting requirements of the Exchange / regulatory body(ies), the Exchange will share the required API with ISV.

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

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

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

1.5 Other terms and conditions

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

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

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

1.6 Documentation for approval of ATF strategy by Empanelled ISV

1.6.1 Empanelled ISV seeking approval for ATF Strategy shall submit necessary documents to Exchange as per **Part B of Appendix**.

1.6.2 The empanelled ISV will have to test the Algo software on the test environment provided by the Exchange. ISV may request Exchange through authorised email ID for credentials to access Test Environment. After successful completion of testing on the Exchange test environment, the ISV shall request for an appointment to demonstrate the Algo strategy to the Exchange.

1.6.3 On being satisfied that empanelled ISV meets the requirement which may be stipulated from time to time by Exchange / regulatory body, the Exchange shall approve the ATF Strategy(ies).

1.7 Charges for ISV Empanelment

1.7.1 The charges as mentioned below shall be payable by ISVs

Sr. No.	Category	Charges (Non-refundable) plus applicable taxes
1	Software Vendors who are applying for empanelment for providing CTCL / IBT / WT solutions using Non FIX API provided by the Exchange.	INR.10,00,000/- as one-time charges and INR 2,50,000/- as annual charges.
2	Software Vendors who are applying for empanelment for providing CTCL / IBT /WT solutions using FIX API provided by the Exchange.	INR.10,00,000/- as one-time charges and INR 2,50,000/- as annual charges.

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

8.2
CTCL / IBT / WT Facility for Members from Empanelled ISVs

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

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

Members desirous of using CTCL/IBT/WT software procured from empanelled ISV are required to seek approval of the Exchange by submitting required documents as detailed below:-

Type of Software	Required Documents
CTCL	**Part C of Appendix**
IBT	**Part D of Appendix**
WT	**Part E of Appendix**

2.1.2 The member will have to test the CTCL/IBT/WT software on the test environment provided by the Exchange. For this purpose a User Id on the test environment should be requested from the Exchange via authorised email id. The member should ensure that the software procured by them meets the bare minimum requirements/Checklist outlined in Annexure 14. Member is required to sign and provide the checklist as confirmation of necessary testing.

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

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

Type of Software	Audit Report	Auditor Certificate
CTCL	-	Annexure 28

IBT	Annexure 27	Annexure 28
WT	Annexure 27	Annexure 28

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

2.1.6 The above procedure will be applicable for first time approval to member and for Vendor change for their respective CTCL/IBT/WT facility. Members already approved by the Exchange for respective CTCL facility will not be required to submit system audit report/certificate while applying for additional User Id for using same software.

2.1.7 For change of version in the CTCL approved software refer Chapter 7 for detailed process.

2.2 Periodic System Audit of CTCL / IBT / WT systems

Members using CTCL / IBT / WT facility shall ensure that the periodic audit report is submitted as may be specified by the Exchange from time to time and covers compliance of all requirements mentioned by SEBI and Exchange in the **Chapter 11**.

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

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

8.3

A. IN-HOUSE DEVELOPMENT OF CTCL / IBT / WT SOFTWARE BY OBTAINING API FROM EXCHANGE

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

3.1.1 Member desirous of developing CTCL/IBT/WT software In-House using Non FIX API / FIX API provided by the Exchange or procuring/developing CTCL/IBT/WT software from non-empanelled vendors are required to seek approval of the Exchange by submitting required documents as detailed below:-

Type of Software	Required Documents
CTCL	**Part F of Appendix**
IBT	**Part G of Appendix**
WT	**Part H of Appendix**

3.2 Approval to Member

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

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

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

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

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

3.2.4 Exchange may require the demonstration of in-house CTCL/IBT/WT software before granting an approval. Member shall arrange to provide demonstration of in-house CTCL/IBT/WT software, after taking an appointment. After successful demonstration of the software and on being satisfied with the documents submitted by the member, Exchange may grant permission to Member for the usage of in-house CTCL/IBT/WT facility.

3.2.5 In case of version change/modification of approved CTCL/IBT/WT software refer **Chapter 7** for detailed process.

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

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

Sr. No.	Category	Charges (Non-refundable) plus applicable taxes
1	Members who are applying for developing in-house CTCL / IBT / WT solutions using Non-FIX API and/or FIX API provided by the Exchange.	Rs. 1,50,000/- as one-time Charges and Rs. 50,000/- as annual charges.

3.3.2 The members shall pay the annual charges for the first year in advance along with the application. The annual charges shall be calculated on a pro-rata basis from the date of receipt of the member's application till the 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 by 30th April each year. Interest @15% p.a. shall be levied on late payment of the annual fees. Any Member who wishes to discontinue in-house facility should inform to the Exchange before 10th day of April.

3.4 Periodic System Audit of CTCL / IBT / WT systems

Members using CTCL / IBT / WT facility shall ensure that the periodic audit report is submitted as may be specified by the Exchange from time to time and covers compliance of all requirements mentioned by SEBI and Exchange in the **Chapter 11**.

B. IN-HOUSE DEVELOPMENT OF CTCL / IBT / WT SOFTWARE BY OBTAINING API FROM EMPANELLED ISV

3.5 Documentation for In-House IBT / WT by obtaining API from Empanelled ISV

3.5.1 Member desirous of developing IBT/WT software In-House using Non FIX API / FIX API from empanelled vendor, are required to seek approval of the Exchange by submitting required documents as detailed below:-

Type of Software	Required Documents
IBT – using API from Vendor	**Part-I of Appendix**
WT – using API from Vendor	**Part-I of Appendix**

3.6 Approval to Member

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

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

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

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

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

3.6.4 Exchange may require the demonstration of in-house IBT/WT software before granting an approval. Member shall arrange to provide demonstration of in-house IBT/WT software, after taking an appointment. After successful demonstration of the software and on being satisfied with the documents submitted by the member, Exchange may grant permission to Member for the usage of in-house IBT/WT facility using API from empanelled Vendor.

3.6.5 In case of version change/modification of approved CTCL/IBT/WT software refer **Chapter 7** for detailed process.

3.7 Charges for In-House Development of IBT/WT Software

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

Sr. No.	**Category**	**Charges (Non-refundable) plus applicable taxes**
1	Members who are applying for developing in-house IBT / WT solutions using Non FIX API and/or FIX API taken from Empanelled CTCL Vendor.	Rs. 50,000/- as annual charges.

3.7.2 The members shall pay the annual charges for the first year in advance along with the application. The annual charges shall be calculated on a pro-rata basis from the date of receipt of the member's application till the 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 by 30th April each year. Interest @15% p.a. shall be levied on late payment of the annual fees. Any Member who wishes to discontinue in-house facility should inform to the Exchange before 10th day of April.

3.8 Periodic System Audit of CTCL / IBT / WT systems

Members using CTCL / IBT / WT facility shall ensure that the periodic audit report is submitted as may be specified by the Exchange from time to time and covers compliance of all requirements mentioned by SEBI and Exchange in the **Chapter 11**.

8.4

Algorithmic Trading Facility (ATF)

4.1 Algorithmic Trading Facility (ATF)

4.1.1 The Exchange allows Algorithmic (Algo) Trading for placing orders on the trading system of the Exchange subject to the terms and conditions mentioned in this chapter. Algorithmic Trading (hereinafter referred to as "Algo") means "Any order that is generated using automated execution logic." Or mean any software or program

facility by the use of which, upon the fulfillment of certain specified parameters, without the necessity of manual entry of orders, buy/sell orders are automatically generated and entered by the software/ program facility through CTCL software into the Trading System of MCX.

4.2 Documentation by Member for Algo through Empanelled ISV

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

4.2.2 Members desirous of using 'Approved Strategy' of empanelled ISV shall apply to Exchange for approval by submitting required documents as detailed in **Part J of Appendix**.

4.3 Documentation by Member for In-House Algo Software

4.3.1 Member desirous of developing In-House Algo software shall additionally submit the documents to the Exchange for approval as per **Part J of Appendix.**

4.4 Charges for In-house development of Algo Software

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

Sr. No.	Category	Charges (Non-refundable) plus applicable taxes
1	Members who are applying for developing in-house ATF solutions using Non FIX API and/or FIX API provided by the Exchange.	Rs. 1,50,000/- as one-time Charges and Rs. 50,000/- as annual charges.

4.4.2 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.

4.4.3 The members shall pay the annual charges for the first year in advance along with the application. The annual charges shall be calculated on a pro-rata basis from the date of receipt of the member's application till the 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 by 30th April each year. Interest @15% p.a. shall be levied on late payment of the annual fees. Any Member who wishes to discontinue in-house facility should inform to the Exchange before 10th day of April.

4.5 Approval to member for Algo Facility

4.5.1 The member will have to test the Algo software on the test environment provided by the Exchange. For this purpose a User Id on the test environment should be requested from the Exchange via authorised email id**.** The member should ensure that the software developed meets the bare minimum requirements/checklist outlined in **Annexure 6.** Member is required to sign and provide the checklist as confirmation of necessary testing.

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

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

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

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

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

4.6 Modifications in Approved Algo Software

4.6.1 In case of version change/modification of approved Algo software refer **Chapter 7** for detailed process.

4.7 Periodic System Audit of Algo system

4.7.1 Members using ATF/Algo facility shall ensure that the periodic audit report is submitted as may be specified by the Exchange from time to time and covers compliance of all requirements mentioned by SEBI and Exchange in the Chapter11.

4.8 Conditions for use of Algo system

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

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

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

4.8.1.3 Clear classification of algo orders by identification flag as specified by the Exchange is used in their algo orders as specified in Chapter 5.

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

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

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

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

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

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

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

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

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

4.8.1.11.2 Algo Identifier: All algo orders shall be tagged with a unique identifier provided by the Exchange and the Member shall keep all data / trigger points

to establish the audit trail.

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

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

4.8.1.11.5 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.

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

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

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

* In case the ratio is 500 or more than 500 during a trading day, concerned member shall not be permitted to place any order for the first 15 minutes on the next trading day (in the continuous trading session) as a cooling off action.

However, the trading member shall be permitted to enter transactions in risk reducing mode during such a cooling off period. For the purpose of calculation of daily Order-to-Trade ratio, all algorithmic order, i.e. order entry, order modifications and order cancellations shall be considered.

It may further be noted that:

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

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

4.8.1.12 ATF software should have control feature to restrict the Algo orders from a particular CTCL ID / ATS User Id not exceeding 20 orders per second or any number as prescribed by Exchange from time to time and there will be economic disincentives for number of algo orders exceeding 20 orders per second. The limit of twenty orders per second from a particular CTCL ID/ATS User–ID shall be measured over a rolling period of five seconds (i.e. hundred orders for 0th -5th second, hundred orders for 1st – 6th second, hundred orders for 2nd to 7th second & so on).

Orders per rolling period of five seconds	**Economic Disincentive**
101-150	Rs. 10 per instance
151-250	Rs. 25 per instance
251 & Above	Rs. 50 per instance

[4.8.1.11A The Exchange has introduced below mentioned additional measures for Order- to-trade ratio and Order-per-second (clause 4.8.1.10 and 4.8.1.11 above) for the repeat offenders:

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

The above strcuture of additional economic disincentive for algo orders is subject to revision based on actual data/details of number of instances of OPS exceeding specified limit.][1]

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

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

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

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

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

4.8.1.18 Members shall maintain logs of all trading activities, record of control parameters, orders, trades and data points emanating from trades executed through algorithm trading and should be made available to the Exchange whenever required for the purpose of audit / inspection.

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

4.8.1.20 Members availing ATF facility are required to undertake System Audit of their software and submit annual compliance report to the Exchange by 30th June every half year as specified in the Chapter 11. Further, Exchange reserves right to conduct System Audit by the Exchange officials or appointed auditors whenever required without prior intimation.

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[1] Inserted vide MCX Circular No. MCX/CTCL/062/2017 dated March 01, 2017

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

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

8.5
CTCL Terminal Details (15 Digits)

5.1 CTCL Terminal Info

5.1.1 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.

5.2 Identification of 1-12 digits

5.2.1 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
Wireless Trading Terminal	333333333333

5.3 Identification of 13th digit

5.3.1 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 (Algo) software,

1 - if order is generated through program trading (Algo) software,

5.4 Identification of 14-15 digit

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

8.6
Activation / Deactivation of CTCL facility on User ID

6.1 Documentation for availing existing approved CTCL/IBT/WT/ATF facility on additional User ID

Members who wish to avail existing approved CTCL / IBT / WT / ATF facility on additional User ID is required to submit the application to the Exchange as per the format mentioned in **Annexure 31**.

6.2 Documentation for deactivating CTCL / IBT / WT / ATF facility

Members who wish discontinue CTCL / IBT / WT / ATF facility from User IDs can do so by applying to the Exchange as per the format mentioned in **Annexure 25**.

8.7
Testing of software

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

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

Particulars	**Testing of Software**	**Mock/Simulated trading environment Participation**	**Audit Report**	**Audit Certificate**	**Demo**
Version change for software procured from ISV	Yes	Yes	No	Yes	No
Version change for software developed In-house	Yes	Yes	No	Yes	Yes

7.1 Documentation

Member is required to submit the Application form as specified in Annexure 26 in case of change in the approved CTCL software impacting major functionalities or risk management system

7.2 Testing of CTCL Software

The member will have to test the software on the test environment provided by the Exchange before putting into use and testing is mandatory. The member should ensure that the software meets the minimum requirements outlined in Annexure 14.

7.3 Mock Trading Participation / Simulated Trading Environment

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

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

7.4 System Audit

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

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

- CISA (Certified Information System Auditors) from ISACA
- DISA (Post Qualification Certification in Information Systems Audit) from Institute of Chartered Accountants of India (ICAI)
- CISM (Certified Information Securities Manager) from ISACA
- CISSP (Certified Information Systems Security Professional) from International
- Information Systems Security Certification Consortium, commonly known as (ISC)

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

7.5 Demonstration

The Exchange may require the demonstration of the software in case of software developed In-house before granting an approval. Member shall arrange to provide

demonstration of the software after taking a prior appointment. After successful demonstration and on being satisfied with the documents submitted by the member, the Exchange may grant permission to Member for the usage of 'CTCL Software'.

7.6 Penalty for the Malfunctioning of software

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

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

8.8
Empanelment of Application Service Provider (ASP)

8.1 Empanelment of ASP

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

8.2 Criteria for Empanelment as an ASP

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

8.3 Documentation for ASP Application

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

8.4 Procedure of ASP Empanelment

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

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

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

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

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

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

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

8.5 Other Terms and Conditions

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

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

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

8.6 Charges for ASP Empanelment

8.6.1 The charges as mentioned below shall be payable by ASPs:

Sr. No.	**Category**	**One -time Charges (Non-refundable)**	**Annual Charges (Non-refundable)**
		Plus applicable taxes	
1	Application Service Provider providing CTCL trading / IBT / WT services to members of the Exchange on chargeable basis	INR. 20,00,000/- at the time of application	INR. 3,50,000 on financial year basis.

2	Application Service Provider providing CTCL trading / IBT / WT services to members of the Exchange free of cost	INR. 10,00,000/- at the time of application	INR. 2,50,000 on financial year basis.

8.6.2 The ASP shall pay the annual charges for the first year in advance along with the application. The annual fee shall be calculated on a pro-rata basis from the date of receipt of the ASP's application till the 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. Interest @ 15% p.a. shall be levied on late payment of the annual fees. Any ASP who wish to discontinue as Empanelled ASP need to inform the Exchange before 10th day of April.

8.9

Tick by Tick Trading Market Data (MarketXstream)

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

9.1 Application for *MarketXstream* API

9.1.1 Members of the Exchange or Empanelled ISVs (CTCL Vendors) desirous of developing software to use MarketXstream can apply for MarketXstream API as per format given in Part M of Appendix. The Exchange shall share MarketXstream API after receiving request as per prescribed format.

9.1.2 The member is required to test the software in Exchange test environment. Members who have developed in-house software for using Tick by Tick Trading Market Data are required to provide demonstration of their software and take approval from the Exchange before using it. CTCL Empanelled Vendors who have developed software for Tick by Tick Trading Market Data are required to provide demonstration of their software and take approval from the Exchange before providing their Tick by Tick Trading Market Data software to members of the Exchange.

9.2 Enable *MarketXstream* for live trading

9.2.1 To enable Tick by Tick Trading Market Data (MarketXstream) for live trading using the approved software, members are required to apply to the Exchange in the format enclosed as Annexure 34. Upon receipt of application Exchange shall enable the required Tick by Tick Data Stream based on bandwidth availability of the leased line and will provide the requisite parameters for receiving Tick by Tick Trading Market Data (MarketXstream).

9.3 Other Terms and Conditions

9.3.1 The Tick by Tick Trading Market Data will be provided to members on a dedicated point to point leased line with bandwidth of 2 Mbps or above. Members may please note that order routing will not be allowed on the Leased Lines enabled for Tick by Tick Trading Market Data. Members should monitor the link utilization and may opt for separate leased line for different data stream.

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

8.10
Application for CTCL / IBT / WT Services through ASP

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

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

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

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

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

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

10.1.5 Documentation for additional User ID

Documentation for availing existing approved CTCL / IBT / WT facility on additional User ID refer to Chapter 6.

8.11
SYSTEM AUDIT OF MEMBERS OF THE EXCHANGE

In view of the circular issued regarding Annual System Audit of the Trading Member of Exchange issued by SEBI, the members using trading software are required to conduct system audit of their trading facility in accordance with the system audit framework which includes auditor selection norms, Terms of Reference (ToR) (Refer Part O of Appendix). Separate ToRs are specified for the Members as categorized below:-

Type of Member	Criteria
Type I	Members who trade through exchange provided terminals such as TWS.
Type II	Members who trade through API based trading terminals like CTCL or IBT or WT facility and who may also be Type I Members.
Type III	Members who use Algorithmic Trading Facility (ATF/ALGO) to trade and who may also be TYPE I or Type II Members.

Members based on their category are required to carry out system audit of their trading facility on periodic basis using specified ToR as mentioned in table below.

Category of Member	Criteria	Terms of Reference (ToR)	Frequency
Type II	Members using CTCL Facility with presence in < 10 locations or have < 50 terminals	Annexure-40 (Part-A)	Once in 2 years
	Members using CTCL Facility with presence in > 10 locations or have > 50 terminals	Annexure-40 (Part-A)	Annual
Type III	All	Annexure-40 (Part-B)	Half Yearly

Type-I Members using trading software provided by the Exchange (TWS) and software provided by Application Service Provider (ASP) are not required to conduct system audit.

The audit shall be conducted for the purpose of and with an objective of identifying the system inadequacies / deficiencies, if any, based on compliance requirements and the implications of such inadequacies. Members are advised to ensure complete compliance with the system audit requirements mentioned in this circular and aforesaid SEBI circulars.

Trading members are required to take corrective action for the observations made by the system auditor on non-compliance / non-conformities (NCs), if any and submit Action Taken Report (ATR) to Exchange. If the Follow-on audit has been recommended by the auditor in System Audit Report (SAR) then Trading members are required schedule the same after

taking necessary corrective actions and submit the Follow-on report to Exchange. The due date for submission of SAR, ATR and Follow-on audit report is as specified below:

Categories	**Due Date for Submission of Reports**		
	System Audit Report	**Action Taken Report, if applicable**	**Follow-on Audit Report, if applicable**
Once in 2 years (April-March, 24 Months)	June 30	August 31	December 31
Annual SAR (April-March, 12 Months)	June 30	August 31	December 31
Half Yearly (April-September)	December 31	January 31	March 31
Half Yearly (October-March)	June 30	July 31	September 30

Auditor Selection Norms

a) The Auditor shall have minimum 3 years of experience in IT audit of Commodities/Securities market participants e.g. 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 from time to time.

b) The appointed Auditor's resources should possess at least one of the following certifications:
   - CISA (Certified Information System Auditors) from ISACA
   - DISA (Post Qualification Certification in Information Systems Audit) from Institute of Chartered Accountants of India (ICAI)
   - CISM (Certified Information Securities Manager) from ISACA
   - CISSP (Certified Information Systems Security Professional) from International Information Systems Security Certification Consortium, commonly known as (ISC)

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

d) The Auditor shall not have any conflict of interest in conducting fair, objective and independent audit of the Trading Member. Further, the directors / partners of Auditor firm shall not be related to any Trading Member including its directors or promoters either directly or indirectly.

e) 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.

f) The Auditor can perform maximum of 3 successive system audits of the Trading member. Follow-on audits conducted by the auditor shall not be considered in the successive audits.

The SAR should be on the letterhead of system auditor. It may be noted that all the pages of SAR should be duly stamped and signed by the system auditor. The system auditor should categorically certify in the report about absence of conflict of interest as given in the format.

Members may please note that the provisions of this circular shall be applicable from financial year 2016-17 onwards.

The members are advised to submit the a) System Audit Report along with Executive summary, b) Action Taken Report & c) Follow-on report (Annexure 40), if applicable, as per the time line provided to:

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

Late submission charges of Rs. 500/- per day will be levied on trading members failing to submit the said reports for the period of non-submission. Further, Non-compliant members shall render themselves liable for action as may be deemed fit by the Exchange.

8.12
Cyber Security & Cyber Resilience Audit of the Members of the Exchange[1]

Members of the Exchange are required to undertake Cyber Security & Cyber Resilience Audit of their Software and submit the report to the Exchange as per the norms, framework and the timelines prescribed by the SEBI from time to time.
The format of the Cyber Security and Resilience Audit Report is available at:

www.mcxindia.com ➔ Technology & services ➔ CTCL ➔ CTCL Compliance ➔ Cyber Security & Cyber Resilience Audit

https://www.mcxindia.com/technology/ctcl/ctcl-compliance

8.13
Cyber Incident Reporting
Members of the Exchange are required to report Cyber Security Incidents faced by them on quarterly basis, within 15 days from the end of each quarter to the Exchange as per the

[1] Inserted vide circular SEBI Circular no. SEBI/HO/MIRSD/CIR/PB/2018/147 dated December 03, 2018 & SEBI/HO/MIRSD/DOP/CIR/P/2019/109 dated October 15, 2019 and Exchange Circular No. MCX/TECH/524/2018 dated December 13, 2018 & MCX/TECH/587/2019 dated October 16, 2019

norms and framework prescribed by the SEBI from time to time.[2]
The format for reporting Cyber Security Incident is available at the below link:

www.mcxindia.com ➔ Technology & services ➔ CTCL ➔ CTCL Compliance ➔ Cyber Incident Reporting

https://www.mcxindia.com/technology/ctcl/ctcl-compliance

8.14

Reporting of Artificial Intelligence (AI) and Machine Learning (ML) by the Members of the Exchange[3]

Members of the Exchange are required to report Artificial Intelligence (AI) and Machine Learning (ML) applications and systems offered and used, on quarterly basis, within 15 days from the end of each quarter as per the norms specified by the SEBI from time to time.

AI & ML reporting is compulsory for all the Trading Members of the Exchange (whether using or not using the facility). Non-compliant members shall render themselves liable for action as may be specified by the Exchange from time to time.

The form for submitting the said report is available at the following link on the Exchange's website:

www.mcxindia.com ➔ Technology & services ➔ CTCL ➔ CTCL Compliance ➔ AI/ML Reporting

https://www.mcxindia.com/technology/ctcl/ctcl-compliance

[2] Inserted vide circular 03, 2018 & SEBI/HO/MIRSD/DOP/CIR/P/2019/109 dated October 15, 2019 and Exchange Circular No.
MCX/TECH/144/2019 dated March 19, 2019 & MCX/TECH/587/2019 dated October 16, 2019

[3] SEBI Circular no. SEBI/HO/MIRSD/DOS2/CIR/P/2019/10 dated January 04, 2019 and Exchange Circular No. MCX/INSP/014/2019 dated
January 11, 2019 & MCX/TECH/130/2019 dated
March 13, 2019

8A
NETWORK CONNECTIVITY

8A.1 VARIOUS MODES OF CONNECTIVITY

1.1 Point to Point Leased Line

1.1.1 Option 1 – Avail Point-to-Point leased line through Exchange

Bandwidth	Available Service Provider
2 Mbps	MTNL
10/20/30/40/45 Mbps	Airtel, TCL

1.1.2 Option 2 – Avail Point-to-Point leased line directly from Service Provider

Bandwidth	Application direct to Service Provider
2 Mbps	Airtel, TCL, Reliance, TTML
10/20/30/40/45 Mbps	Airtel, TCL, Videocon, [Microscan Computers Pvt Ltd.][1]

1.2 MPLS Leased Line

1.2.1 Avail MPLS leased line through Exchange

Bandwidth	Available Service Provider
2 Mbps	BSNL, Airtel, TCL
10/20/30/40 Mbps	Airtel, TCL

[1] Inserted vide MCX Circular No. MCX/TECH/031/2017 dated February 03, 2017

1.3 NPN POP Leased Line

1.3.1 Avail NPN-POP leased line through Exchange

Bandwidth	**Available Service Provider**
2 Mbps	*MTNL, TCL, Airtel, **Reliance

*MTNL is available only at Mumbai POP locations.

**Reliance is available only at Mumbai and Kochi POP location.

1.4 VSAT Connectivity

Bandwidth	**Available Service Provider**
Shared Pool	HCL Comnet

8A.2 Network Connectivity Procedure - For Point to Point and MPLS Leased Line

2.1 Application and Feasibility

2.1.1 Option 1 Avail Point-to-Point / MPLS leased line through Exchange

Members desirous of availing facility of 2/10/20/30/40/45 Mbps Point to Point and MPLS Leased Line connectivity through Exchange is required to send feasibility request over email to MCX-LeasedLine@mcxindia.com as per Network Connectivity Form.

On receipt of the said e-mail, Exchange shall process feasibility of the location from the service provider/s as per the choice indicated by the member. Thereafter feasibility details will be intimated to the member through email for obtaining confirmation to process further. Validity of the feasibility declared by the respective service provider is 15 days, thereafter member is required to do re-feasibility.

After receipt of the feasibility details from the Exchange, members are required to submit duly filled and signed undertaking as per Network Connectivity Undertaking-Leased Line to the Membership department.

2.1.2 Option 2 Avail Point-to-Point / MPLS leased line directly from Service Provider

Members desirous of availing connectivity directly from the Service Provider, need to submit the application over email to MCX-LeasedLine@mcxindia.com for obtaining No Objection Certificate (NOC) from the Exchange. While applying directly to the service provider member is required to submit the undertaking as per Network Connectivity Undertaking-Leased Line**.**

Thereafter**,** Exchange will process the application for Point to Point or MPLS leased line connectivity through the respective service provider.

2.2 Commercials for Point to Point Leased Line

2.2.1 Option 1 Avail Point to Point Leased Line through Exchange

Charges to service Provider

Charges Type	**Bandwidth**	**MTNL**
One Time charges (OTC)	2 Mbps	At Actual
Annual Recurring Charges (ARC)	2 Mbps	At Actual

Charges Type	Bandwidth	Airtel	TCL
One Time charges (OTC)	10/20/30/40/45 Mbps	15,000	15,000
Annual Recurring Charges (ARC)	10 Mbps	1,20,000	1,20,000
	20 Mbps	1,70,000	1,80,000
	30 Mbps	2,10,000	2,30,000
	40 Mbps	2,35,000	2,80,000
	45 Mbps	2,45,000	3,20,000

The above mentioned charges are exclusive of any government taxes, duties and levies and the same are to be paid extra by members.

2.2.2 Option -2 Last mile charges for Private Point to Point Leased Line

Member is required to pay last mile charges (OTC and ARC) directly to service provider in case the point to point leased line is obtained directly from service provider.

2.2.3 Port Charges to Exchange (applicable for Option 1 and option 2)

Charges Type	Bandwidth	Airtel	TCL / TTML	MTNL	Reliance	Videocon
Port Charges	*1 Mbps	60,000	60,000	60,000	60,000	#NA#
	2 Mbps	75,000	75,000	75,000	75,000	NA
	10/20/30/40/45 Mbps	2,00,000	2,00,000	NA#	NA#	2,00,000

The above mentioned charges are exclusive of any government taxes, duties and levies and the same are to be paid extra by members.

*Applicable only for existing connectivity availed

#NA – Facility is not available

2.3 Commercials for MPLS Leased Line

Charges to service Provider

Charges Type	Bandwidth	Airtel	TCL	BSNL
One Time charges (OTC)	1 Mbps	10,000	10,000	1,000 (Rest of Mumbai and Delhi)
				4,000 (For Mumbai and Delhi)
	2 Mbps	10,000	20,000	2,000 (Rest of Mumbai and Delhi)

Charges Type	Bandwidth	Airtel	TCL	BSNL
				4,000 (For Mumbai and Delhi)
	10/20/30/40 Mbps	15,000	20,000	NA#
Annual Recurring Charges	1 Mbps	1,25,000	1,12,000	1,10,900 (Silver Scheme)
	2 Mbps	1,50,000	1,40,000	1,56,100 (Silver Scheme)
	10 Mbps	3,25,000	3,25,000	NA#
	20 Mbps	4,50,000	4,50,000	NA#
	30 Mbps	5,85,000	5,75,000	NA#
	40 Mbps	6,60,000	6,90,000	NA#

The above mentioned charges are exclusive of any government taxes, duties and levies and the same are to be paid extra by members.

NA – Facility is not available

**Charges to Exchange – No charges are applied by Exchange for MPLS Leased Line Connectivity.

2.4 Upgrading Network Connectivity

Members desirous of upgrading a Leased line connectivity obtained from Exchange, are required to submit duly signed application as per the Network Connectivity Form to Membership department. The charges for upgrading the leased line would be charged on pro-rata basis as per the charges confirmed by service provider. On receipt of the demand note / invoice from the respective service provider, Exchange would inform member about the additional charges applicable for the upgrade. If the Upgradation of leased line connectivity is not feasible at the location, the same will be intimated to the member through email.

In case of connectivity is taken directly from the service provider, Member needs to inform Exchange regarding upgrading of the connectivity through email MCX-LeasedLine@mcxindia.com for record and user ID mapping.

2.5 Shifting of Network Connectivity

Members desirous of shifting MPLS or Point to Point leased line connectivity are required to e-mail the new location details to MCX-LeasedLine@mcxindia.com as per Network Connectivity Form**.** If the shifting of leased line connectivity is feasible at new location, the same will be intimated to the member. Thereafter members should submit duly signed application as per the Network Connectivity Form to MCX membership department. Shifting charges will be debited after completion of shifting

of the connectivity from the settlement account of their respective Clearing Member based on Network Connectivity Form submitted by Member to the Exchange.

2.5.1 Commercials and criteria for shifting of Leased Line

Type of Connectivity	Service Provider	Location	Shifting Charges
MPLS & Point to Point	AIRTEL / TCL	Allowed only within city and subject to feasibility of the new location.	10,000
MPLS	BSNL	Allowed only within city and subject to feasibility of the new location.	As per the shifting demand note amount raised by BSNL.
Point to Point	MTNL	Allowed only within city and subject to feasibility of the new location.	As per the shifting demand note amount raised by MTNL.

The above mentioned charges are exclusive of any government taxes, duties and levies and the same are to be paid extra by members.

- In case of Point to Point leased line connectivity directly applied to service provider then Member needs to inform Exchange for change of Installation address via email MCX-LeasedLine@mcxindia.com for record.

2.6 Surrendering of Network Connectivity

Members desirous of surrendering network connectivity are required to submit duly signed application as per the Network Connectivity Form to MCX membership department.

- Members is not entitled for refund of any charges if the network connectivity is surrendered within a year of installation. From second year onwards, members will be entitled to get refund of pro-rata annual recurring charges from service provider for the unexpired portion of that year. The un-expired portion shall constitute the period after completion of one month in case of Airtel and TCL from the date of submission of surrender application to service provider.
- The applicable refund amount will be credited to member's settlement account as and when the same is received by the Exchange from the respective service provider. For surrender of BSNL/MTNL leased line connectivity the refund amount if any, will be credited to members settlement account as and when the same is received by the Exchange from BSNL/MTNL.

The Exchange shall process the application on receipt of complete documents as prescribed and after verifying for the dues if any and related compliance formalities.

Important Note:

a) For BSNL and MTNL leased line connectivity member needs to submit modem to BSNL/MTNL Telephone Exchange and submit the modem surrender acknowledge copy to Exchange or else BSNL/MTNL will charged for leased line connectivity to member till date the modem is not submitted to BSNL/MTNL telephone exchange.
b) Members who are using only Point to point Leased circuit(s) to connect to the primary site of the Exchange are advised to have alternate mode of backup network connectivity either NPN-POP leased line or MPLS leased line or VSAT to ensure that they are able to connect to DR site of the Exchange to participate in Mock Trading or live trading from DR site.
c) It is recommended that Members are required to avail connectivity from two different service providers for redundancy and uptime of network connectivity & business continuity.
d) Network feasibility at member's location is at the discretion of the service provider chosen by the member.
e) Network latency may vary depending upon the mode of connectivity and the geographical distance between Member's trading location and the Exchange.
f) Exchange has always put best efforts to deliver any network connectivity at the earliest. However considering dependency on service provider, turnaround time for feasibility check is 1 week, for application process and payments if applicable is 1 week and connectivity delivery is 6 weeks.
g) Upon surrendering the network connectivity, members are required to return back all applicable network termination equipment owned by the service provider to ensure no commercials implications.

8A.3 Network Connectivity Procedure - For NPN POP Leased Line

3.1 Introduction

Members desirous of applying for leased lines under Nationwide Private Network with POP are required to fill-in the application form available on the website www.mcxindia.com with the appropriate login credentials. Members may please note that the password to login for the first time on the portal will be communicated on their registered office email id. Members may kindly refer to corresponding tool tips for any assistance in filling the application form. Please note that separate application form is required to be submitted for each scenario. The Exchange is providing multiple options to the members to cater for different number of user IDs and Orders per Second (OPS) as required. Details of the cost, deposits, applicable to various options/ scenarios, number of user IDs allowed and number of OPS per leased line are mentioned in NPN POP Options and Charges.

The scanned copy of the following documents should be uploaded while submitting the application online.

a) Undertaking on stamp paper as per Network Connectivity Undertaking-Leased Line
b) Authorization letter as per Network Connectivity Form
c) Demand Draft / Pay Order for charges and deposits as per scenario and option chosen

Member is required to submit undertaking and authorization letter only for the first application for POP connectivity and for subsequent applications the same is not required to be submitted.

Once application form is submitted online, Member will be provided with a unique reference number. Member should take printout of the filled-in application form and submit the application form duly signed, on his letter-head along with the original documents mentioned above to the Membership department.

In case of optional services like leased line management and monitoring, members are requested to submit Purchase Order(s) to Network Integrator, as per the prescribed format available with the Network Integrator.

3.2 Commercials for NPN POP Leased Line
Charges to the Exchange

Options	Option A		Option B		Option C		Option D	
Bandwidth	2 Mbps		2 Mbps		2 Mbps		2 Mbps	
Broadcast available	Yes		No		No		No	
No. of TWS IDs per primary leased line Member can replace 5 TWS IDs with 1 CTCL ID. 10 TWS IDs with MAT (Member Admin Terminal) ID.	30		35		60		100	
Application Processing Fees (One Time Cost)	2,000		2,000		2,000		2,000	
Scenario	S1	S2/S3	S1	S2/S3	S1	S2/S3	S1	S2/S3
Service Activation Fess per leased line – One Time Cost	5,000	10,000	5,000	10,000	5,000	10,000	5,000	10,000
Port Charges (Annual Recurring Charges - ARC)	1,00,000	2,00,000	1,50,000	3,00,000	2,50,000	5,00,000	5,00,000	10,00,000

Interest Free Deposit (IFD)	1,00,000	2,00,000	1,50,000	3,00,000	2,50,000	5,00,000	5,00,000	10,00,000

The above mentioned charges are exclusive of any government taxes, duties and levies and the same are to be paid extra by members at actuals.

Charges to the service provider

Options	Option A		Option B		Option C		Option D	
Bandwidth	2 Mbps		2 Mbps		2 Mbps		2 Mbps	
Scenario	S1	S2/S3	S1	S2/S3	S1	S2/S3	S1	S2/S3
Annual Recurring charges (ARC)	At actual	At actual	At actual	At actual	At actual	At actual	At actual	At actual

3.3 **Optional Services & Charges:**

Member can opt for below mentioned optional services directly from Network Integrator

Type of Service / charges	Charges in Rs.
Link Management & Monitoring Charges per leased line (ARC)	10,000
Router Cost (ownership will be with Member)	65,000
Router AMC from second year onwards (ARC)	7,000

The above charges are exclusive of any government taxes and duties as applicable and are to be paid by the member.

The Router AMC is to be paid in advance at beginning of each financial year. The applicable amount is to be paid to HCL Comnet Ltd. by way of Demand Draft / Pay Order.

3.4 Available Scenarios for Connectivity:

Type of Scenario for all Options	Scenario Description
S1	Single point to point leased line to POP
S2	Dual point to point leased line to single or Dual POP (Single Router)
S3	Dual point to point leased line to single or Dual POP (Dual Router)

3.5 Upgrading NPN POP Connectivity:

Members desirous of upgrade NPN POP Connectivity Options (A, B, C & D) are required to submit application as per Network Connectivity Form to Technology department.

Following are the guidelines for upgrading options,

- Members having single NPN POP connectivity having Option A is required to apply for one more connectivity for using Option B, C or D. Option A is required to receive broadcast.
- Members having multiple NPN POP connectivity can upgrade their connectivity Options after keeping one connectivity option as Option A.
- For upgrading connectivity Options, Members are required to pay differential charges for moving from one connectivity option to other.

Members desirous of change the scenario (S1, S2 or S3) are required to submit application as per Network Connectivity Form to MCX Technology department. Member is required to pay applicable charges for changing the scenario.

3.6 Shifting of NPN POP Network Connectivity:

After delivering of Leased Line by Service provider, Members desirous of shifting of NPN POP connectivity will have to inform the new location details via email to MCX-LeasedLine@mcxindia.com. If the shifting of Leased Line is feasible at new location, the same will be intimated to Member through email. Thereafter Member should submit duly signed application as per Network Connectivity Form**.** In case of MTNL Leased Line, Member is required to pay shifting charges and additional last mile charges if any at actual.

Service Provider	**Location**	**Shifting Charges**
AIRTEL / TCL / Reliance	Allowed only within city and subject to feasibility of the new location.	10,000
MTNL	Allowed only within city and subject to feasibility of the new location.	As per the shifting demand note amount raised by MTNL.

The above mentioned charges are exclusive of any government taxes, duties and levies and the same are to be paid extra by members.

If router has been provided by HCL Comnet then Member is required to inform HCL Comnet to disconnect the router at old location and connect the router at new location as per downtime scheduled. Member needs to shift the router on their own. Network Integrator – HCL Comnet Ltd shall be informed for the new location for continuation of LLM service if opted.
Member needs to apply within 2 working days after receiving the feasibility report.

Link shall be shifted within 6 weeks from the date of application.

3.7 Surrendering of NPN POP Network Connectivity

Members desirous of surrender the NPN POP connectivity is required to submit application as per Network Connectivity Form to MCX Membership department**.** In case of receipt of surrender application before commissioning of the Leased Line then Exchange will refund Port charges and IFD but application processing fees (one time cost) will not be refunded back. Members are not entitled for refund of any charges if the network connectivity is surrendered within a year of installation. From second year onwards, members will be entitled to get refund of pro-rata annual recurring charges from service provider for the unexpired portion of that year. The un-expired portion shall constitute the period after completion of one month in case of MTNL, Airtel, TCL and Reliance from the date of submission of surrender application to service provider.

The applicable refund amount will be credited to member's settlement account as and when the same is received by the Exchange from the respective service provider.

Important Note:

- For MTNL leased line connectivity member needs to submit modem to MTNL Telephone Exchange and submit the modem surrender acknowledge copy to Exchange or else MTNL will charged for leased line connectivity to member till date the modem is not submitted to MTNL telephone exchange.
- It is recommended that Members are required to avail connectivity from two different service providers for redundancy and uptime of network connectivity & business continuity.
- Network feasibility at member's location is at the discretion of the service provider chosen by the member.
- Network latency may vary depending upon the mode of connectivity and the geographical distance between Member's trading location and the Exchange.
- Exchange has always put best efforts to deliver any network connectivity at the earliest. However considering dependency on service provider, turnaround time for feasibility check is 1 week, for application process and payments if applicable is 1 week and connectivity delivery is 6 weeks.
- Upon surrendering the network connectivity, members are required to return back all applicable network termination equipment owned by the service provider to ensure no commercials implications.

8A.4 Network Connectivity Procedure - For VSAT

4.1 New VSAT / New VSAT on Installment / Limited promotion scheme

Member desirous to avail VSAT connectivity is required to submit application as per Network Connectivity Form and need to pay the charges which includes following activities,

1. Site survey
2. Installation
3. Transportation
4. Commissioning of VSAT equipment (ODU, IDU and Antenna)
5. Cost of the IFL cable (up to 100 feet)
6. Broadcast and Interactive Bandwidth charges for 3 years
7. DOT & WPC charges for 3 years for new VSAT and 1 year for VSAT under limited promotion scheme
8. Repair and Maintenance for 3 years for new VSAT and 1 year for VSAT under limited promotion scheme
9. The Exchange provides VSAT connectivity facility through 'Additional VSAT's' (Pre-used) under a 'Limited Promotion Scheme', to encourage its Members to have back up/additional connectivity to the Exchange. Members can avail benefit of Limited Promotion VSAT subject to availability of VSAT's with Exchange as on date of receipt of application.

4.2 Usage of existing VSAT (Member Own VSAT)

In case a member of the Exchange is having an existing VSAT / additional IDU / Hosted at HCL Comnet Noida Hub supported by HCL Comnet Ltd. and desirous to use it for MCX connectivity, Member is required to submit application as per Network Connectivity Form.

Any charges towards re-installation, verification of equipment, bandwidth charges, hosting charges, annual maintenance etc. as applicable, has to pay to HCL Comnet directly by the Member. In case the VSAT equipment is found faulty, the Member has to pay the rectification charges to HCL Comnet directly. In case a member desires to shift his VSAT to another location, he has to pay transportation charges, octroi and entry tax and other out of pocket expenses to HCL Comnet directly.

4.3 Transfer of VSAT

The Transferor and Transferee of VSAT will have to forward a request on letter head for transfer of VSAT along with the following documents,

1) Request-cum-Undertaking from the Transferor for transfer of VSAT on a Non-Judicial stamp paper of Rs.500/- or the value prevailing in the state whichever is higher as specified in VSAT Transferor undertaking.

2) Request-cum-Undertaking from the Transferee for transfer of VSAT on a Non-Judicial stamp paper of Rs.500/- or the value prevailing in the state whichever is higher as specified in VSAT Transferee undertaking.
3) VSAT Undertaking from the transferee executed on a Non-Judicial stamp paper of Rs.500/- or the value prevailing in the state whichever is higher as specified in Network Connectivity Undertaking-VSAT.
4) Questionnaire for VSAT from the transferee as specified in Network Connectivity Form.
5) No-objection Certificate by the owner of premise on his letterhead with Rubber stamp of the owner (in case of physical movement of VSAT) as specified in Network Connectivity Form.
6) LST and CST Declaration (in case of physical movement of VSAT) as specified in Network Connectivity Form.

Kindly note the transferring member would be obliged to pay all the dues/installment relating to the particular VSAT facility to MCX till the last date of the calendar month of such transfer. All expenses in relation to physical transfer of VSAT would be directly payable by the member to the VSAT service provider and borne by the transferor.

4.4 Commercials for VSAT Connectivity

Charges to Exchange

Sr. No.	Type of Application	One Time Charges (OTC)	Annual Recurring Charges (ARC)	Remarks
1	New VSAT	1,65,000	28,000	ARC : applicable after 3 years warranty from the date of installation of VSAT
2	VSAT in Installment	15,750	28,000	OTC: Rs. 15,750/- for 12 quarterly installments, of which an advance payment of Rs. 15,750/- is required to be made at the time of application. ARC : applicable after 3 years warranty from the date of installation of VSAT
3	Limited Promotion Scheme	25,000	28,000	ARC: applicable from 1st year onwards.
4	Member Own VSAT / **Additional IDU /		50,000	Charges for 3 years however to be paid in advance at the time of installation of VSAT.

Sr. No.	Type of Application	One Time Charges (OTC)	Annual Recurring Charges (ARC)	Remarks
	**Hosted at HCL Comnet Noida Hub			
5	Transfer of VSAT from one member to another member	25,000	28,000	ARC: applicable from 1st year onwards.

The above mentioned charges are exclusive of any government taxes, duties and levies and the same are to be paid extra by members.

** Applicable only for existing connectivity

4.5 VSAT Shifting of connectivity

In case a member wants to shift VSAT equipment and antenna from one location to the other, they need to inform in advance to the Exchange over email MCX-VSAT@mcxindia.com as per Network Connectivity Form. The member has to pay Rs. 12,500/- for shifting (dismantling of antenna equipment, re-site survey and re-installation) of the VSAT within the same building or for intra city/town. In addition to that, the member has to pay transportation charges, Octroi and entry tax etc. on actual basis directly to the HCL Comnet.

4.6 Surrendering of VSAT Connectivity

For surrendering of VSAT connectivity member is required to submit application as per Network Connectivity Form. In case of Surrender of VSAT connectivity, Members are required to surrender VSAT equipment (IDU, ODU, LNBC & Antenna) without physical damage to the Exchange. Following are the details for the surrendering / retaining VSAT equipment.

	If VSAT returned	If VSAT not returned
Application for termination of VSAT facility made	• No amount would be refunded back to member.	• No amount would be refunded back to member.

	If VSAT returned	If VSAT not returned
within 3 years of activation	• In case member has taken VSAT on installments, all unpaid installments would be payable along with application for surrender.	• In case member has taken VSAT on installments, all installments would be payable along with application for surrender. • Rs. 40,000 would be payable by member to MCX towards VSAT cost
Application for termination of VSAT facility made after 3 years of activation	• Annual cost for the VSAT facility, if not paid in advance.	• Annual cost for the VSAT facility, if not paid in advance. • Rs. 40,000 would be payable by member to MCX towards VSAT cost.

8A.5 RSA TOKEN FOR INTERNET CONNECTIVITY

The Exchange has introduced RSA Hardware Token for users trading over Internet which is a two factor authentication (T-FA) to provide better and secure mode of connectivity for trading. T-FA is implemented using RSA Secure ID hardware token from RSA, one of the premier provider of security solutions.

RSA Secure ID two-factor authentication comprises of a password or PIN (the first factor) and an authenticator (the token which is the second factor) provides reliable and secured user authentication. Hence for login to the system user needs to key in the username & password and the one time password (OTP) generated by the RSA hardware token which changes every minute. Only after providing the correct username-password along with a valid OTP the user will be allowed to login for trading.

Members who are trading over Internet, essentially need to procure RSA Hardware token for two factor authentication for better and secure mode of connectivity.

The Exchange provides RSA hardware token kit through courier to the address provided by the member with the Exchange. The kit will contain User Manual, MCX RSA hardware token and list of users who need to use RSA hardware token. All internet trading users are requested to follow instructions given in the User Manual for use of RSA hardware token.
Member wishes to connect to Exchange trading system through Internet is informed to use https:\\trading.mcxindia.com URL for login purpose.

Members shall be charged a sum of Rs 4000/- per token (per user) towards the activation, maintenance and logistics of token. The RSA hardware token shall be valid up the RSA hardware to the expiry date shown on the back of the token, and thereafter the Exchange will issue fresh new RSA Hardware Token to the members with a charge of Rs.
1500/- per token (per user). RSA hardware token once issued to a user cannot be used by any other user. However when a user becomes inactive, the RSA hardware token can be re-validated for another user without any charge. The re-validated token can be used till the end of its validity period.

The charges for the RSA hardware token shall be debited from the member's settlement account on delivery of the RSA hardware token kit.

APPENDIX-CTCL

Checklist for Documentation

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Part A: Checklist for Application for Empanelment of ISV for CTCL/IBT/WT solutions

A vendor seeking empanelment with Exchange as an ISV shall provide the following to the Exchange:

Sr. No.	Particulars	Format
1.	Criteria for Empanelment as an ISV	Annexure 1
2.	Application for Empanelment as ISV	Annexure 2
3.	Undertaking to be given by ISV - One time only	Annexure 3
4.	Personal Guarantee Letter	Annexure 4
5.	Certified true copy of board resolution	----
6.	Guidelines for Undertaking	Annexure 5
7.	Checklist for software development	Annexure 6

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Part B: Checklist for approval of Algo Strategy by ISV

Empanelled ISV seeking approval for Algo Strategy shall provide the following to the Exchange:

Sr. No.	Particulars	Format
1.	**Application for approval of Algorithmic Trading (Algo) Strategy**	Annexure 7
2.	**Algorithmic Trading (Algo) Strategy Write-up**	To be submitted

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Part C: Checklist for CTCL Facility from Empanelled ISV

A member seeking permission for CTCL facility shall provide the following to the Exchange:

Sr. No.	Particulars	Format
1.	**Application for change of Authorised User from MCX- TWS to CTCL**	Annexure 8
2.	**Details of CTCL Network being used by Member**	Annexure 9
3.	**Acceptance Certificate for CTCL / IBT Software** (Certificate to be issued by the Member after testing all the features of the 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 MCX Central server in diagram to be provided by Member.)	----
6.	**Certified true copy of board resolution** (If the member is company. Required only once)	Annexure 12
7.	**CTCL/IBT/ATF/WT Undertaking** (Required for first application only)	Annexure 13
8.	**Guidelines for Undertaking**	Annexure 5
9.	Checklist for software testing procured from ISV	Annexure 14

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Part D: Checklist for IBT Facility from Empanelled ISV

A member seeking permission for IBT facility shall provide the following to the Exchange:

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.)	Annexure 10
2.	**Network Diagram** (Details of connectivity of IBT server with MCX Central server and distribution Connectivity in diagram to be provided by Member.	----
3.	**Software confirmation by Vendor** Confirmation to be issued by Exchange empanelled ISV on their letter head)	Annexure 11
4.	**Request for User Id to be used for Internet Based Trading Facility**	Annexure 15
5.	**Annexure signed by vendor and countersigned by member.** (Not required if applying for additional User Id for using same IBT software)	Annexure 16
6.	**Contingency Plan**	Annexure 17
7.	**Secured Socket Layer Certificate (SSL)** (Secured socket level security for server access through Internet to be provided by Member)	----
8.	**Internet trading write-up (Features)** (Not required if applying for additional User Id for using same IBT software)	----
9.	**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 for using same IBT software)	----
10.	**Checklist for software testing procured from ISV**	Annexure 14

Table of Content **Chapter 2**

Part E: Checklist for Wireless Trading (WT) Facility from Empanelled ISV

A member seeking permission for Wireless Trading facility shall provide the following to the Exchange:

Sr. No.	Particulars	Format
1.	**Application Form for availing Wireless Trading (WT) Facility**	Annexure 18
2.	**Network Diagram** (Kindly enclose detailed network architecture showing the geographical location of the order routing server for Wireless Trading)	----
3.	**Secured Socket Layer Certificate (SSL)** (Secured socket level security for server access through Internet to be provided by Member.)	
4.	**Wireless trading write-up (Features)** (Wireless trading front-end information of the software to be provided by Member. Not required for additional Wireless Trading Id for using same software)	----
5.	**Software confirmation by Vendor** **Confirmation to be issued by Exchange empanelled ISV on their letter head)**	Annexure 11
9.	**Checklist for software testing procured from ISV**	Annexure 14

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

A member seeking permission for In-House software development or procurement / development of software from non – empanelled vendor shall provide the following to the Exchange:

Sr. No.	Particulars	Format
1.	Application form for In-House CTCL / IBT software	Annexure 19
2.	Application for change of Authorised User from MCX- TWS to CTCL	Annexure 8
3.	Details of Network being used by Member	Annexure 9
4.	Acceptance Certificate for CTCL / IBT Software (Certificate to be issued by the Member after testing all the features of the software.)	Annexure 10
5.	Network Diagram (Details of connectivity of CTCL server at member's office with MCX Central server in diagram to be provided by Member.)	----
6.	Software development team details / Non-empanelled vendor details	
7.	CTCL/IBT/ATF/WT Undertaking (Required only once)	Annexure 20

8.	Guidelines for Undertaking	Annexure 5
9.	Checklist for software testing	Annexure 14

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Part G: Checklist for Internet Based Trading (IBT) for In-house software development

A member seeking permission for In-House software development shall provide the following to the Exchange:

Sr. No.	Particulars	Format
1.	Request for User Id to be used for Internet Based Trading Facility	Annexure 15
2.	Software development team details / Non-empanelled vendor details	
3.	Network Diagram	----
4.	Contingency Plan	Annexure 17
5.	**Secured Socket Layer Certificate (SSL)** (Secured socket level security for server access through Internet to be provided by Member)	----
6.	Internet trading write-up (Features)	----
7.	**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)	----
8.	Checklist for software testing	Annexure 14

Table of Content **Chapter 3**

Part H: Checklist for Wireless Trading (WT) In-house Software Development

A member seeking permission for Wireless Trading facility shall provide the following to the Exchange:

Sr. No.	Particulars	Format
1.	**Application Form for availing Wireless Trading (WT) Facility**	Annexure 19
2.	**Network Diagram** (Kindly enclose detailed network architecture showing the geographical location of the order routing server for Wireless Trading)	----
3.	**Secured Socket Layer Certificate (SSL)** (Secured socket level security for server access through Internet to be provided by Member.)	
4.	**Wireless trading write-up (Features)** (Wireless trading front-end information of the software to be provided by Member. Not required for additional Wireless Trading Id for using same software)	----

5.	**Checklist for software testing**	Annexure 14

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Part I: Checklist for In-House Internet Based Trading (IBT) & Wireless Trading (WT) Software Development Application by Member using API of Empanelled CTCL Vendor

A member seeking permission for In-House IBT/WT software development using API of the empanelled CTCL Vendor shall provide the following to the Exchange:

Sr. No.	Particulars	Format
1.	Application form for In-House IBT/WT software using API of empanelled CTCL Vendor	Annexure 21
2.	IBT/WT Undertaking	Annexure 22
3.	Guidelines for Undertaking	Annexure 5
4.	Letter from Empanelled CTCL Vendor	Annexure 23
5.	Request for User Id to be used for IBT / WT Facility	Annexure 15
6.	Software development team details / Non-empanelled vendor details	
7.	Network Diagram	----
8.	Contingency Plan	Annexure 17
9.	Product write-up (Features)	----
10.	**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)	----
11.	**Secured Socket Layer Certificate (SSL) in case of IBT** (Secured socket level security for server access through Internet to be provided by Member)	----
12.	Checklist for software testing	Annexure 14

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Part J: Checklist for Algorithmic Trading (Algo) Facility from Empanelled ISV / In-house

A member seeking permission for Algo shall provide the following to the Exchange:

Sr. No.	Particulars	Format
1.	Application Form for use of Algorithmic Trading (Algo) Facility	Annexure 24
2.	Trading member's Undertaking for use of Algorithmic Trading Facility from Empanelled ISV	Annexure 13
3.	Trading member's Undertaking for use of Algorithmic Trading Facility for In-house software development	Annexure 20
4.	Software confirmation by ISV (In case of Software procuring from empanelled ISV)	Annexure 11
5.	Network Diagram (Provide network diagram for use of Algo through CTCL facility)	----

6.	Strategy Write-up (Should cover note on Liquidity Infusion)	
7.	Software development team details in case of In-house facility	
8.	In case of In-house software development by non empanelled vendor Member need to submit Vendor Profile	
9.	Guidelines for Undertaking	Annexure 5

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Part K: Testing of software used in or related to Trading and Risk Management

Sr. No.	Particulars	Format
1.	Application for modification in approved CTCL Software	Annexure 26
2.	System Audit Report – Format	Annexure 27
3.	System Auditors' Certificate	Annexure 28

Table of Content **Chapter 8**

Part L: Checklist for Application for Empanelment of ASP for CTCL/IBT/WT solutions

A vendor seeking empanelment with Exchange as an ASP shall provide the following to the Exchange:

Sr. No.	Particulars	Format
1.	Criteria for Empanelment as an ASP	Annexure 1
2.	Application for Empanelment as ASP	Annexure 29
3.	Undertaking to be given by ASP - One time only	Annexure 30
4.	Personal Guarantee Letter	Annexure 4
5.	Certified true copy of board resolution	----
6.	Guidelines for Undertaking	Annexure 5
7.	Checklist for software development	Annexure 6

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Part M: Application for Application for API for MarketXstream facility

Members of the Exchange or Empanelled ISVs (CTCL Vendors) desirous of developing software to use MarketXstream shall provide the following to the Exchange:

Sr. No.	Particulars	Format
1.	Application for API for Tick by Tick Trading Market Data (MarketXstream) facility	Annexure 32
2.	Application for API for Tick by Tick Trading Market Data (MarketXstream) facility **– ISV**	Annexure 33
3.	Application for enabling Tick by Tick Trading Market Data (MarketXstream) - **Trading Member**	Annexure 34

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Part N: Application for CTCL / IBT / WT Services through ASP

Members of the Exchange desirous for availing CTCL/IBT/WT/ services through APS shall provide the following to the Exchange:

Sr. No.	Particulars	Format
1.	Application form for permission to provide CTCL/ IBT / WT services using an ASP	Annexure 35
2.	Undertaking to be submitted by member	Annexure 36
3.	Guidelines for submitting undertaking	Annexure 5
4.	Countersigned documents by ASP and member	Annexure 37
5.	Network Diagram	Annexure 38
6.	Application for change of Authorised User from MCX-TWS to CTCL	Annexure 39
7.	Member to submit the copy of Undertaking executed with ASP Vendor for availing services	----

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Part O: System Audit of Members of the Exchange – Report Formats

Sr. No.	Particulars	Format
1.	Terms of Reference - The Checklist for conducting System Audit for Type-II Category of Member is enclosed herewith	Annexure 40 Part – A
2.	Terms of Reference - The Checklist for conducting System Audit for Type-III Category of Member is enclosed herewith	Annexure 40 Part – B
3.	Executive Summary Reporting Format	Annexure 40 Part-C

ANNEXURES-CTCL

ANNEXURE 1

CRITERIA FOR EMPANELMENT OF ISV / ASP

Sr. #	Criteria	Response to Criteria
1.	The vendor should be a LLP / Limited Company / Private Limited Company having its registered office in India.	Documentary proof of the same is to be submitted
2.	Vendor organization should be in existence and should be in business of software development for minimum of 2 years	Please provide necessary proof like certificate of Incorporation etc.
3.	Whether the Vendor has any affiliation with other entities like brokers / sub-brokers etc. including beneficial interests held by / in such brokers / sub-brokers etc.	If Yes, Please mention name of all such entities with required details
4.	Whether applicant is having previous experience in similar product development / implementation.	If yes, provide name and project / product details with reference
5.	Whether Applicant has requisite skills within the organization in relation to product development, system integration and maintenance	Please provide details with key personnel profile
6.	At least 2 designated directors should have minimum 5 years' experience in Information Technology and Finance Domain	
7.	Whether Applicant is certified for ISO 9001:2008 or CMMi	
8.	Whether the Applicant has adequate infrastructure in terms of: • Hardware & software facilities. • Communication & networking facilities within the organization • General office facilities in terms of office space and infrastructure • Staff	Please provide the existing and planned infrastructure.
9.	The vendor should have sound financial condition for continuous support having net worth of minimum Rs.1 Cr.	
10.	The vendor should have minimum 5 clients for the CTCL software in any other national level stock exchange or commodity exchange	

11.	At least 2 designated directors should provide Personal Guarantee to the Exchange to indemnify Exchange against any claims made by users of the said software due to any malfunction of the software provided by the vendor	
12.	The vendor must warrant that there are no legal actions being taken against it for any cause in legal jurisdiction of India. The vendor should not have been blacklisted by Stock Exchange / Commodity Exchange / SEBI / or any other Government agencies	
13.	Should have permanent location or office within India	

ANNEXURE 2

APPLICATION FOR EMPANELMENT AS ISV
(To be executed on letter head of the ISV)

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

Sr. #	Particulars	Details
1.	Application for empanelment for: (CTCL / IBT / WT)	
2.	API required from Exchange: (NonFIX API / FIX API)	
3.	Name of the ISV:	
4.	Registered Address:	
5.	Legal form of Organisation:	Certificate of Registration / Partnership deed to be enclosed
6.	Telephone No.:	
7.	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.	Organisational structure:	To be enclosed
12.	Total Staff:	
13.	Directors:	
14.	Technical Staff - Hardware:	
15.	Technical Staff - Software:	
16.	Technical Staff - Support:	
17.	Technical Staff - Others:	
18.	No. of support offices across the country:	Complete details to be enclosed

19.	Details of promoters and their background:	To be enclosed
20.	No. of years in the IT Business:	
21.	IT Turnover for last three years:	Complete details including audited balance sheets to be enclosed
22.	Technical Details – Hardware Infra Structure available within Organisation:	To be enclosed
23.	Technical Details – Software Infra Structure available within Organisation:	To be enclosed
24.	Technical Details – Communication / Networking Infra Structure available within Organisation:	To be enclosed
25.	Details of Empanelment as CTCL / IBT / WT software vendor with other Exchanges:	
26.	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.
27.	Name and reference of Exchange (MCX) trading members where solution is implemented, if any:	
28.	Proposed Price (indicative per user & site license fee) for providing the Solution to the Members of the Exchange: Price for Workgroup edition	(Give details)
29.	Networth Details	Amount to be mentioned

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

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

ANNEXURE 3

UNDERTAKING TO BE GIVEN BY ISV

I / We,_____, an individual /a firm registered under the Partnership Act, 1932 / a Company / body corporate incorporated under the Companies Act of 1956_and residing at / having our office/ registered office at _____(hereinafter referred to as the 'Undersigned' which expression shall unless repugnant to the context include her/his/ its successors, assigns and legal representatives) give this Undertaking on this_____day of _____20_____ at _____ IN FAVOUR of MULTI COMMODITY

EXCHANGE OF INDIA LTD, a company incorporated under the Companies Act, 1956 and a Commodity Exchange duly recognized by the Central Government having its registered office at Exchange Square, Suren Road, Chakala, Andheri (East), Mumbai – 400 093, India (hereinafter referred to as "MCX", which expression shall unless repugnant to the context include its successors, assigns and legal representatives)

WHEREAS

a) MCX has provided the trading software to enable its Members of the Exchange to trade.

b) In addition, MCX provides a Computer to Computer Link (hereinafter referred to as the 'CTCL facility'), Internet Based Trading (hereinafter referred to as the 'IBT') facility, Algorithmic Trading (hereinafter referred to as the 'ATF') facility and Wireless Trading (hereinafter referred to as the 'WT') facility on CTCL/IBT/ATF/WT software provided by CTCL empanelled vendors designated by the Exchange and on CTCL/IBT/ATF/WT software procured from empanelled vendor, for order entry, receipt of order and trade confirmation and also for receipt of data relating to its trade quotations.

c) MCX has decided that it shall make the CTCL/IBT/ATF/WT Facility available to its Members of the Exchange / grant permission to Members of the Exchange to offer CTCL/IBT/ATF/WT facility on a case to case basis subject to such terms and conditions as MCX may impose from time to time.

d) The Members of MCX can procure required software from its empanelled ISV's, after duly complying with the requirements as may be stipulated by MCX in this regard.

e) The empanelled ISV's of MCX may facilitate CTCL/IBT/ATF/WT Trading through order routing system for trading for its members, after obtaining permission from MCX.

f) MCX has decided that the software vendors shall be identified for this purpose, based on the application received from them and subject to fulfillment of such criteria as may be stipulated by MCX from time to time, and subject to such software vendor executing an Undertaking in favour of MCX in the format prescribed by it and agreeing to abide by and be bound by the various terms and conditions which MCX may prescribe in this regard from time to time.

g) MCX has agreed to identify me / us as a software vendor for the above purpose and I
/ we am / are desirous of developing the software for the Trading Member to enable the Member to avail of the CTCL/IBT/ATF/WT facility, and shall fulfill all the terms and conditions as may be prescribed by MCX from time to time at its discretion in this regard.

h) I / We had entered into an agreement dated _____ day of _____, 20 , (hereinafter referred to as 'Agreement') with the Member Mr. / Ms. / M/s. _____ (hereinafter referred to as Member) having their residence / registered office at _____ for development of the software for the CTCL/IBT/ATF/WT facility (hereinafter referred to as 'Software') for the Member. The software duly tested and found free of any errors / bugs has been put into operations. We are aware that the Member _____ has obtained necessary approvals, entered into the necessary undertaking etc. from/ with MCX before commissioning our services in this regard.

NOW THEREFORE IN CONSIDERATION OF MCX having agreed to identify / identified me / us as a software vendor for the aforesaid purposes, I / we hereby IRREVOCABLY AND UNCONDITIONALLY UNDERTAKE and agree to abide by and be bound by the following terms and conditions:

1. I/We shall ensure that the connectivity of the CTCL/IBT/ATF/WT facility is as per MCX and Department of Telecommunications (DOT) approved network diagram for the CTCL/IBT/ATF/WT facility.

2. I/We undertake to pay any such license fees/charges/royalties as may be levied by DOT/MTNL/MCX any other regulatory/statutory authorities from time to time.

3. I/We shall install the software only at the “Members of the Exchange” location only after duly ensuring that all the requirements stipulated by MCX in this regard have been complied with by the Member and that the Approved User shall not make the CTCL/IBT/ATF/WT facility available to any other unauthorized person.

4. I/We undertake to ensure that the connectivity between the Member and MCX shall be used only for application of the CTCL/IBT/ATF/WT facility.

5. I/We agree that the data communication link between MCX's equipment and the Member's equipment is on a computer to computer basis and that the link shall not be connected to my/our own telecommunication network.

6. I/We undertake to obtain the prior approval of MCX for any changes to be made to the existing network diagram **/** software.

7. I/We undertake to ensure that access shall be given only to the individuals authorized and also a method shall be established to ensure that non authorized persons cannot access the system.

8. I/We undertake that the software design shall use only the specified messages given by MCX and shall consider all the structures defined by MCX from time to time. The Deliverables shall be:

   i. Basic functionalities as and when required by MCX.
   ii. Customization of Members of the Exchange needs as approved by MCX.

9. I/We undertake that the Software developed by me / us, shall not resemble or result in duplication of the trading software of the Exchange. We also undertake that the Software shall provide all the essential functions as may be stipulated by MCX from time to time.

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

11. I / we shall not develop or use any software / program facility which shall either directly or indirectly facilitate automated trading without prior written approval of the Exchange. For the purpose of this clause the term 'Algorithmic Trading' shall mean any software or facility by the use of which, upon the fulfillment of certain specified parameters, without the necessity of manual entry of orders, buy/sell orders are automatically generated and entered by the software / program facility into the Trading System of MCX to be matched by the Exchange's System.

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

    i. Data validation routines to detect input errors.
    ii. Backup and recovery procedures.

13. I / We shall ensure that the Approved Persons shall not make the CTCL/IBT/ATF/WT facility available to any other person and that there shall be no provision in the Software to enable such persons to do so.

14. I / We shall ensure that position monitoring etc., shall be inbuilt in the CTCL/IBT/ATF/WT facility and it shall be flexible to change as per the requirements of the Exchange and the regulators.

15. I / We shall ensure that the CTCL/IBT/ATF/WT facility shall be developed so as to generate the following from the System for the purpose of verification during the inspection:

    i. Number of Users connected on to the Network.
    ii. Number of Dealers connected on to the Network including privileges to each Dealer.

iii. All the systems logs and audit trails of the Dealer and the Member.
iv. Provision for entering complementary dummy orders.

16. I/We undertake that

(i) MCX shall have the right and privilege of inspecting and testing the Software at my/our site and the Members of the Exchange site without any prior notice.
(ii) The source code of the Software shall be available at both, my/ our site as well as the Member's site for verification.
(iii) I / We shall make available Prototype and the technical specifications of the Software to MCX for testing purposes.
(iv) I / We shall be responsible to fix the bugs in the Software if any, found at the time of testing.

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

18. That the terms of delivery and payment shall be as agreed to by the Member and myself/us. I / We also undertake that the entire development, testing and installation process of the CTCL/IBT/ATF/WT facility shall not take more than six months from the
____day of_____, 20___, being the date the Member has entered into an agreement with MCX.

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

20. I / We undertake to provide User training first when the product is installed and thereafter whenever a major upgrade is released to the Member's Personnel for the following:
(i) Use of Product
(ii) Maintenance of the product.

Further, I / We also undertake that the frequency and caliber of the Vendor Personnel providing the training shall be as specified.

21. I / We undertake that:

i. All material and information which has or will come into my /our possession or knowledge in connection with the agreement or the performance hereof, consists of confidential and proprietary data, whose disclosure to or use by third parties will be damaging or cause loss to MCX. I / We agree to hold such material and information in strict confidence, not to make use thereof other than for the performance of the Agreement, to release it only to my/our employees requiring such information and that too only with the written consent of MCX, and not to

release or disclose it to any other parties. I / We shall take appropriate action with respect to my / our employees to ensure that the obligations of non-use and non-disclosure of confidential information under the Agreement are fully satisfied and shall also ensure that my/our Employees are aware and comply with the above provisions. The provisions of this clause shall survive the termination of the agreement. For the purpose of this clause the term data shall include amongst other things technical data which may be divulged by the Member during the normal course of development of the software and information relating to the operations of MCX.

ii. I / We shall not in any way represent that the software developed is a part of the MCX Trading software.

iii. I / We shall not advertise or publish any brochure, pamphlet, booklet, notice, or promotional material mentioning MCX or the services to be provided under the Agreement without the prior written consent of MCX.

iv. I / We shall keep full security of MCX's programs, databases and computer records in accordance with best computing practice.

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

23. I / We shall develop the software and make it compatible to other Operating Systems, in case of any need to transfer the Software from one piece of hardware to another due to technological changes.

24. I / We shall provide upgrade to the application software as and when the need for the same arises and in accordance with the requirements of MCX.

25. I / We undertake to make the Software compatible with the MCX Trading system, under intimation / (written consent) of MCX, in case any modification is made to the MCX Trading software by MCX and the same is required to be incorporated in the Software.

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

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

28. I / We undertake to provide such warranty as required under the agreement.

29. I / We undertake to ensure as follows:

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

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

(iii) Shall supply and maintain the CTCL application software solution to any MCX Member at any location in the country, which the Member desires to operate from.

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

31. I / We hereby undertake to duly inform MCX in case of any cause, resulting in any change to my/our entity, or any change in any of the eligibility criteria based on which we have been identified as a software vendor for this purposes by MCX.

32. I / We hereby undertake to duly inform MCX the list of Members of the Exchange who are using my/our CTCL / Internet trading application software.

33. That during the continuation of the Agreement if any modification/amendment is required by MCX/ Member, to be made by us, I/We agree and undertake to make the same.

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

35. I / We agree and undertake that MCX shall not be liable for any direct or indirect loss, damage, costs, claims and expenses whatsoever caused or contributed by any event of force majeure. For the purposes of this Clause, "Force Majeure" means and includes governmental acts, regulatory changes, acts of God or forces of nature, landslides, earthquakes, floods, fire, lightening, explosions, major storm (hurricanes, typhoons, cyclones, tsunami etc.) or major storm warnings, tidal

waves, shipwrecks, communication cable cutting/theft, major telephone exchange failure and perils of navigations, acts of war (declared or undeclared), insurrection, terrorism riots or public enemies, unavailability of public services, strikes, lockouts, acts or omission of sovereign states or those purporting to represent sovereign states, blockades, embargoes, epidemics, quarantines, public disorders, sabotages, accidents, and such other acts or events beyond MCX's control and further the above is without prejudice to the rights already accrued to MCX due to my/our failure to perform either in full or in part, my/our obligations prior to the occurrence of events of Force Majeure.

36. I / We shall indemnify and keep indemnified MCX harmless against every and all claims, demand, damages, liabilities, losses and expenses suffered by it directly by reason of my / our non-compliance, contravention with any of the provisions of this Undertaking or by reason of bugs or malfunctioning of the software provided by us to the Members of the Exchange.

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

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

39. That I / we shall produce all such necessary documents/papers to MCX in support of my claim that software is solely developed and the intellectual property rights of the software is owned by me/us.

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

41. I/We also agree that in the event of my/our non-compliance with any of the provisions as mentioned above, MCX shall take such action against us as it may deem fit in this regard.

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

SIGNED, SEALED AND DELIVERED BY

_____ for and on behalf of _____

Before me
In Presence of Witnesses

Sr. No.	Name	Address	Signature
1.			
2.			

ANNEXURE 4
PERSONAL GUARANTEE
(to be executed on Rs.300 Stamp Paper)

I,
……..……
… residing at
……..
……..……..
……..….... (hereinafter "Guarantor") do hereby personally guarantee the performance of …….……. With regard to an undertaking dated …….. (hereinafter "Undertaking") given by M/s. ……..……
……..……
(hereinafter "Company") in favour of Multi Commodity Exchange of India Ltd (hereinafter "MCX/Exchange") in reference to the circular no…….. dated ……. (copy of said undertaking is attached hereto as Exhibit A). In the event that Company fails to make payment to MCX, or fails to perform in any manner with regard to the said Undertaking given by Company in favour of MCX, I, hereby personally and solidarity guarantee:

i. All of the obligations of the Company and agree to be bound solidarity with MCX for the prompt performance of it's' obligations under the said Undertaking.

ii. to comply with all such requirements, existing and future, with regard to and in connection with Vendor Empanelment for CTCL/IBT/WT of MCX.

iii. to abide by, comply with and be bound by the Bye- Laws, Rules and Regulations of MCX as in existence or in force from time to time and any modification through any circular, order, direction, notice, instruction issued and in force from time to time;

iv. that the information provided in the application form for CTCL Vendor Empanelment of MCX is true and correct to the best of the knowledge and belief and shall be binding on my successors and permitted assigns. That any defenses which Company might have been able to set up against MCX in respect of any claim by Company against MCX under the Undertaking or in law, including without limitation any claim of non-performance by Company of its obligations to MCX thereunder and any right of compensation or set-off which MCX might have had against Company under the Undertaking or in law, are expressly excluded and that I shall not be entitled to set up any such defense in the event of a claim by Company against me pursuant to this guarantee.

v. that (i) the essential stipulations of the present guarantee were not imposed by MCX and were negotiable, and that it is accordingly not a contract of adhesion within the meaning under the laws of India; (ii) the Undersigned has signed same in a free and enlightened manner, without error, fear or lesion, intending in good faith to be bound thereby, and the Undersigned had the benefit of independent legal counsel in

connection therewith; (iii) the clauses of the present guarantee and of the Circular and all other contractual agreements between Company and MCX have been expressly brought to my attention; (iv) an adequate explanation of the nature and scope of the clauses thereof has given to me, and (v) the said clauses are not excessively or unreasonably detrimental to me and therefore are in good faith.

vi. Notwithstanding the foregoing, the Undersigned guarantees hereunder to pay any and all amounts including costs, expenses, fees, dues & penalties imposed, owing by Company to MCX

IN WITNESS WHEREOF, this personal guarantee is entered into this …….. day of ……(month), …… (year) at ……. (place of execution)

Name:
Signature:
Date:

ANNEXURE 5

GUIDELINES FOR SUBMITTING UNDERTAKING

1. The Undertaking is to be executed on a non-judicial stamp paper/s or on paper franked from Stamp Office / authorised banks, for a value of INR 500/-

2. Further the Undertaking (including all annexures / schedules) has to be notarised before a Notary Public.

3. Please use the format of respective undertaking as it is. **PLEASE DO NOT RETYPE THE UNDERTAKING**. The said Undertaking should not be modified without the consent of the Exchange (MCX).

4. All the pages of this Undertaking (including all annexures / schedules) have to be signed in full. 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._____forms part and parcel of this Undertaking executed by me/us Mr. /Mrs. /M/s._____having my/our residence/office at_____on this the day of _ 20 at_____IN FAVOUR of Multi Commodity Exchange of India Limited.

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

ANNEXURE 6

Checklist/ Reference Points While Developing CTCL/IBT/AT/WT Software

Description	**Type of software and requirements**			
Select the facility				
Application	CTCL	IBT	AT	WT
Availability of Secured Socket level security for server access through internet	NA	Yes	NA	Yes
Display details of Software Name, Version Number	Yes	Yes	Yes	Yes
Display of UMC Member Code / SEBI registration Code	Yes	Yes	Optional	Yes
Display of Useful Link to website – www.mcxindia.com and www.sebi.gov.in	Yes	Yes	Optional	Yes
Display of Strategy Name and Version Number	NA	Yes	Yes	Yes
Type of Strategy	NA	NA	Yes	NA
Display of Exchange Time	Yes	Yes	Yes	Yes
Display of Login/ Log Off Status	Yes	Yes	Yes	Yes
Display of Market Status (eg: Open/Closed)	Yes	Yes	Yes	Yes
Display of Price Data in Ticker form (minimum Commodity Symbol, Expiry, Price (LTP))	Optional	Optional	Optional	Optional
Market Data/Watch – should contain minimum information of Segment, Contract Symbol, Expiry, Best Buy Quantity & Price, Best Sell Quantity & Price, Last traded price, Last traded time, Last updated time, Daily price range.	Yes	Yes	Optional	Yes
Contract Information to be provided - Contract Symbol, Expiry, Tick Size, Price Range, Min Lot Price Unit, Quantity Unit, Delivery Unit, Last traded price etc.	Yes	Yes	Optional	Yes
Facility of one key stroke for Buy or Sell order entry & Contract Information	Yes	Yes	NA	Yes
Password Standards				
User should be able to login with valid user id and password	Yes	Yes	Yes	Yes
Minimum password length should be 6 and maximum 8 characters length	Yes	Yes	Yes	Yes
The password numeric values should not fully comprise of user id	Yes	Yes	Yes	Yes
Password should expired after minimum predefined period (eg: 15/ 30/ 45 days)	Yes	Yes	Yes	Yes
In case of multiple invalid password entries	Yes	Yes	Yes	Yes

Description	Type of software and requirements			
Select the facility				
Application	CTCL	IBT	AT	WT
the user id should be locked				
Password should be alphanumeric and comprise one special character	Yes	Yes	Yes	Yes
Appropriate message should be displayed while user login fails	Yes	Yes	Yes	Yes
Two factor authentication for login	Optional	Yes	Optional	Yes
Password help file can be provided	Optional	Optional	Optional	Optional
Message Broadcast				
Display of Exchange Messages/ Announcements & Response messages for Failures.	Yes	Yes	Yes	Yes
Different Window for Internal Messages (Broker Messages)	Optional	Optional	Optional	Optional
Time sync with Exchange in Messages, LTT, LUT etc.	Yes	Yes	Yes	Yes
Vendors to provide details of any add-on provided on CTCL terminals, also notified in the product write-up.	Yes	Yes	Yes	Yes
Order Entry				
Order Entry at Market/Limit price with RL/SL type in both Normal & Spread contracts	Yes	Yes	Market Not Allowed	Yes
Order validity types provided i.e. GTC/GTD/Day/IOC/EOS	Yes	Yes	IOC Not Allowed	Yes
User Types provide Pro & Client	Yes	Yes	Yes	Yes
Order Entry should follow SMPF Rule	Yes	Yes	Yes	Yes
In case of buy SL order, the trigger price should be less than limit price & vice versa for sell order	Yes	Yes	Yes	Yes
Order Modification from Order type RL to SL - Not Allowed	Yes	Yes	Yes	Yes
Order Modification from Order type SL to RL Allowed	Yes	Yes	Yes	Yes
If the orders are cancelled by Exchange or by Member Admin or by client, details of such information should be display in Order Book and/or captured in logs.	Yes	Yes	Yes	Yes
Order Cancellation message should Contain minimum-Order number, Order Type, Market type, Commodity name. Date & time, User id, Price Quantity & cancelled By.	Yes	Yes	Yes	Yes
Order Modification message should Contain minimum-Order number, Order Type,	Yes	Yes	Yes	Yes

Description	Type of software and requirements			
Select the facility				
Application	CTCL	IBT	AT	WT
Market type, Commodity name. Date & time, User id, Price Quantity & Modified By.				
Order Rejection message should Contain minimum-Order number, Order Type, Market type, Commodity name. Date & time, User id, Price Quantity & Rejection Message.	Yes	Yes	Yes	Yes
Trade Confirmation message should Contain minimum-Trade number, Trade Type, Market type, Commodity name. Date & time, User id, Price Quantity.	Yes	Yes	Yes	Yes
Order Entry with Disclosed Quantity below 25% not allowed	Yes	Yes	Yes	Yes
Order Entry during Halt session is not allowed	Yes	Yes	Yes	Yes
Tracing and mitigating possibility of excessive and unnecessary order modification & Cancellation in the nature of order per second as per regulatory compliance.	Yes	Yes	Yes	Yes
RMS				
With every CTCL order, 15 digit terminal info should be provided (as per API)	Yes	Yes	Yes	Yes
DPR Updating in software during the market hours	Yes	Yes	Yes	Yes
Intraday Special/Additional Margin changes @ Exchange should get updated on respective CTCL terminals	Yes	Yes	Yes	Yes
Alerts of Maximum Sale Traded Value /Maximum Sale Traded Quantity	Yes	Yes	Yes	Yes
Limit breach for CTCL Terminal should be handled at CTCL Manager level	Yes	Yes	Yes	Yes
On Square-Off/Suspended mode/Segment disallow, also all pending orders should be rejected & order entry is not allowed	Yes	Yes	Yes	Yes
Trade Modification from OWN to CLI or vice versa for CTCL ID not allowed	Yes	Yes	Yes	Yes
Complete Audit Trail like order book, order history, trade book etc.	Yes	Yes	Yes	Optional
Order Alerts while breaching the limits	Yes	Yes	Yes	Yes
Reports				
Trade Book , Order Book	Yes	Yes	Yes	Optional

Description	Type of software and requirements			
Select the facility				
Application	CTCL	IBT	AT	WT
Net Position should be accurate	Yes	Yes	Yes	Yes
System Logs/Reports				
All message logs maintained (order logs, trade log, Client code modification log etc.)	Yes	Yes	Yes	Yes
Connection Logs to be maintained at CTCL Server	Yes	Yes	Yes	Yes
Backup Facility & Database Security	Yes	Yes	Yes	Yes
Activity/ System Log	Yes	Yes	Yes	Yes
Access Controls/remedies for misuse of log in id/ password	Yes	Yes	Yes	Yes
Alternate mode of connection in case of Link Failure	Optional	Yes	Optional	Yes
System Rollback functionality	Yes	Yes	Yes	Yes
Session Management- Logout after a system defined period of inactivity	Yes	Yes	Yes	Yes

Signed sealed and delivered by the Authorised Signatory of the Vendor

Date:
Place:

ANNEXURE 7

Application for approval of Algorithmic Trading (Algo) Strategy

(To be executed on letterhead of the Vendor)

To

CTCL Department

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

We are desirous of making available Algorithmic Trading software to members of the Exchange for the purpose of Algorithmic Trading. We hereby apply for the permission of the Exchange for approval of Algorithmic Trading software / strategies.

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.	Name of the Algo Software and Version Number	
8.	Algo Strategy Name and Version number	
9.	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:

ANNEXURE 8

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

(On letterhead of the member)

To

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

Dear Sir,

We _____ (Name of Member) hereby apply for change of Authorised User of MCX- TWS to CTCL.

Sr. #	Particulars	Details
1.	Member ID	
2.	User ID	
3.	Approved User Name	
4.	Address	
5.	Telephone No (with STD code)	
6.	Fax No	
7.	Email ID	
8.	Name of CTCL software with version number	
9.	Empanelled Vendor 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 execute any order on his/her own account or on account of anyone without such order having been approved by us in writing prior to execution.

For (Name of the Member)

Authorised Signatory
(Name and designation)

Date:
Place:

ANNEXURE 9

Details of the CTCL network being used by the Member

(On letterhead of the Member)

To,

CTCL Department

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

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

For (Name of the Member)

Authorised Signatory
(Name and designation)

Date:
Place:

ANNEXURE 10

Acceptance Certificate for CTCL / IBT /WT

(On letterhead of the Member)

To,

CTCL Department

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

Dear Sir,

I/We_____(Name of Trading Member & Member ID) do hereby communicate that we have done necessary testing and are satisfied with the following CTCL / IBT/ WT product.

Sr. #	Particulars	Details
1.	Name of CTCL / IBT /WT software with version number	
2.	Empanelled Vendor Name / In-house	
3.	Member's Registered Office address	
4.	Telephone No (with STD code)	
5.	Fax No	
6.	Contact Person Name	
7.	Contact Person – Telephone No. & Mobile No.	
8.	Contact Person- Email ID	

I/We request you to enable the User ID_____for CTCL / IBT / WT in the live environment.

For (Name of the Member)

Authorised Signatory
(Name and designation)

Date:
Place:

ANNEXURE 11
Software confirmation by Vendor
(On letterhead of the Vendor)

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

Sub: CTCL / IBT /ATF/ WT software procurement confirmation Dear

Sir/Madam,

This is to state that M/s._____ (Name of the

member), registered member (Member Id:_____CTCL Id :_____) of MCX**,** has purchased CTCL/IBT/ATF/WT software from us for trading on MCX platform and same is installed at their premises.

Name of CTCL/ IBT/ATF/WT software:_____.

Software version number:_____.

In case of ATF Strategy Name & Version No.:_____.

Kindly enable them to start trading using CTCL / IBT / ATF/WT software. Thanking

You,
Yours Sincerely,

For (Name of ISV)

Authorised Signatory
(Name and designation)

Date:
Place:

ANNEXURE 12
Board Resolution

(On Letter Head of Member)

CERTIFIED TRUE COPY OF THE BOARD RESOLUTION PASSED BY THE BOARD OF DIRECTORS OF ……. (Name of the company) IN THEIR MEETING HELD ON …..…the (date of board meeting) at ……. (Office address)

"RESOLVED THAT the company can avail a Computer To Computer Link (CTCL)/ Internet based Trading (IBT) / Wireless Trading (WT) facility on its own behalf and on behalf of its clients in consonance with the Bye-Laws, Rules and Regulations laid down in this regard by Multi Commodity Exchange of India Limited.

"**RESOLVED FURTHER THAT** any one of the Directors (Name mentioned below) are hereby authorize to execute the Undertaking and all the necessary documents that may be required by the authority for the same."

Name	**Designation**	**Signature**
…….	Director	……
…….	Director	……
…….	Director	……

"**RESOLVED FURTHER THAT** the Common Seal of the company be affixed on such Undertaking to be provided to MCX, in the presence of

Mr……., Director

of……..."

Certified True Copy

For …….

Director

Date:
Place:

ANNEXURE 13
CTCL/IBT/ATF/WT Undertaking (To be submitted by member)

PART I – CTCL/IBT Undertaking

I / We,_____, an individual /a firm registered under the Partnership Act, 1932 / a Company / body corporate incorporated under the Companies Act of 1956 /_____Act, 19 , and residing at / having our office/ registered office at _____(hereinafter referred to as the 'Undersigned' which expression shall unless repugnant to the context include her/his / its successors, assigns and legal representatives) give this Undertaking on this_____day of _____20_____ at _____ IN FAVOUR of MULTI COMMODITY

EXCHANGE OF INDIA LTD, a company incorporated under the Companies Act, 1956 and a Commodity Exchange duly recognized by the Central Government having its registered office at Exchange Square, CTS No.255, Suren Road, Chakala, Andheri (East), Mumbai – 400 093, India (hereinafter referred to as "MCX", which expression shall unless repugnant to the context include its successors, assigns and legal representatives)

WHEREAS,

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

b) In addition, MCX provides a Computer to Computer Link (hereinafter referred to as the 'CTCL facility'), Internet Based Trading (hereinafter referred to as the 'IBT') facility, Algorithmic Trading (hereinafter referred to as the 'ATF') facility and Wireless Trading (hereinafter referred to as the 'WT') facility on CTCL/IBT/ATF/WT software provided by CTCL empanelled vendors designated by the Exchange and on CTCL/IBT/ATF/WT software procured from empanelled vendor, for order entry, receipt of order and trade confirmation and also for receipt of data relating to its trade quotations.

c) MCX has decided that it shall make the CTCL/IBT/ATF/WT facility available to its Members on case to case basis, subject to such terms and conditions as MCX may impose and one of the conditions is that they execute an undertaking in its favor in the format prescribed by it and agree to provide the said facility only to such persons (hereinafter referred to as the "Approved Persons") as MCX may permit and also agree to abide by and be bound by the various terms and conditions which it may prescribe in this regard from time to time.

d) I / We have admitted to the Membership of MCX, and am/are desirous of availing the CTCL/IBT/ATF/WT facility by fulfilling all the terms and conditions as may be prescribed by MCX from time to time at its discretion in this regard.

NOW THEREFORE IN CONSIDERATION OF MCX having agreed to allow me / us to avail the CTCL/IBT/ATF/WT facility, I / we hereby IRREVOCABLY AND UNCONDITIONALLY UNDERTAKE and agree to abide by and be bound by the following terms and conditions.

1. That I / We shall make the CTCL/IBT/ATF/WT facility available to the Approved Persons only after obtaining the prior written consent of MCX and subject to such terms and conditions as may be prescribed by MCX from time to time.

2. That in addition to such terms and conditions as may be prescribed under clause (1) by MCX, all the provisions of the Byelaws, Rules, Regulations and Circulars relating to use and operation of the Trading System shall also mutatis mutandis become applicable to the use and operation of the CTCL/IBT/ATF/WT facility.

3. That notwithstanding anything contained in this Undertaking all my / our liabilities and obligations as a Member of MCX shall not be affected nor shall be prejudiced in any manner whatsoever.

4. That without prejudice to the generality of the clause (3) of this Undertaking, I / we shall be responsible to settle all the trades executed by the Approved Persons on my / our behalf whether such trades were executed with or without my permission / knowledge and that I shall be bound to complete / fulfill all my / our obligations / liabilities / commitments arising due to the trades executed by the Approved Persons on my / our behalf, including the trades executed by using CTCL/IBT/ATF/WT facility.

5. That I/We shall abide by, comply with and be bound by the Rules, Bye-laws, and terms and conditions as applicable for CTCL and/or Internet Based Trading and/or Wireless Trading facility of MCX as in existence or as may be modified / amended by the relevant authority from time to time and any circular, order, direction, notice, instructions issued and / or as maybe modified or amended from time to time by the relevant authority.

6. That MCX, at its discretion, may make the CTCL/IBT/ATF/WT facility available to me / us at MCX address first mentioned above or at any other address as MCX from time to time may notify to me / us or approve as being the location.

7. That MCX shall be entitled to amend its Rules, Bye Laws, Regulations and terms and conditions for CTCL and/or Internet Based Trading and/or Wireless Trading facility unilaterally and I/We shall be deemed to have consented to them, and accordingly be bound by the Rules, Bye-laws, Regulations and terms and conditions for CTCL and/or IBT and/or ATF and/or WT facility prevailing from time to time and MCX shall be entitled to all powers vested in them under the Rules, Bye-laws and Regulations, by which I/We unconditionally agree to be bound.

8. That I/We shall execute, sign, subscribe, to such documents, papers, agreements, covenants, bonds and / or undertakings whether legal or otherwise as maybe required by MCX from time to time.

9. That without prejudice to the rights, remedies whether legal or otherwise available to MCX upon my / our non-compliance with this Undertaking, I/We shall indemnify and keep indemnified MCX and its directors, managers, officers, employees and authorised representatives against any loss / damage suffered by it whether legal or otherwise arising due to non-compliance by me/us with the provisions of this Undertaking.

10. That I / We shall use the physical communication link (s) provided to me / us, for the purpose of having access to the CTCL / IBT / ATF / WT facility and TRADING SYSTEM Software.

11. That MCX, at its absolute discretion, may make the CTCL/IBT/ATF/WT facility available to me / us only from the date of my / our enablement on the CTCL/IBT/ATF/WT facility till such time as it may deem fit and further that the CTCL/IBT/ATF/WT facility may at any time be withdrawn by MCX at its discretion without giving me / us any notice or any reasons whatsoever.

12. That the CTCL/IBT/ATF/WT facility if made available to me / us by MCX will be made available to me / us by MCX on a non-exclusive basis only and that the same may be made available by MCX, at its discretion, to any other Trading cum Clearing Member whomsoever on such terms and conditions as it may deem fit.

13. That I / We may be entitled by giving one month's written notice to request MCX to withdraw the CTCL/IBT/ATF/WT facility extended to me / us and such withdrawal shall be subject to such terms and conditions as may be prescribed by MCX including payment of such compensation to MCX as may be decided by MCX at its discretion.

14. That I / We shall be responsible and take all such steps, actions and proceedings to ensure and keep ensured that no Approved Persons in any way further makes the CTCL/IBT/ATF/WT facility available to any other person nor shall extend the CTCL/IBT/ATF/WT facility outside his/new premises / outside India and that in case I / We fail to ensure the same, MCX shall be empowered to take such action as it may deem fit, which action may include disabling me / us from having access to CTCL/IBT/ATF/WT facility, and taking of such disciplinary actions as it may deem fit.

15. I / we undertake that

a) I / We shall at my / our own expenses provide all lines, cabling, software, hardware, equipment and other communication facilities required for transmission of the data between the Receiving Premises and my / our server at my / our office and also obtain the necessary approvals from relevant authorities.

b) I / We shall ensure that the connectivity of the CTCL/IBT/ATF/WT facility is as per the MCX and Department of Telecommunications (DoT) and/or Mahanagar Telephone Nigam Limited (MTNL) and/or any other appropriate governmental / statutory authority approved network diagram and that I/we shall produce the necessary approvals to MCX in order to meet one of its requirements for enabling me/us for having access to the CTCL/IBT/ATF/WT facility.

c) I / We undertake to ensure that access shall be given only to Approved persons and also a method shall be established to ensure that non-Approved persons cannot access the system.

d) I/We undertake to pay any such license fees/charges/royalties as may be levied by DoT/MTNL/MCX/any other regulatory/statutory authorities from time to time. MCX fees if any for using the CTCL/IBT/ATF/WT facility shall be paid in advance.

e) I / we shall ensure that data communication lines between the MCX equipment and my / our equipment will be connected to my / our own and further telecommunication network will be as per the MCX and DoT and/or MTNL and/or any other appropriate governmental / statutory authority approved network diagram.

f) I / We shall indemnify the Exchange against any loss or damage including liabilities arising out of failure to comply with Clause (e) above.

g) I / We shall provide MCX with the Network diagram as adopted by me / us for having access to the CTCL/IBT/ATF/WT facility between the Receiving Premises and my / our server at my / our office and that we shall also provide MCX with the new network diagram as and when any changes are made to the existing Network diagram with the prior written permission of MCX.

h) I / We shall notify MCX giving the details related to the Approved Persons as prescribed in this Circular, hereto for prior approval of MCX and shall acquire the prior written permission from MCX for every additional Approved Person taken subsequently before letting him / her have access to the CTCL/IBT/ATF/WT facility. Further in case an Approved Person is disabled from acting in his / her capacity as such for any reason whatsoever, then I / we shall acquire prior written permission from MCX before appointing any other individual to act as an Approved Person in his / her place.

i) I / We shall make the necessary changes in the software used by me / us for accessing the CTCL/IBT/ATF/WT facility as and when any changes either technical or structural are made by MCX in the CTCL/IBT/ATF/WT facility.

j) I / We shall not develop / use any software for accessing the CTCL/IBT/ATF/WT facility, which software in the opinion of MCX shall resemble or result in duplication of TRADING SYSTEM software in any manner and further that no representation shall be made by me / us that the software developed by me / us for accessing the CTCL/IBT/ATF/WT facility is part of-the TRADING SYSTEM software.

k) I / We shall not assign or otherwise transfer the rights and obligations arising out of the use of the CTCL/IBT/ATF/WT facility and this undertaking whether in whole or in part without the prior written consent of MCX.

l) I / We agree not to use, without the express permission of MCX, the name of MCX to directly or indirectly promote my/ our business.

m) I / We shall not, either by myself / ourselves or through any person acting on my / our

behalf, issue / release / publish any advertisement, brochure, pamphlet, booklet, notice or any other promotional material on any aspect relating to the CTCL/IBT/ATF/WT facility in any form, whether in writing or otherwise, in accordance to the Code of Advertisement as prescribed by the MCX except with the prior written approval of MCX.

n) I / We agree to obtain prior approval of MCX for change of its activities/operations from existing empanelled CTCL/IBT/ATF/WT vendor to another empanelled vendor.

16. I / We agree that MCX does not warrant that the provision of the CTCL/IBT/ATF/WT facility will be error free or uninterrupted.

17. I / We undertake and agree that:-

a) I / We shall maintain all systems logs and make the same available for inspection by MCX at any time at its discretion.

b) I / We shall not under any circumstances match the respective orders entered in by my / our Approved Persons from their terminals by myself / ourselves by using any means whatsoever and that I / we shall route all the orders entered in by my / our Approved Persons to the Trading System of MCX so that they could be matched by the Central Computer of MCX only.

c) I/We shall ensure that the following guidelines on CTCL/IBT/ATF/WT and services would be adhered to:

i. System used by me / us has provision for security, reliability and confidentiality of data through the use of encryption technology.

ii. I / We shall maintain adequate backup systems and data storage capacity and also arrange for alternative means of communications in case of Internet Link failure or any other software failure relating to the Trading System.

iii. Order/Trade confirmation shall be sent to the investor through email at client's discretion at the time period specified by the client in addition to the other mode of display of such confirmations on real time basis on my/our web site. The investor shall be allowed to specify the time interval on the web site itself within which he/she would like to receive this information through email. Facility for reconfirmation of orders which are larger than that specified by the member's risk management system shall be provided on the internet based system

iv. I / We shall ensure to have a system based control on the trading limits of clients and exposures taken by clients and also set pre-defined limits on the exposure and turnover of each client. The system will also be capable of assessing risk of the client as soon as the order comes in. The client also to be informed of acceptance/rejection of the order within a reasonable period. Reports on margin requirements, payment and delivery obligations etc to be informed to the clients through the system

v. I/We shall ensure that the following security measures shall be in-built in the

system:

- User Id
- First Level Password (Private Code)
- Automatic expiry of passwords at the end of reasonable duration. Reinitialize access on entering fresh passwords.

vi. All transaction logs with proper audit facilities to be maintained in the system

vii. Secured Socket Layer Security for server access through Internet

viii. Suitable Firewalls between trading set-ups directly connected to an Exchange trading system and the Internet trading set up.

ix. Shall integrate any advanced level security as specified by MCX from time to time.

x. The following systems operations procedures will be adhered to:

- Shall follow similar logic/priorities used by the Exchange to treat client orders
- Shall maintain all activities / alerts log with audit trail facility
- The Web-server shall have internally generated unique numbering for all client orders/trades

d) I / We shall ensure that on-line surveillance and risk management features like trade-by-trade Position Monitoring etc., shall be inbuilt in the CTCL/IBT/ATF/WT facility and it shall be flexible to change as per MCX guidelines.

e) I / We shall not develop or use any software / program facility which shall either directly or indirectly facilitate program trading without prior written approval of the Exchange. For the purpose of this clause the term 'Algorithmic Trading' shall mean any software or program facility by the use of which, upon the fulfillment of certain specified parameters, without the necessity of manual entry of orders, buy/sell orders are automatically generated and entered by the software / program facility into the Trading System of MCX to be matched by the central computer.

f) I / We shall not develop or use any software / program which shall either directly or indirectly facilitate orders to cross trades of their clients with each other. All orders shall be offered to the market for matching.

g) MCX shall be possessed with the absolute right to inspect the internal software used / being utilised me / us at any time at its discretion.

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

18. That after the completion of the necessary test and after completely satisfying myself / ourselves that the CTCL/IBT/WT/ATF facility is fault free, I / we shall submit an

Acceptance Certificate in the format as specified by MCX in partial fulfillment of one of the conditions of MCX for my / our enablement for having access to the CTCL/IBT**/**ATF/WT facility.

19. I / We undertake that
    a. will take all necessary steps to ensure that every new software and any change thereupon to the trading and/or risk management functionalities of the software will be tested as per the framework prescribed by SEBI / Exchange before deployment of such new / modified software in Commodity/Securities market.

    b. 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.
    c. the absolute liability arising from failure to comply with the above provisions shall lie entirely with me/us.

20. That Member should arrange to provide demonstration of the IBT/ATF/WT software as per the Exchange's convenience. After successful demonstration of the software, MCX would grant permission to Member for the usage of IBT/ATF/WT facility.

21. That I/We cannot claim any direct or indirect damage, costs and expenses whatsoever arising from the following:-

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 MCX.

ii. Based upon special indirect economic or consequential loss or damage including, but not limited to loss of profit, business revenue, opportunity costs, and goodwill or anticipated savings.

iii. Caused or contributed to by any event of Force Majeure. For purposes of this Clause, "Force Majeure" means and includes governmental acts, regulatory changes, acts of God or forces of nature, landslides, earthquakes, floods, fire, lightening, explosions, major storm (hurricanes, typhoons, cyclones, tsunami etc.) or major storm warnings, tidal waves, shipwrecks, communication cable cutting/theft, major telephone exchange failure and perils of navigations, acts of war (declared or undeclared), insurrection, terrorism riots or public enemies, unavailability of public services, strikes, lockouts, acts or omission of sovereign states or those purporting to represent sovereign states, blockades, embargoes, epidemics, quarantines, public disorders, sabotages, accidents, and such other acts or events beyond MCX control, and further the above is without prejudice to the rights already accrued to MCX due to my / our failure to perform either in full or in part, my / our obligations prior to the occurrence of events of Force Majeure.

iv. Or any other nature or type.

22. That MCX shall not be responsible for any development, maintenance, updates upgrades, error-fixes and any other support of my / our software for accessing the CTCL/IBT/ATF/WT facility and shall not be liable for any loss suffered by me / us due to the use of the software for accessing the CTCL/IBT facility.

23. That neither MCX nor the directors, managers, officers, employees or agents of MCX, guarantee the functioning of the CTCL/IBT/ATF/WT facility. MCX and the directors, managers, officers, employees and agents of MCX shall not be liable in any way to me / us or to any of my / our Approved Persons or to any other person, for any non-performance or interruption of CTCL/IBT/ATF/WT facility or for any damages, consequential or otherwise, arising there from or occasioned thereby. No proceedings would be adopted by me / us or any third party neither against MCX nor against any individual officer or employee of MCX for any act done by such officer or employee of MCX in their official capacity.

24. I / We shall indemnify and keep indemnified MCX harmless against every and all claims, demand, damages, liabilities, losses and expenses suffered by it directly by reason of the provision of the CTCL/IBT/ATF/WT facility to me / us or by reason of my / our noncompliance, contravention with the any of the provisions of this Undertaking.

25. That this Undertaking is applicable not only in respect of the information services and terminal equipment currently offered by me / us to Approved Persons but also in respect of any information services and terminal equipment developed by or for me / us in the future, even if I / we should at any time alter my / our mode of supplying information to Approved Persons provided MCX approves in writing of such alteration with all details.

26. That without prejudice to any other right under any law for the time being in force or which may become applicable, MCX shall be vested with the exclusive right, upon my / our non-compliance with any of the terms and conditions of this Undertaking or upon the termination, suspension of my / our Membership or upon my / our ceasing to be a Member of MCX, to take, at its discretion, such actions, steps, proceedings, measures, decisions within such period of time and upon such terms and conditions as it may deem fit and that any such actions, steps, proceedings, measures, decisions may, inter alia, include denial of access to the CTCL/IBT**/**ATF/WT facility and / or take such disciplinary actions as it deems fit. I / we further undertake that I / we shall abide by and be bound by any actions, steps, proceedings, measures, decisions as may be taken by MCX.

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

28. I / We shall treat as confidential all information obtained from MCX pursuant to the arrangement and shall not divulge such information to any person (except to my / our own employees and then only to those employees who need to know the same)

without the MCX prior written consent and that I / we shall also ensure that my / our employees are aware of and comply with the provisions of this clause. The foregoing obligations as to confidentiality shall survive any termination of the availability of the CTCL/IBT/ATF/WT facility.

29. Any declaration or other notice to be given by me / us to MCX shall be sent by registered letter or telex / cable or facsimile transmission to the registered address.

30. This Undertaking will be binding on my / our successors / legal representatives and permitted assignees.

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

32. A Member shall not advertise or use any software/ program, which may directly or indirectly facilitate matching of orders between or among two or more clients by way of grouping or otherwise. The CTCL/IBT/ATF/WT facility being used by a member shall have inbuilt feature of pushing in all the orders, entered by any of the approved persons only through CTCL/IBT/ATF/WT server of the member for which in turn will push such orders to the trading system of the Exchange, for the purpose of execution.

33. A member shall ensure to undertake periodic audit of their CTCL/IBT/ATF/WT Systems.

PART II - Algorithmic Trading Undertaking

WHEREAS

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

- MCX provides a Computer – to –Computer Link (hereinafter referred to as the 'CTCL') facility for order entry, receipt of order and trade confirmation and also for receipt of data relating to its trade quotations by using their own trading front end software in order to trade on MCX trading system.

- MCX also decides to permit the users of CTCL, an ALGORITHMIC TRADING facility (hereinafter referred to as the "ATF facility") which mean any software or facility by the use of which, upon the fulfillment of certain specified parameters, without the necessity of manual entry of orders, buy/sell orders are automatically generated and entered by the software/program facility into the MCX trading system to be matched by the Exchange's system and such permission is subject to terms and conditions as may be specified by MCX from time to time.

- MCX allows to avail the ATF facility by fulfilling all the terms and conditions as may be prescribed from time to time at its discretion.

NOW THEREFORE IN CONSIDERATION OF MCX having agreed to allow me / us to avail the ATF facility, I / we hereby IRREVOCABLY AND UNCONDITIONALLY UNDERTAKE and agree to abide by and be bound by the following terms and conditions.

1. I / We shall use the Algorithmic Trading software approved by the Exchange and the data generated from the same exclusively for trading on MCX trading platform.

2. I/We shall not modify the software/algorithm for ATF facility as approved by MCX without prior approval of MCX.

3. I / We agree that MCX shall be entitled to conduct audit / inspection of the ATF facility, at any time in its absolute discretion. MCX officials or MCX appointed auditors can visit our office without prior intimation for the purpose of audit / inspection.

4. I/We confirm that I/We have proper procedures and arrangements to safeguard algorithms from misuse or unauthorised access. I/We undertake to ensure that access shall be given only to authorised persons.

5. I/We agree and confirm that I/We have proper procedures, systems and technical capability to carry out trading through the use of algorithms.

6. I/We agree and confirm that we have real time monitoring systems to identify dysfunctional algorithms that may not behave as expected and will inform the Exchange immediately in case of such incidents. Further, I/We confirm that we have

system to control to shut down such algorithms if identified on immediate basis.

7. I/We shall maintain logs of all trading activities to facilitate audit trail for minimum 3 years and I/We agree to provide such logs to the Exchange / appointed auditors during inspection / audits.

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

9. I/We shall provide details of algorithmic trading strategies to the Exchange wherever required for the purpose of inquiry, surveillance, investigation etc.

10. I/We shall be solely liable and responsible for any monetary losses, damages or other costs and consequences arising in any manner due to algo orders submitted to the Exchange on account of any inadvertent mistake or malfunctioning or failure of our system, including component failure, and shall always keep the Exchange and its official/s indemnified against any loss or damage or compensation etc. Further, I/We shall not hold MCX responsible in any manner whatsoever due to use of ATF Facility.

11. I/We shall adhere to the connectivity diagram approved by MCX and shall not make any changes in the same.

12. I/We shall be solely responsible and liable for the consequences in case of any breach of this undertaking and MCX shall be entitled to take such appropriate action as deem fit against me/us.

13. That MCX, at its absolute discretion, shall make the ATF facility available to me / us only from the date of enabling the ATF facility, till such time as it may deem fit and further that the ATF facility may at any time be withdrawn by MCX at its discretion without giving me / us any notice or any reasons whatsoever.

14. I / We shall adhere to SEBI circular CIR/CDMRD/DEICE/03/2015 dated December 11, 2015 and / or undertakings / circulars as may be prescribed or required by MCX / Regulator from time to time.

15. I / We shall also ensure to undertake System Audit of ATF facility by System Auditors empanelled by the Exchange and submit the report as per the timeline specified by the Exchange.

16. I / We shall also ensure to undertake that Algorithmic Trading Terminals will not be provided to my clients for placing Algorithmic orders directly to the Exchange.

17. I/We shall also ensure to participate in periodic mock trading sessions conducted by the Exchange using all User Ids approved for Algorithmic trading on an ongoing basis, irrespective of the algorithm having undergone change or not.

PART III – Wireless Trading Undertaking

WHEREAS,

- The Exchange has also allowed its trading members providing/using IBT facility to offer the facility of Trading using Wireless Technology (hereinafter referred to as the 'Wireless Trading'), to its clients subject to submission of this Undertaking.

- We are desirous of providing the Wireless Trading facility to our clients in compliance with relevant Circulars of the Exchange.

NOW THEREFORE IN CONSIDERATION OF EXCHANGE having agreed to allow me / us to avail the Wireless Trading facility,

1. I / We undertake and agree to ensure that adequate measures shall be taken for user identification, authentication and access control using means such as user-id, passwords, smart cards, biometric devices or other reliable means, to prevent misuse of facility by unauthorised persons.
2. I / We shall ensure that alternative means of communication for placing orders shall be made to our clients available in case of failure of the wireless network.
3. I / We undertake that access for order routing is permitted only through the user of client specific User Ids.
4. I / We undertake that the risk management system takes into account overall positions of clients irrespective of the medium of undertaking and provides a system-based control facility on the trading limits of the clients and exposures taken by the clients.
5. I / We undertake to offer facility of Wireless Trading to any client only after obtaining undertaking from the client that they are fully aware and agree for additional provisions specifying possible risks, responsibilities, obligations and liabilities associated with Wireless Trading as mentioned time to time by the Exchange in its circulars.
6. I / We shall ensure that the addresses of Internet web site/web page where detailed information would be available, along with the minimum information shall be available on hand held device, as it may not be possible to give detailed information to the investor on a hand held device.
7. I / We undertake that order confirmation shall be provided to the user on submission of the order and also on order modification / cancellation in the handheld device. Trade confirmation shall be provided to the user, along with history of trades for the day.
8. I / We undertake and agree to ensure that Session login details are not stored on the devices used for Wireless Trading.
9. I / We undertake to ensure that Network security protocols and interface standards shall be as per prevalent industry standards and sound audit trails are available for all transactions conducted using wireless devices.
10. I / We shall ensure that server routing orders placed through Wireless Trading System to the exchange trading system shall be located in India.
11. I / We shall ensure to undertake periodical System audit of the Wireless Trading system and software as specified by the Exchange and to submit certificate/report to the Exchange.

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

SIGNED, SEALED AND DELIVERED BY
_____for and on behalf of _____
_____

Before me

In Presence of Witnesses

Sr. No.	Name	Address	Signature
1.			
2.			

ANNEXURE 14

Checklist/ Reference Points While Developing CTCL/IBT/AT/WT Software

Description	**software and requirements**			
Application	CTCL	IBT	AT	WT
Availability of Secured Socket level security for server access through internet	NA	Yes	NA	Yes
Display of UMC Member Code / SEBI registration Code	Yes	Yes	Optional	Yes
Display of Useful Link to website – www.mcxindia.com and www.sebi.gov.in	Yes	Yes	Optional	Yes
Display details of Software Name, Version Number	Yes	Yes	Yes	Yes
Display of Strategy Name and Version Number	NA	Yes	Yes	Yes
Type of Strategy	NA	NA	Yes	NA
Display of Exchange Time	Yes	Yes	Yes	Yes
Display of Login/ Log Off Status	Yes	Yes	Yes	Yes
Display of Market Status (eg: Open/Closed)	Yes	Yes	Yes	Yes
Display of Price Data in Ticker form (minimum Commodity Symbol, Expiry, Price (LTP))	Optional	Optional	Optional	Optional
Market Data/Watch – should contain minimum information of Segment, Contract Symbol, Expiry, Best Buy Quantity & Price, Best Sell Quantity & Price, Last traded price, Last traded time, Last updated time, Daily price range.	Yes	Yes	Optional	Yes
Contract Information to be provided - Contract Symbol, Expiry, Tick Size, Price Range, Min Lot Price Unit, Quantity Unit, Delivery Unit, Last traded price etc.	Yes	Yes	Optional	Yes

Description	software and requirements			
Application	CTCL	IBT	AT	WT
Facility of one key stroke for Buy or Sell order entry & Contract Information	Yes	Yes	NA	Yes
Password Standards				
User should be able to login with valid user id and password	Yes	Yes	Yes	Yes
Minimum password length should be 6 and maximum 8 characters length	Yes	Yes	Yes	Yes
The password numeric values should not fully comprise of user id	Yes	Yes	Yes	Yes
Password should expired after minimum predefined period (eg: 15/ 30/ 45 days)	Yes	Yes	Yes	Yes
In case of multiple invalid password entries the user id should be locked	Yes	Yes	Yes	Yes
Password should be alphanumeric and comprise one special character	Yes	Yes	Yes	Yes
Appropriate message should be displayed while user login fails	Yes	Yes	Yes	Yes
Two factor authentication for login	Optional	Yes	Optional	Yes
Password help file can be provided	Optional	Optional	Optional	Optional
Broadcast				
Display of Exchange Messages/ Announcements & Response messages for Failures.	Yes	Yes	Yes	Yes
Different Window for Internal Messages (Broker Messages)	Optional	Optional	Optional	Optional
Time sync with Exchange in Messages, LTT, LUT etc.	Yes	Yes	Yes	Yes
Order Entry				
Order Entry at **Market/Limit price** with RL/SL type in both Normal & Spread contracts	Yes	Yes	Market Not	Yes

Description	software and requirements			
Application	CTCL	IBT	AT	WT
			Allowed	
Order validity types provided i.e. GTC/GTD/Day/IOC/EOS	Yes	Yes	IOC Not Allowed	Yes
User Types provide Pro & Client	Yes	Yes	Yes	Yes
Order Entry should follow SMPF Rule	Yes	Yes	Yes	Yes
In case of buy SL order, the trigger price should be less than limit price & vice versa for sell order	Yes	Yes	Yes	Yes
Order Modification from Order type RL to SL - Not Allowed	Yes	Yes	Yes	Yes
Order Modification from Order type SL to RL Allowed	Yes	Yes	Yes	Yes
If the orders are cancelled by Exchange or by Member Admin or by client, details of such information should be display in Order Book and/or captured in logs.	Yes	Yes	Yes	Yes
Order Cancellation message should Contain minimum-Order number, Order Type, Market type, Commodity name. Date & time, User id, Price Quantity & cancelled By.	Yes	Yes	Yes	Yes
Order Modification message should Contain minimum-Order number, Order Type, Market type, Commodity name. Date & time, User id, Price Quantity & Modified By.	Yes	Yes	Yes	Yes
Order Rejection message should Contain minimum-Order number, Order Type, Market type, Commodity name. Date & time, User id, Price Quantity & Rejection Message.	Yes	Yes	Yes	Yes
Tracing and mitigating possibility of excessive and unnecessary order modification &	Yes	Yes	Yes	Yes

Description	software and requirements			
Application	CTCL	IBT	AT	WT
Cancellation in the nature of order per second as per regulator compliance.				
Trade Confirmation message should Contain minimum-Trade number, Trade Type, Market type, Commodity name. Date & time, User id, Price Quantity.	Yes	Yes	Optional	Yes
Order Entry with Disclosed Quantity below 25% not allowed	Yes	Yes	Yes	Yes
Order Entry during Halt session is not allowed	Yes	Yes	Yes	Yes
RMS				
With every CTCL order, 15 digit terminal info should be provided (as per API)	Yes	Yes	Yes	Yes
DPR Updating in software during the market hours	Yes	Yes	Yes	Yes
Intraday Special/Additional Margin changes @ Exchange should get updated on respective CTCL terminals	Yes	Yes	Optional	Yes
Alerts of Maximum Sale Traded Value /Maximum Sale Traded Quantity	Yes	Yes	Yes	Yes
Limit breach for CTCL Terminal should be handled at CTCL Manager level	Yes	Yes	Yes	Yes
On Square-Off/Suspended mode/Segment disallow, also all pending orders should be rejected & order entry is not allowed	Yes	Yes	Yes	Yes
Trade Modification from OWN to CLI or vice versa for CTCL ID not allowed	Yes	Yes	Yes	Yes
Order Alerts while breaching the limits	Yes	Yes	Yes	Yes

Complete Audit Trail like order book, order history, trade book etc.	Yes	Yes	Yes	Optional

Description	**software and requirements**			
Application	CTCL	IBT	AT	WT
Reports				
Trade Book , Order Book	Yes	Yes	Yes	Optional
Net Position should be accurate	Yes	Yes	Yes	Yes
System Logs/Reports				
All message logs maintained (order logs, trade log, Client code modification log etc.)	Yes	Yes	Yes	Yes
Connection Logs to be maintained at CTCL Server	Yes	Yes	Yes	Yes
Backup Facility & Database Security	Yes	Yes	Yes	Yes
Activity/ System Log	Yes	Yes	Yes	Yes
Access Controls/remedies for misuse of log in id/ password	Yes	Yes	Yes	Yes
Alternate mode of connection in case of Link Failure	Optional	Yes	Optional	Yes
System Rollback functionality	Yes	Yes	Yes	Yes
Session Management- Logout after a system defined period of inactivity	Yes	Yes	Yes	Yes

Signed sealed and delivered by the Authorised Signatory of the Member

Date:
Place:

ANNEXURE 15

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

(On letterhead of the member)

To

CTCL Department

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

Sub: User Id to be used for Internet Based Trading facility / Wireless Trading facility Dear

Sir,

Please enable the facility of IBT / WT on following User Ids

Sr. #	Particulars	Details
1.	Member ID	
2.	User ID	
3.	Empanelled Vendor Name / In-house	
4.	Name of IBT software with version number	
5.	Name of WT software with version number	

For (Name of the Member)

Authorised signatory
(Name and designation)

Date:
Place:

ANNEXURE 16

Annexure signed by vendor and countersigned by member.

(To be executed on letterhead of the Vendor)

I / We ----------, having our registered office at ----------and represented by ----------and hereinafter referred to as VENDOR have sold to M/s. ---------- ----------, having their registered office at ---------- ----------who are members of Multi Commodity Exchange of India Limited, and hereinafter referred to as MEMBER, a software for internet based trading services.

NOTWITHSTANDING the generality of the above, the software provided by us complies with the following provisions in particular as directed by the MCX.

Access for order routing is permitted only through the use of client specific User ids the access is permitted only through the use of client specified password (private code)

The system provides for automatic expiry of passwords at the end of a reasonable duration and re-initialising of access on entering fresh passwords. All transaction logs are maintained with proper audit facilities (a write-up in this regard shall be enclosed) Secured socket level security for server access through Internet is available.

Suitable firewalls between trading set-up and Internet trading set up are available. The optional advanced security products used for e-commerce, including SMART cards, dynamic password and 128 bit encryption, second level pass words are available. If so, details of the same, between the trading web server and trading client terminals, interfaces standards as per recommendations of IETF and W3C (e.g. HTTP ver. 4 or above, HTM ver 4/XML) are adopted.

Logic/priorities similar to those used by the MCX is used to treat client orders. Provision for maintenance of all activities / alerts log with audit trail available the member's web server internally generates unique numbering for all client orders/ trades. Adequate provisions for maintaining backup systems and data storage capacity are available. An alternative means of communication is arranged for in case of Internet link failure (A write up shall be provided in this regard)

The web site providing the Internet based trading facility contains information meant for investor protection such as rules and Business Rules affecting client broker relationship, arbitration rules, investor protection rules, etc. The web site also provides and displays prominently hyper link to the web site/page on the web site of the MCX displaying rules/Business Rules/circulars. The web site displays the ticker/quote/order book of the MCX along with the time stamp.

The software provides for sending of the order/trade confirmation through email at clients discretion at the time period specified by the client in addition to the other mode of display of such confirmations on real time basis on the web site. The web site allows for specifying the time interval on the web site itself by the client.

The software provides for reconfirmation of orders, which are larger than that as specified by the member's risk management system. In this regard the system is capable of assessing the risk of the client as soon as the order comes in and shall inform the client of acceptance/rejection of the order within a reasonable period.

The software provides a system-based control facility on the trading limits of the clients and exposures taken by the clients. All orders entered into the internet-based trading system are offered to the market for matching and no cross trades are generated the software has the facility of providing the reports on margin requirements, payment and delivery obligations etc to the clients through the system.

Signed sealed and delivered by the Authorised representative of the VENDOR

Date
Place:

We, ----------having our registered office at ----------and represented by ---------- are members of the Exchange. We confirm and certify that the software provided by the vendor for internet based trading has undergone tests by us and we are satisfied that it complies with the stipulations of the Exchange. We also undertake to get the software modified, if necessary to continue compliance with the requirements of the Exchange, DoT policy and regulations with regard to levels of encryption, etc and Exchange / any other regulatory body(ies) directives and other statutory requirements etc. as may be issued in this regard from time to time.

Countersigned, sealed and delivered by the Authorised representative of the MEMBER

Date:
Place:

ANNEXURE 17
Contingency Plan

(On Letterhead of the Member)

The Company is providing Internet Trading through Order Routing System to its Registered Clients and in case of any failure of the system the Registered Client would be given an option to execute his trade through the dealers at the various existing branches / locations.

As a measure of contingency it has been worked out that in case the investor is not able to establish the link to their site or in case the link is missed investor can contact the following persons at the respective places as mentioned below: -

LOCATION	CONTACT PERSON	ADDRESS	TEL. NO.	FAX NO.

In the process of giving further link the authorised person_____will make certain questions to the clients & if satisfied about the authenticity of the client he will again allot new Password to him.

If you have any contingency plan for server, kindly mention.

(Authorised signatory)
Name & Designation
Company Stamp

Date:
Place:

ANNEXURE 18

Application Form for availing Wireless Trading (WT) Facility

(On letterhead of the member)

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

I/We,_____(Name of the member) hereby apply for the permission for providing Wireless Trading facility.

Sr. No	Particulars	Details
1.	Member ID	
2.	Registered Office/ Office address of Member : Telephone / Fax No. :	
3.	Complete location address of the order routing server	
4.	Have you been approved for providing Internet Based Trading by the exchange	YES / NO
5.	If yes please provide the following : • Name of the IBT Product Approved • Vendor Name • Approval Letter Reference no. and date	
6.	Whether the software for the proposed Wireless Trading facility is being developed by the In-house team of the member or Non-empanelled vendor	YES / NO
7.	If yes, details of In-house team developing software or Non-empanelled vendor.	
8.	If no, name of Empanelled vendor.	
9.	CTCL ID for using Wireless Trading facility	
10.	Name of the Wireless Trading software with Version no.	
11.	A comprehensive write-up on the system for Wireless Trading to be enclosed. The write-up should include details of user authentication, order management, trade management, risk management etc.	

We confirm and certify that the software for Wireless Trading facility has undergone tests by us and are satisfied and we undertake to comply with and be bound by the Rules, Bye-laws, Regulations of the Exchange and/or 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:

ANNEXURE 19
Application form for In-House CTCL / IBT / WT software development
(On letterhead of the member)

To

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

I/We_____(Name of the Member) hereby apply for use of CTCL / IBT / WT software, developed In-House or CTCL / IBT / WT procured / developed from Non-empanelled vendor.

Sr. #	Particulars	Details
1.	Member ID	
2.	Registered Office/ Correspondence address	
3.	Telephone No (with STD code)	
4.	Fax No	
5.	Name(s) & Designation of Authorised Signatory:	
6.	Contact Details of Authorised Signatory	
7.	Email ID 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 development, system integration and maintenance	Please provide profiles key personnel including education, experience, technical skills etc.
10.	Technical details – Hardware:	
11.	Technical details – Software:	
12.	API required from Exchange: (NonFIX API / FIX API)	
13.	Mode of connectivity between the CTCL server and the CTCL terminal:	
14.	Name of the software	

15.	Software Version No.	

16.	User ID	

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:

ANNEXURE 20

Undertaking for In-house software development by Member for CTCL/IBT/ATF/WT

(To be submitted by member)

I / We,_____, an individual /a firm registered under the Partnership Act, 1932 / a Company / body corporate incorporated under the Companies Act of 1956 /_____Act, 19 , and residing at / having our office/ registered office at _____(hereinafter referred to as the 'Undersigned' which expression shall unless repugnant to the context include her/his / its successors, assigns and legal representatives) give this Undertaking on this_____day of _____20_____ at _____ IN FAVOUR of MULTI COMMODITY

EXCHANGE OF INDIA LTD, a company incorporated under the Companies Act, 1956 and a Commodity Exchange duly recognized by the Central Government having its registered office at Exchange Square Suren Road, Chakala, Andheri (East), Mumbai – 400 093, India (hereinafter referred to as "MCX", which expression shall unless repugnant to the context include its successors, assigns and legal representatives)

WHEREAS,

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

- In addition, MCX provides a Computer – to –Computer Link (hereinafter referred to as the 'CTCL facility') Internet Based Trading (hereinafter referred to as the 'IBT') facility, Algorithmic Trading (hereinafter referred to as the 'ATF') facility and Wireless Trading (hereinafter referred to as the 'WT') facility on CTCL/IBT/ATF/WT software developed in-house by the member / procured from non-empanelled vendor, for order entry, receipt of order and trade confirmation and also for receipt of data relating to its trade quotations.

- MCX has decided that it shall make the CTCL/IBT/ATF/WT facility available to its Members on case to case basis, subject to such terms and conditions as MCX may impose and one of the conditions is that they execute an undertaking in its favor in the format prescribed by it and agree to provide the said facility only to such persons (hereinafter referred to as the "Approved Persons") as MCX may permit and also agree to abide by and be bound by the various terms and conditions which it may prescribe in this regard from time to time.

- I / We have admitted to the Membership of MCX, and am/are desirous of availing the CTCL/IBT/ATF/WT facility by fulfilling all the terms and conditions as may be prescribed by MCX from time to time at its discretion in this regard.

NOW THEREFORE IN CONSIDERATION OF MCX having agreed to allow me / us to avail the CTCL/IBT/ATF/WT facility, I / we hereby IRREVOCABLY AND UNCONDITIONALLY UNDERTAKE and agree to abide by and be bound by the following terms and conditions.

1. That I / We shall make the CTCL/IBT/ATF/WT facility available to the Approved Persons only after obtaining the prior written consent of MCX and subject to such terms and conditions as may be prescribed by MCX from time to time.

2. That in addition to such terms and conditions as may be prescribed under clause (1) by MCX, all the provisions of the Byelaws, Rules, Regulations and Circulars relating to use and operation of the Trading System shall also mutatis mutandis become applicable to the use and operation of the CTCL/IBT/ATF/WT facility.

3. That notwithstanding anything contained in this Undertaking all my / our liabilities and obligations as a Member of MCX shall not be affected nor shall be prejudiced in any manner whatsoever.

4. That without prejudice to the generality of the clause (3) of this Undertaking, I / we shall be responsible to settle all the trades executed by the Approved Persons on my / our behalf whether such trades were executed with or without my permission / knowledge and that I shall be bound to complete / fulfill all my / our obligations / liabilities / commitments arising due to the trades executed by the Approved Persons on my / our behalf, including the trades executed by using CTCL/IBT/ATF/WT facility.

5. That I/We shall abide by, comply with and be bound by the Rules, Bye-laws, Regulations and terms and conditions as applicable for CTCL and/or Internet Based Trading and/or Wireless Trading and/or Algorithmic Trading facility of MCX as in existence or as may be modified / amended by the relevant authority from time to time and any circular, order, direction, notice, instructions issued and / or as maybe modified or amended from time to time by the relevant authority.

6. That MCX, at its discretion, may make the CTCL/IBT/ATF/WT facility available to me / us at MCX address first mentioned above or at any other address as MCX from time to time may notify to me / us or approve as being the location.

7. That MCX shall be entitled to amend its Rules, Bye Laws, Regulations and terms and conditions for CTCL and/or Internet Based Trading and/or Wireless Trading facility unilaterally and I/We shall be deemed to have consented to them, and accordingly be bound by the Rules, Bye-laws, Regulations and terms and conditions for CTCL/IBT/ATF/WT facility prevailing from time to time and MCX shall be entitled to all powers vested in them under the Rules, Bye-laws and Regulations, by which I/We unconditionally agree to be bound.

8. That I/We shall execute, sign, subscribe, to such documents, papers, agreements, covenants, bonds and / or undertakings whether legal or otherwise as maybe required by MCX from time to time.

9. That without prejudice to the rights, remedies whether legal or otherwise available to MCX upon my / our non-compliance with this Undertaking, I/We shall indemnify and keep indemnified MCX and its directors, managers, officers, employees and authorised representatives against any loss / damage suffered by it whether legal or otherwise arising due to non-compliance by me/us with the provisions of this Undertaking.

10. That I / We shall use the physical communication link (s) provided to me / us, for the purpose of having simultaneous access to the CTCL/IBT/ATF/WT facility and TRADING SYSTEM Software.

11. That MCX, at its absolute discretion, may make the CTCL/IBT/ATF/WT facility available to me / us only from the date of my / our enablement on the CTCL/IBT/ATF/WT facility till such time as it may deem fit and further that the CTCL/IBT facility may at any time be withdrawn by MCX at its discretion without giving me / us any notice or any reasons whatsoever.

12. That the CTCL/IBT/ATF/WT facility if made available to me / us by MCX will be made available to me / us by MCX on a non-exclusive basis only and that the same may be made available by MCX, at its discretion, to any other Member whomsoever on such terms and conditions as it may deem fit.

13. That I / We may be entitled by giving one month's written notice to request MCX to withdraw the CTCL/IBT/ATF/WT facility extended to me / we and such withdrawal shall be subject to such terms and conditions as may be prescribed by MCX including payment of such compensation to MCX as may be decided by MCX at its discretion.

14. That I / We shall be responsible and take all such steps, actions and proceedings to ensure and keep ensured that no Approved Persons in any way further makes the CTCL/IBT/ATF/WT facility available to any other person nor shall extend the CTCL/IBT/ATF/WT facility outside his/new premises and that in case I / We fail to ensure the same, MCX shall be empowered to take such action as it may deem fit, which action may include disabling me / us from having access to CTCL/IBT/ATF/WT facility, and taking of such disciplinary actions as it may deem fit.

15. I / we undertake that

a) I / We shall at my / our own expenses provide all lines, cabling, software, hardware, equipment and other communication facilities required for transmission of the data between the Receiving Premises and my / our server at my / our office and also obtain the necessary approvals from relevant authorities.

b) I / We shall ensure that the connectivity of the CTCL/IBT/ATF/WT facility is as per the MCX and Department of Telecommunications (DoT) and/or Mahanagar Telephone Nigam Limited (MTNL) and/or any other appropriate governmental / statutory authority approved network diagram and that I/we shall produce the necessary approvals to MCX in order to meet one of its requirements for enabling me/us for having access to the CTCL/IBT facility.

c) I/We shall be solely responsible for the network infrastructure and connectivity for availing CTCL/IBT/ATF/WT facility made available to me.

d) I / We undertake to ensure that access shall be given only to Approved persons and also a method shall be established to ensure that non-Approved persons cannot access the system.

e) I/We undertake to pay any such license fees/charges/royalties as may be levied by DoT/MTNL/MCX/any other regulatory/statutory authorities from time to time. MCX fees if any for using the CTCL/IBT/WT facility shall be paid in advance.

f) I / we shall ensure that data communication lines between the MCX equipment and my / our equipment will be connected to my / our own and further telecommunication network will be as per the MCX and DoT and/or MTNL and/or any other appropriate governmental / statutory authority approved network diagram.

g) I / We shall indemnify the Exchange against any loss or damage including liabilities arising out of failure to comply with Clause (e) above.

h) I / We shall provide MCX with the Network diagram and as adopted by me / us for having access to the CTCL/IBT/ATF/WT facility between the Receiving Premises and my / our server at my / our office and that we shall also provide MCX with the new network diagram as and whenever any changes are made to the existing Network diagram with the prior written permission of MCX.

i) I / We shall notify MCX giving the details related to the Approved Persons as per circular format described attached hereto for prior approval of MCX and shall acquire the prior written permission from MCX for every additional Approved Person taken subsequently before letting him / her have access to the CTCL/IBT/ATF/WT facility. Further in case an Approved Person is disabled from acting in his / her capacity as such for any reason whatsoever, then I / we shall acquire prior written permission from MCX before appointing any other individual to act as an Approved Person in his / her place.

j) I / We shall make the necessary changes in the software used by me / us for accessing the CTCL/IBT/ATF/WT facility as and when any changes either technical or structural are made by MCX in the CTCL/IBT/ATF/WT facility.

k) I / We shall provide MCX with the Technical Specifications for the software used by me / us for accessing the CTCL/IBT/ATF/WT facility and shall also provide it with the new Technical Specifications for the software as and whenever any changes are made by me / us to the existing software used to access the CTCL/IBT/ATF/WT facility.

l) I / We shall not develop / use any software for accessing the CTCL/IBT/ATF/WT facility, which software in the opinion of MCX shall resemble or result in duplication of TRADING SYSTEM software in any manner and further that no representation shall be made by me / us that the software developed by me / us for accessing the

CTCL/IBT/ATF/WT facility is part of-the TRADING SYSTEM software.

m) I / We shall not assign or otherwise transfer the rights and obligations arising out of the use of the CTCL/IBT/ATF/WT facility and this undertaking whether in whole or in part without the prior written consent of MCX.

n) I / We agree not to use, without the express permission of MCX, the name of MCX to directly or indirectly promote my/ our business.

o) I / We shall not, either by myself / ourselves or through any person acting on my / our behalf, issue / release / publish any advertisement, brochure, pamphlet, booklet, notice or any other promotional material on any aspect relating to the CTCL/IBT facility in any form, whether in writing or otherwise, in accordance to the Code of Advertisement as prescribed by the MCX except with the prior written approval of MCX.

p) I / We agree to obtain prior approval of MCX for change of its activities/operations from existing approved CTCL/IBT/ATF/WT vendor to another.

16. I / We agree that MCX does not warrant that the provision of the CTCL/IBT/ATF/WT facility will be error free or uninterrupted.

17. I / We undertake and agree that

a) I/We shall maintain logs of all trading activities to facilitate audit trail for minimum 3 years and I/We agree to provide such logs to the Exchange / appointed auditors during inspection / audits.

b) I / We shall not under any circumstances match the respective orders entered in by my / our Approved Persons from their terminals by myself / ourselves by using any means whatsoever and that I / we shall route all the orders entered in by my / our Approved Persons to the Trading System of MCX so that they could be matched by the Central Computer of MCX only.

c) I/We shall ensure that the following guidelines on CTCL/IBT/ATF/WT and services would be adhered to:

i. System used by me / us has provision for security, reliability and confidentiality of data through the use of encryption technology.

ii. I / We shall maintain adequate backup systems and data storage capacity and also arrange for alternative means of communications in case of Internet Link failure or any other software failure relating to the Trading System.

iii. Order/Trade confirmation shall be sent to the investor through email at client's discretion at the time period specified by the client in addition to the other mode of display of such confirmations on real time basis on my/our web site. The investor shall be allowed to specify the time interval on the web site itself within which he/she would like to receive this information through email. Facility for reconfirmation of orders which are larger than that specified by the member's risk

management system shall be provided on the internet based system.

iv. I / We shall ensure to have a system based control on the trading limits of clients and exposures taken by clients and also set pre-defined limits on the exposure and turnover of each client. The system will also be capable of assessing risk of the client as soon as the order comes in. The client also to be informed of acceptance/rejection of the order within a reasonable period. Reports on margin requirements, payment and delivery obligations etc to be informed to the clients through the system

v. I/We shall ensure that the following security measures shall be in-built in the system:
- User Id
- First Level Password (Private Code)
- Automatic expiry of passwords at the end of reasonable duration. Reinitialize access on entering fresh passwords.

vi. All transaction logs with proper audit facilities to be maintained in the system.

vii. Secured Socket Layer Security for server access through Internet.

viii. Suitable Firewalls between trading set-ups directly connected to an Exchange trading system and the Internet trading set up.

ix. Shall integrate any advanced level security as specified by MCX from time to time.

x. The following systems operations procedures will be adhered to:
- Shall follow similar logic/priorities used by the Exchange to treat client orders
- Shall maintain all activities / alerts log with audit trail facility
- The Web-server shall have internally generated unique numbering for all client orders/trades

d) I / We shall ensure that on-line surveillance and risk management features like trade-by-trade Position Monitoring etc., shall be inbuilt in the CTCL/IBT facility and it shall be flexible to change as per MCX guidelines.

e) I / We shall not develop or use any software / program facility which shall either directly or indirectly facilitate program trading without prior written approval of the Exchange. For the purpose of this clause the term ‘Algorithmic Trading’ shall mean any software or program facility by the use of which, upon the fulfillment of certain specified parameters, without the necessity of manual entry of orders, buy/sell orders are automatically generated and entered by the software / program facility into the Trading System of MCX to be matched by the central computer.

f) I / We shall not develop or use any software / program which shall either directly or indirectly facilitate orders to cross trades of their clients with each other. All orders shall be offered to the market for matching.

g) MCX shall be possessed with the absolute right to inspect the internal software used / being utilised me / us at any time at its discretion.

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

18. That after the completion of the necessary test and after completely satisfying myself / ourselves that the CTCL/IBT/ATF/WT facility is fault free, I / we shall submit an Acceptance Certificate in the format as specified in circular by MCX in partial fulfillment of one of the conditions of MCX for my / our enablement for having access to the CTCL/IBT/ATF/WT facility.

19. I / We undertake that
    a. will take all necessary steps to ensure that every new software and any change thereupon to the trading and/or risk management functionalities of the software will be tested as per the framework prescribed by SEBI / Exchange before deployment of such new / modified software in Commodity/Securities market.

    b. 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.
    c. the absolute liability arising from failure to comply with the above provisions shall lie entirely with me/us.

20. That Member should arrange to provide demonstration of the IBT software as per the Exchange's convenience. After successful demonstration of the software, MCX would grant permission to Member for the usage of IBT facility.

21. That I/We cannot claim for any direct or indirect damage, costs, and expenses whatsoever arising from the following:-

a) Arising from mechanical or electrical or telephone or network breakdown or power failure or malfunction of any computer and / or / our server and / or any other auxiliary equipment or any other cause beyond the reasonable control of MCX.

b) Based upon special indirect economic or consequential loss or damage including, but not limited to loss of profit, business revenue, opportunity costs, and goodwill or anticipated savings.

c) Caused or contributed to by any event of Force Majeure. For purposes of this Clause, "Force Majeure" means and includes governmental acts, regulatory changes, acts of God or forces of nature, landslides, earthquakes, floods, fire, lightening, explosions, major storm (hurricanes, typhoons, cyclones, tsunami etc.) or major storm warnings, tidal waves, shipwrecks, communication cable

cutting/theft, major telephone exchange failure and perils of navigations, acts of war (declared or undeclared), insurrection, terrorism riots or public enemies, unavailability of public services, strikes, lockouts, acts or omission of sovereign states or those purporting to represent sovereign states, blockades, embargoes, epidemics, quarantines, public disorders, sabotages, accidents, and such other acts or events beyond MCX control, and further the above is without prejudice to the rights already accrued to MCX due to my / our failure to perform either in full or in part, my / our obligations prior to the occurrence of events of Force Majeure.

d) Or any other nature or type.

22. That MCX shall not be liable for any development, maintenance, updates and, upgrades, error-fixes and any other support of my / our software for accessing the CTCL/IBT facility and shall not be liable for any loss suffered by me / us due to the use of the software for accessing the CTCL/IBT/ATF/WT facility.

23. That neither MCX nor the directors, managers, officers, employees or agents of MCX, guarantee the functioning of the CTCL/IBT**/**ATF/WT facility. MCX and the directors, managers, officers, employees and agents of MCX shall not be liable in any way to me / us or to any of my / our Approved Persons or to any other person, for any non-performance or interruption of CTCL/IBT**/**ATF/WT facility or for any damages, consequential or otherwise, arising there from or occasioned thereby. No proceedings would be adopted by me / us or any third party neither against MCX nor against any individual officer or employee of MCX for any act done by such officer or employee of MCX in their official capacity.

24. I / We shall indemnify and keep indemnified MCX harmless against every and all claims, demand, damages, liabilities, losses and expenses suffered by it directly by reason of the provision of the CTCL/IBT**/**ATF/WT facility to me / us or by reason of my / our noncompliance, contravention with the any of the provisions of this Undertaking.

25. That this Undertaking is applicable not only in respect of the information services and terminal equipment currently offered by me / us to Approved Persons but also in respect of any information services and terminal equipment developed by or for me / us in the future, even if I / we should at any time alter my / our mode of supplying information to Approved Persons provided MCX approves in writing of such alteration with all details.

26. That without prejudice to any other right under any law for the time being in force or which may become applicable, MCX shall be vested with the exclusive right, upon my / our non-compliance with any of the terms and conditions of this Undertaking or upon the termination, suspension of my / our Membership or upon my / our ceasing to be a Member of MCX, to take, at its discretion, such actions, steps, proceedings, measures, decisions within such period of time and upon such terms and conditions as it may deem fit and that any such actions, steps, proceedings, measures, decisions may, inter alia, include denial of access to the CTCL/IBT**/**ATF/WT facility and / or take such disciplinary actions as it deems fit. I / we further undertake that I / we shall abide by and be bound by any actions, steps, proceedings, measures, decisions as may be taken by MCX.

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

28. I / We shall treat as confidential all information obtained from MCX pursuant to the arrangement and shall not divulge such information to any person (except to my / our own employees and then only to those employees who need to know the same) without the MCX prior written consent and that I / we shall also ensure that my / our employees are aware of and comply with the provisions of this clause. The foregoing obligations as to confidentiality shall survive any termination of the availability of the CTCL/IBT facility.

29. Any declaration or other notice to be given by me / us to MCX shall be sent by registered letter or telex / cable or facsimile transmission to the registered address.

30. This Undertaking will be binding on my / our successors, legal representatives and permitted assignees.

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

32. A Member shall not advertise or use any software/ program, which may directly or indirectly facilitate matching of orders between or among two or more clients by way of grouping or otherwise. The CTCL/IBT/ATF/WT facility being used by a member shall have inbuilt feature of pushing in all the orders, entered by any of the approved persons only through CTCL/IBT/ATF/WT server of the member for which in turn will push such orders to the trading system of the Exchange, the purpose of execution.

33. A member shall ensure to undertake periodic audit of their CTCL/IBT/ATF/WT systems.

Trading member's undertaking for use of Algorithmic Trading Facility (ATF)

WHEREAS

- MCX also decides to permit the users of CTCL, an ALGORITHMIC TRADING facility (hereinafter referred to as the "ATF facility") which mean any software or facility by the use of which, upon the fulfillment of certain specified parameters, without the necessity of manual entry of orders, buy/sell orders are automatically generated and entered by the software/program facility into the MCX trading system to be matched by the Exchange's system and such permission is subject to terms and conditions as may be specified by MCX from time to time.

- MCX allows to avail the ATF facility by fulfilling all the terms and conditions as may be prescribed from time to time at its discretion.

NOW THEREFORE IN CONSIDERATION OF MCX having agreed to allow me / us to avail the ATF facility, I / we hereby IRREVOCABLY AND UNCONDITIONALLY UNDERTAKE and agree to abide by and be bound by the following terms and conditions.

1. I / We shall use the Algorithmic Trading software approved by the Exchange and the data generated from the same exclusively for trading on MCX trading platform.

2. I/We shall not modify the software/algorithm for ATF facility as approved by MCX without prior approval of MCX.

3. I/We shall obtain prior approval of the Exchange on any modification or change to the approved strategy or software used for ATF facility. I/We shall ensure conformance of such modified strategy or algorithmic trading system to the requirements specified by the Exchange / any other regulatory body (ies) from time to time.

4. I/We agree that I/We will take undertaking from our non-empanelled software vendor on the following points
   a. Software vendor will not implement any software change or modification in the software already installed at Member's end without the change being approved by the Exchange.
   b. Software vendor will not incorporate features / functionalities which are against guidelines of the Exchange / any other regulatory body(ies)

5. I / We agree that MCX shall be entitled to conduct audit / inspection of the ATF facility, at any time in its absolute discretion. MCX officials or MCX appointed auditors can visit our office without prior intimation for the purpose of audit / inspection.

6. I/We confirm that I/We have proper procedures and arrangements to safeguard algorithms from misuse or unauthorised access. I/We undertake to ensure that access shall be given only to authorised persons.

7. I/We agree and confirm that I/We have proper procedures, systems and technical

capability to carry out trading through the use of algorithms.

8. I/We agree and confirm that we have real time monitoring systems to identify dysfunctional algorithms that may not behave as expected and will inform the Exchange immediately in case of such incidents. Further, I/We confirm that we have system to control to shut down such algorithms if identified on immediate basis.

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

10. I/We shall provide details of algorithmic trading strategies to the Exchange wherever required for the purpose of inquiry, surveillance, investigation etc.

11. I/We shall be solely liable and responsible for any monetary losses, damages or other costs and consequences arising in any manner due to algo orders submitted to the Exchange on account of any inadvertent mistake or malfunctioning or failure of our system, including component failure, and shall always keep the Exchange and its official/s indemnified against any loss or damage or compensation etc. Further, I/We shall not hold MCX responsible in any manner whatsoever due to use of ATF Facility.

12. I/We shall ensure that there is no interlink with any system or User ID located / linked outside India.

13. I/We shall be solely responsible and liable for the consequences in case of any breach of this undertaking and MCX shall be entitled to take such appropriate action as deem fit against me/us.

14. I/We shall not extend ATF facility to any other person/entity and/or premises unless I/We obtain prior written permission from MCX.

15. That MCX, at its absolute discretion, shall make the ATF facility available to me / us only from the date of enabling the ATF facility, till such time as it may deem fit and further that the ATF facility may at any time be withdrawn by MCX at its discretion without giving me / us any notice or any reasons whatsoever.

16. I / We shall adhere to SEBI circular CIR/CDMRD/DEICE/03/2015 dated December 11, 2015 and / or undertakings / circulars as may be prescribed or required by MCX / Regulator from time to time.

17. I / We shall also ensure to undertake System Audit of ATF facility by System Auditors as mentioned in this circular and submit the report as per the timeline specified by the Exchange from time to time.

18. I / We shall also ensure to undertake that Algorithmic Trading Terminals will not be provided to my clients for placing Algorithmic orders directly to the Exchange.

Trading Member's Undertaking for Wireless Trading Facility

WHEREAS,

- The Exchange has also allowed its trading members providing/using IBT facility to offer the facility of Trading using Wireless Technology (hereinafter referred to as the 'Wireless Trading'), to its clients subject to submission of this Undertaking.
- We are desirous of providing the Wireless Trading facility to our clients in compliance with relevant Circulars of the Exchange.

NOW THEREFORE IN CONSIDERATION OF EXCHANGE having agreed to allow me / us to avail the Wireless Trading facility, I / we hereby IRREVOCABLY AND UNCONDITIONALLY UNDERTAKE and agree to abide by and be bound by the following terms and conditions

We agree and acknowledge that the Exchange has allowed offering of Wireless Trading facility at its discretion and that it may at any time and at its sole discretion withdraw the privilege offering wireless trading facility.

1. I / We undertake and agree to ensure that there shall be secure access, encryption and security of communication for IBT and wireless trading, in accordance with DOT policy and regulation regarding the level of encryption.
2. I / We undertake and agree to ensure that adequate measures shall be taken for user identification, authentication and access control using means such as user-id, passwords, smart cards, biometric devices or other reliable means, to prevent misuse of facility by unauthorised persons.
3. I / We shall ensure that alternative means of communication for placing orders shall be made to our clients available in case of failure of the wireless network.
4. I / We shall not develop or use any software / program which shall either directly or indirectly facilitate orders to cross trades of their clients with each other. All orders shall be offered to the market for matching.
5. I / We undertake that access for order routing is permitted only through the user of client specific User Ids.
6. I / We undertake that the risk management system takes into account overall positions of clients irrespective of the medium of undertaking and provides a system-based control facility on the trading limits of the clients and exposures taken by the clients.
7. I / We undertake to offer facility of Wireless Trading to any client only after obtaining undertaking from the client that they are fully aware and agree for additional provisions specifying possible risks, responsibilities, obligations and liabilities associated with Wireless Trading as mentioned in this undertaking.
8. I / We shall ensure that the addresses of Internet web site/web page where detailed information would be available, along with the minimum information shall be available on hand held device, as it may not be possible to give detailed information to the investor on a hand held device.

9. I / We undertake that order confirmation shall be provided to the user on submission of the order and also on order modification / cancellation in the handheld device. Trade confirmation shall be provided to the user, along with history of trades for the day.
10. I / We undertake and agree to ensure that Session login details are not stored on the devices used for Wireless Trading.
11. I / We undertake to ensure that Network security protocols and interface standards shall be as per prevalent industry standards and sound audit trails are available for all transactions conducted using wireless devices.
12. I / We shall ensure that server routing orders placed through Wireless Trading System to the exchange trading system shall be located in India.
13. I / We shall ensure to undertake periodical System audit of the Wireless Trading system and software as specified by the Exchange and to submit certificate/report to the Exchange.

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

SIGNED, SEALED AND DELIVERED BY

_____ for and on behalf of _____

_____

Before me

In Presence of Witnesses

Sr. No.	Name	Address	Signature
1.			
2.			

ANNEXURE 21

Application for In-house Development of IBT/WT software by Member using API of Exchange empanelled CTCL vendor

(On letterhead of the member)

To,

CTCL Department

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

I/We_____(Name of the Member) hereby confirm that, we have procured API from the Exchange empanelled CTCL vendor _____for In-house IBT/WT software development for our own use.

Sr. No	**Particulars**	**Details**
1	Name of the IBT Software with version number	
2	Name of the WT Software with version number	
3	Member ID	
4	User ID	
5	Registered Office address	
6	Telephone no	
7	E-mail ID	
8	Technical Details • Hardware • Software	

I / We declare that the information so furnished is true and correct

For
(Name of the Member)

Authorised signatory
(Name and designation)
Date:

ANNEXURE 22
IBT / WT UNDERTAKING
(To be submitted by member)

Trading Member's Undertaking for Internet Based Trading Facility

I / We,_____, an individual /a firm registered under the Partnership Act, 1932 / a Company / body corporate incorporated under the Companies Act of 1956 /_____Act, 19 , and residing at / having our office/ registered office at _____(hereinafter referred to as the 'Undersigned' which expression shall unless repugnant to the context include her/his / its successors, assigns and legal representatives) give this Undertaking on this_____day of _____20_____ at _____ IN FAVOUR of MULTI COMMODITY

EXCHANGE OF INDIA LTD, a company incorporated under the Companies Act, 1956 and a Commodity Exchange duly recognized by the Central Government having its registered office at Exchange Square, CTS No.255, Suren Road, Chakala, Andheri (East), Mumbai – 400 093, India (hereinafter referred to as "MCX", which expression shall unless repugnant to the context include its successors, assigns and legal representatives)

WHEREAS,

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

b) MCX allows their trading members to develop Internet Based Trading (herein after referred to as the 'IBT') software in-house for their internal use after procuring API from Exchange empanelled CTCL vendor and after duly complying with the requirements as may be stipulated by the exchange in this regard.

c) MCX has decided that it shall make the IBT facility available to its Members on case to case basis, subject to such terms and conditions as MCX may impose.

d) MCX, at its discretion, may make the IBT facility available to The Member at MCX address mentioned herein above or at any other address as MCX from time to time may notify as being the location.

e) That MCX, at its absolute discretion and, till such time as it may deem fit, may make the IBT facility available to the Member from the date of the Member's enablement of the IBT facility. Further thereto, the IBT facility may at any time be withdrawn by MCX at its discretion without giving any notice or any reasons whatsoever to the Member.

NOW THEREFORE IN CONSIDERATION OF MCX having agreed to allow me / us to avail the CTCL/IBT facility, I / we hereby IRREVOCABLY AND UNCONDITIONALLY UNDERTAKE and agree to abide by and be bound by the following terms and conditions**:**

1. The Member undertake to make the IBT facility available to the Approved Persons only after obtaining the prior written consent of MCX and subject to such terms and conditions as may be prescribed by MCX from time to time.

2. The Member undertakes that in addition to such terms and conditions as may be prescribed under clause (1) by MCX, all the provisions of the Byelaws, Rules, Regulations and Circulars relating to use and operation of the Trading System shall also mutatis mutandis become applicable to the use and operation of the IBT facility.

3. The Members liabilities and obligations as a Member of MCX shall not be affected nor shall be prejudiced in any manner whatsoever notwithstanding anything contained in this undertaking.

4. That without prejudice to the generality of the clause (3) of this Undertaking, the Member shall be responsible to settle all the trades executed by the Approved Persons on the Members behalf whether such trades were executed with or without the Members permission / knowledge and that the Member shall be bound to complete /

fulfill all the obligations / liabilities / commitments arising due to the trades executed by the Approved Persons on the Members behalf.

5. The Member undertakes that they shall use the established physical communication link (s) provided to the Member, for the purpose of having simultaneous access to both IBT facility and Trading System software.

6. The Member understands that the IBT facility if made available by MCX will be on a non-exclusive basis only and that the same may be made available by MCX, at its discretion, to any other Member whomsoever on such terms and conditions as it may deem fit.

7. The Member undertakes to give one month's written notice to MCX to withdraw the IBT facility extended and such withdrawal shall be subject to such terms and conditions as may be prescribed by MCX including payment of such payments and charges to MCX as may be decided by MCX at its discretion.

8. The Member undertakes to take all such steps, actions and proceedings to ensure and keep ensured that no Approved Persons in any way further makes the IBT facility available to any other person nor shall extend the IBT facility outside his premises and that in the event the Member fail to ensure the same, MCX shall be empowered to take such action as it may deem fit.

9. The Member undertakes to provide at their own expenses provide all lines, cabling, software, hardware, equipment and other communication facilities required for transmission of the data between the Receiving Premises and to the server at the Member's premises and shall also obtain the necessary approvals from relevant authorities.

10. The Member understand that the connectivity of the IBT facility is as per the MCX and Department of Telecommunications of India (DoT) and/or Mahanagar Telephone Nigam Limited (MTNL) and/or any other appropriate governmental / statutory authority approved network diagram and that the Member shall produce the necessary approvals to MCX in order to meet one of its requirements for enabling the Member for access to the IBT facility.

11. The Member undertakes that access shall be given only to Approved persons and also a method shall be established to ensure that non-Approved persons cannot access the system.

12. The Member undertakes to pay any such license fees/charges/royalties as may be levied by DoT/MTNL/MCX/any other regulatory/statutory authorities from time to time. MCX fees if any for using the IBT facility shall be paid in advance.

13. The Member understands that data communication lines between the MCX equipment and to the Member's equipment will be connected by the Member and further telecommunication network will be as per the MCX and DoT of India and/or MTNL and/or any other appropriate governmental / statutory authority approved network

diagram.

14. The Member undertakes to provide MCX with the Network diagram and as adopted by the Member for having access to the IBT facility between the Receiving Premises and to the server at the Member's office and that we shall also provide MCX with the new network diagram as and whenever any changes are made to the existing Network diagram with the prior written permission of MCX.

15. The Member undertakes to make the necessary changes in the software used by the Member for accessing the IBT facility as and when any changes either technical or structural are made by MCX in the IBT facility.

16. The Member undertakes to provide MCX with the Technical Specifications for the software used for accessing the IBT facility and shall also provide it with the new Technical Specifications for the software as and when any changes are made by the Member to the existing software used to access the IBT facility.

17. The Member undertakes not to develop / use any software for accessing the IBT facility, which software in the opinion of MCX shall resemble or result in duplication of TRADING SYSTEM software in any manner and further that no representation shall be made by the Member that the software developed is for accessing the IBT facility is part of-the TRADING SYSTEM software.

18. The Member undertakes not to assign or transfer any rights and obligations arising out of the use of the IBT facility and this undertaking whether in whole or in part without the prior written consent of MCX.

19. The Member undertakes not to use, without the written permission of MCX, the name of MCX for directly or indirectly promoting the business.

20. The Member undertakes that neither they nor through any person acting on the Member's behalf issue / release / publish any advertisement, brochure, pamphlet, booklet, notice or any other promotional material on any aspect relating to the IBT facility in any form, whether in writing or otherwise, in accordance to the Code of Advertisement as prescribed by the MCX except with the prior written approval of MCX.

21. The Member undertakes to obtain the prior written approval of MCX for any changes to be made to the existing network diagram/software.

22. The Member understands that MCX does not warrant the provision of the IBT facility will be error free or uninterrupted.

23. The Member undertake that the following controls shall be inbuilt in the Software to detect any loss of product integrity:

    i. Data validation routines to detect input errors.
    ii. Backup and recovery procedures.

24. The Member undertakes that the IBT facility shall be developed so as to generate the following from the System for the purpose of verification during the inspection:

i. Number of Users connected on to the Network.
ii. Number of Dealers connected on to the Network including privileges to each dealer.
iii. All the systems logs and audit trails of the Dealer and the Member.
iv. Provision for entering complementary dummy orders.

25. The Member undertakes that:

i. The Members shall permit / allow MCX inspection and testing of the software at the Member's site without any prior notice. The source code of the Software shall be available at the Member's site.
ii. The Member undertakes to make available prototype and the technical specifications of the software to MCX for testing purposes.
iii. The Members undertakes the responsibility to fix the bugs in the software if any, found at the time of testing.

26. The Member undertakes that:

a) The Member shall maintain all systems logs and make the same available for inspection by MCX at any time at its discretion.
b) The Member shall not under any circumstances match the respective orders entered in by the Members Approved Persons from their terminals by using any means whatsoever and that the Member shall route all the orders entered in by the Members Approved Persons to the Trading System of MCX so that they could be matched by the Central Computer of MCX only.
c) The Member undertakes that the following guidelines on IBT and services would be adhered to without fail:
    i. System used by the Member has provision for security, reliability and confidentiality of data through the use of encryption technology;
    ii. Member to maintain adequate backup systems and data storage capacity and also arrange for alternative means of communications in case of Internet Link failure.

iii. Order/Trade confirmation shall be sent to the investor through email at client's discretion at the time period specified by the client in addition to the other mode of display of such confirmations on real time basis on the Members web site. The investor shall be allowed to specify the time interval on the web site itself within which he/she would like to receive this information through email. Facility for reconfirmation of orders which are larger than that specified by the member's risk management system shall be provided on the internet based system.
iv. Member to have a system based control on the trading limits of clients and exposures taken by clients and also set pre-defined limits on the exposure and turnover of each client. The system will also be capable of assessing

risk of the client as soon as the order comes in. The client also to be informed of acceptance/rejection of the order within a reasonable period. Reports on margin requirements, payment and delivery obligations etc to be informed to the clients through the system.

v. The following security measures shall be in-built in the system:
   - User Id
   - First Level Password (Private Code)
   - Automatic expiry of passwords at the end of reasonable duration. Reinitialize access on entering fresh passwords.

vi. All transaction logs with proper audit facilities to be maintained in the system.

vii. Secured Socket Layer Security for server access through Internet.

viii. Suitable Firewalls between trading set-up directly connected to an Exchange trading system and the Internet trading set up.

ix. Shall integrate any advanced level security as specified by MCX from time to time.

x. Following systems operations procedures will be adhered to by the Member:
   - Follow similar logic/priorities used by the Exchange to treat client orders.
   - Maintain all activities / alerts log with audit trail facility.
   - The Web-server shall have internally generated unique numbering for all client orders/trades.

d) The Member undertakes that on-line surveillance and risk management features like trade-by-trade Position Monitoring etc., shall be inbuilt in the IBT facility and it shall be flexible to change as per MCX guidelines.

e) The Member undertakes not to develop or use any software / program facility which shall either directly or indirectly facilitate program trading without prior written approval of the Exchange. For the purpose of this clause the term 'Program Trading' shall mean any software or program facility by the use of which, upon the fulfillment of certain specified parameters, without the necessity of manual entry of orders, buy/sell orders are automatically generated and entered by the software / program facility into the Trading System of MCX to be matched by the central computer.

f) The Member undertakes not to develop or use any software / program which shall either directly or indirectly facilitate orders to cross trades of their clients with each other. All orders shall be offered to the market for matching.

g) The member understands that MCX shall be possessed with the absolute right to inspect the internal software used / being utilized by the Member at any time at its discretion.

h) The Member undertakes to render all possible assistance and cooperation to MCX by providing access to any kind of information in any form as it may require and shall produce such documents, records, accounts, books, data howsoever stored including data stored in magnetic tapes, floppy diskettes, etc. and any other information as may be required by MCX at its discretion.

27. That Member undertakes to arrange to provide demonstration of the IBT software at Exchange premises as per the Exchange's convenience. After successful demonstration of the software**,** MCX would approve the software and grant permission to the Member for the usage of IBT software.

28. I / We undertake that

a. Will take all necessary steps to ensure that every new software 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.

b. will ensure that approval of the stock 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.

c. the absolute liability arising from failure to comply with the above provisions shall lie entirely with me/us.

29. The member understands that MCX shall not be liable for any direct or indirect damage, costs, losses, claims and expenses whatsoever caused to the Member or its clients.

Notwithstanding anything contained in this undertaking or elsewhere MCX shall not be liable for any claim, damage, loss:

i. for any damage, costs, losses, claims, expenses and responsible for any liability arising out of this Undertaking or otherwise or because of supply of API.
ii. Arising from mechanical or electrical or telephone or network breakdown or power failure or malfunction of any computer and / or / our server and / or any other auxiliary equipment or any other cause beyond the reasonable control of MCX.
iii. Based upon special indirect economic or consequential loss or damage including, but not limited to loss of profit, business revenue, opportunity costs, and goodwill or anticipated savings.
iv. Caused or contributed to by any event of Force Majeure. For purposes of this Clause, "Force Majeure" means and includes wars, insurrections, revolution, fires, floods, epidemic quarantine restrictions, declared general strikes in

relevant industries, act of God, act of the Government of India and any concerned State Government and such other acts or events beyond MCX control, and further the above is without prejudice to the rights already accrued to MCX due to the Members failure to perform either in full or in part, the Members obligations prior to the occurrence of events of Force Majeure.

v. Or any other nature or type.

30. The member understands that MCX shall not be responsible for development, maintenance, updates, upgrades, error-fixes and any other support of the Members software for accessing the IBT facility and shall not be liable for any loss suffered by the Member due to the use of the software for accessing the IBT facility.

31. The Member also confirm that they have not obtained nor applied for any other User ID in the names of the Approved Person/User/s and that the User ID allotted shall be utilized by the Approved Person/user/s only to access the MCX trading system.

32. The Member understand that this undertaking is in respect of not only the information services and terminal equipment currently offered by the Member to Approved Persons but also in respect of any information services and terminal equipment developed by or for the Member in the future, even if the Member should at any time alter the mode of supplying information to Approved Persons provided MCX approves in writing of such alteration with all details.

33. The Member understands that neither MCX nor the directors, managers, officers, employees or agents of MCX, guarantee the functioning of the IBT facility. MCX and the directors, managers, officers, employees and agents of MCX shall not be liable in any way to the Member or to any of the Member's Approved Persons or to any other person, for any non-performance or interruption of IBT facility or for any damages, consequential or otherwise, arising there from or occasioned thereby. The Member undertake that no proceedings would be adopted by the Member neither against MCX nor against any individual officer or employee of MCX for any act done by such officer or employee of MCX in their official capacity.

34. The Member shall indemnify and keep indemnified its directors, managers, officers, employees harmless against every and all claims, demand, damages, liabilities, losses and expenses suffered by it directly by reason of the provision of the IBT facility to the Member or by reason of non-compliance, contravention with the any of the provisions of this Undertaking.

35. The Member understands that this Undertaking is applicable not only in respect of the information services and terminal equipment currently offered by the Member to Approved Persons but also in respect of any information services and terminal equipment developed by the Member in the future, even if the Member should at any time alter the mode of supplying information to Approved Persons provided MCX approves in writing of such alteration with all details.

36. The Members acknowledge and understand that without prejudice to any other right under any law for the time being in force or which may become applicable, MCX shall

be vested with the exclusive right, upon the Members non-compliance with any of the terms and conditions of this Undertaking or upon the termination, suspension of the Members Membership or upon the Members ceasing to be a Trading cum Clearing Member of MCX, to take, at its discretion, such actions, steps, proceedings, measures, decisions within such period of time and upon such terms and conditions as it may deem fit and that any such actions, steps, proceedings, measures, decisions may, inter alia, include denial of access to the IBT facility and / or take such disciplinary actions as it deems fit. The Member further undertake that the Member shall abide by and be bound by any actions, steps, proceedings, measures, decisions as may be taken by MCX.

37. The Member undertakes to receive the latest API version from the vendor, on any change in the API version, and incorporate necessary changes in the software as per the requirement of the Exchange. The Member is required to give a comprehensive demonstration of the IBT software on any modification/change in the IBT software.

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

39. The Member undertakes to treat as confidential all information obtained from MCX pursuant to the arrangement and shall not divulge such information to any person (except those employees who need to know the same) without the MCX prior written consent and that the Member shall also ensure that the employees are aware of and comply with the provisions of this clause. The foregoing obligations as to confidentiality shall survive any termination of the availability of the IBT facility.

40. The Member undertakes to execute, sign, and subscribe, to such others documents, papers, agreement, covenants, bonds, and / or undertakings as may be prescribed or required by MCX from time to time.

41. The Member undertakes to make any modification / amendment as required by MCX to be made from time to time by the Member during the continuation of the Agreement, if any.

<u>Trading Member's Undertaking for Wireless Trading Facility</u>

WHEREAS,

- MCX allows their trading members to develop Wireless Trading (herein after referred to as the "WT") software in-house for their internal use after procuring API from Exchange empanelled CTCL vendor and after duly complying with the requirements as may be stipulated by the exchange in this regard.
- We are desirous of providing the Wireless Trading facility to our clients in compliance with relevant Circulars of the Exchange.
- MCX has decided that it shall make the WT facility available to its Members on case to case basis, subject to such terms and conditions as MCX may impose.

- That MCX, at its absolute discretion and, till such time as it may deem fit, may make the WT facility available to the Member from the date of the Member's enablement of the WT facility. Further thereto, the WT facility may at any time be withdrawn by MCX at its discretion without giving any notice or any reasons whatsoever to the Member.

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

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 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.
3. I / We undertake and agree to ensure that adequate measures shall be taken for user identification, authentication and access control using means such as user-id, passwords, smart cards, biometric devices or other reliable means, to prevent misuse of facility by unauthorised persons.
4. 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.
5. I / We shall not develop or use any software / program which shall either directly or indirectly facilitate orders to cross trades of their clients with each other. All orders shall be offered to the market for matching.
6. I / We undertake that access for order routing is permitted only through the user of client specific User Ids.
7. I / We undertake that the risk management system takes into account overall positions of clients irrespective of the medium of undertaking and provides a system-based control facility on the trading limits of the clients and exposures taken by the clients.
8. I / We undertake to offer facility of Wireless Trading to any client only after obtaining undertaking from the client that they are fully aware and agree for additional provisions specifying possible risks, responsibilities, obligations and liabilities associated with Wireless Trading as mentioned in this undertaking.
9. I / We shall ensure that the addresses of Internet web site/web page where detailed information would be available, along with the minimum information shall be available on hand held device, as it may not be possible to give detailed information to the investor on a hand held device.
10. I / We undertake that order confirmation shall be provided to the user on submission of the order and also on order modification / cancellation in the handheld device.

Trade confirmation shall be provided to the user, along with history of trades for the day.

11. I / We undertake and agree to ensure that Session login details are not stored on the devices used for Wireless Trading.
12. 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.
13. I / We shall ensure that server routing orders placed through Wireless Trading System to the exchange trading system shall be located in India.
14. 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.

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

SIGNED, SEALED AND DELIVERED BY

_____ for and on behalf of _____

_____

Before me

In Presence of Witnesses

Sr. No.	Name	Address	Signature
1.			
2.			

ANNEXURE 23
Letter from Exchange empanelled CTCL vendor
(On letterhead of the vendor)

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

Sub : Application Program Interface (API) to_____(Member Name)

I/We_____ (Name of the

Exchange empanelled CTCL vendor) hereby confirm that, we have provided API version_____to the Member_____for In-house development of IBT / WT software for their own use.

I/We undertake the responsibility that whenever there is any change in the API or a new version of the API is released, we will inform the same to the aforesaid member in advance and will ensure that the member is informed about the date of implementation of the software.

Sr. No	Particulars	Details
1	Registered Office address	
2	Telephone no	
3	E-mail ID	

I / We declare that the information so furnished is true and correct

For
(Name of the empanelled vendor)

Authorised signatory
(Name and designation)
Date:

ANNEXURE 24
Application Form for use of Algorithmic Trading (Algo)
(On the letter head of the member)

To

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

Dear Sir,

I / We_____(Name of member) hereby request approval of the Exchange for using Algorithmic Trading Facility (ATF)

Sr. #	Particulars	Details
1.	Member Id	
2.	Member's Registered Office address	
3.	ATF Software Name with version number	
4.	ATF Strategy Name with version number. number (A write-up on Algo to be provided on letterhead of the member)	
5.	Empanelled Vendor Name / In-house/ Name of Non-Empanelled vendor	
6.	API Type (FIX or Non FIX)	
7.	Technical Details a) Hardware b) Software	
8.	Telephone No (with STD code)	
9.	Contact Person Name	
10.	Contact Person – Telephone No. & Mobile No.	
11.	Email ID of contact Person	
12.	Address of the office where ATF Server is hosted	
13.	User ID for ATF	

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 / any other

regulatory body(ies). We undertake to comply with and be bound by the Rules, Bye-laws, Regulations of the Exchange / any other 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 /demonstration related to Algorithmic trading at any time as it may deem fit.

Stamp & Signature of the authorised representative of the Member

Date:
Place:

ANNEXURE 25

Application form for deactivating CTCL / IBT / Wireless Trading (WT) / Algorithmic Trading Facility (ATF)

(On letterhead of the member)

To

CTCL Department

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

I/We_____(Name of the Member) hereby apply for deactivating following facility from the User ID.

Sr. #	Particulars	Details
1.	Member ID	
2.	Registered Office/ Correspondence address	
3.	Facility to be deactivated (CTCL / IBT /WT / ATF)	
4.	User ID	
5.	Name of Empanelled Vendor / In-house	
6.	Contact Details of Authorised Signatory	
7.	Email ID of Authorised Signatory	

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:

ANNEXURE 26
Application for modification in approved CTCL Software
(On letterhead of the Member)

To,

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

Dear Sir,

I/We_____(Name of Trading Member) do hereby communicate that we have done necessary testing and participated in mock trading session and are satisfied with the following product.

Sr. #	Particulars	Details
9.	Type of software (CTCL/IBT/WT/ATF)	
10.	Name of Existing Software and/or Strategy with version number	
11.	Name of Modified Software and/or Strategy with version number	
12.	Empanelled Vendor Name / In-house	
13.	Member's Registered Office address	
14.	Telephone No (with STD code)	
15.	Fax No	
16.	Contact Person Name	
17.	Contact Person – Telephone No. & Mobile No.	
18.	Contact Person- Email ID	
19.	User ID	

For (Name of the Member)

Authorised Signatory
(Name and designation)

Date:
Place:

ANNEXURE 27

System Audit Report – Format

(On the letterhead of system auditor)

Date:

Name of Trading Member:
Member Id:

1. **IBT Audit Checklist (Part I & Part II)**
2. **Wireless Trading Audit Checklist (Part I & Part III) Part I**

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

<table><tr><td>Particulars</td><td>Name</td><td>Version No.</td></tr><tr><td>Application Software</td><td></td><td></td></tr><tr><td>Software developed by</td><td></td><td></td></tr><tr><td>Gateway</td><td></td><td></td></tr><tr><td>Risk Administration / Manager</td><td></td><td></td></tr><tr><td>Front End / Order Placement / Algo Strategy</td><td></td><td></td></tr><tr><td>Database details</td><td></td><td></td></tr></table></td><td></td><td></td></tr>
<tr><td>2.</td><td>The installed system features are as prescribed by MCX.

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

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

Order Processing :
The system has a feature:</td><td></td><td></td></tr>
</table>

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	a) Which allows order entry and confirmation of orders b) Which allows for modification or cancellation of orders placed Trade Confirmation: The system has a feature which enables confirmation of trades.		
3.	**The installed system provides a system based control facility over the order input process** Order Entry The system has order placement controls that allow only orders matching the system parameters to be placed. Order Modification The system allows for modification of orders placed. Order Cancellation The system allows for cancellation of orders placed Order Outstanding Check The system has a feature for checking the outstanding orders i.e. the orders that have not yet traded or partially traded.		
4.	**The installed system provides a system based control facility over the trade confirmation process** Trade Confirmation and Reporting Feature Should allow confirmation and reporting of the orders that have resulted in trade		
5.	**The installed system provides a system based control facility over the order input process** Order Matching Does the System pass all the Orders to the trading platform of the Exchange for execution and not allow any crossing of orders that are routed through it?		
6.	The System generates appropriate audit logs and trails so as to facilitate tracking of events such as orders and trades with timestamp.		

7.	**The installed system allows for placing of orders only for authorized clients**		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	Client ID Verification Only duly authorized client's orders are allowed to be placed. Proprietary order entry mechanism Order entry for Pro types of orders is executed through specific User Ids. The system should not in any manner suggest to the user by default the name of Exchange, Scrip and Segment etc. It is the user who should have the option to select the same.		
8.	**The installed system has a User Management system as per the requirements of MCX.** Approved Users: Only users approved by MCX are allowed to access the system and documentation regarding the same is maintained in the form of a) User Approval Application b) Copy of User Qualifications User Creation: New User IDs are created as per the CTCL guidelines. User ID: All users are uniquely identified through issue of unique CTCL ids. User Disablement: Users not compliant with the Exchange Requirements are disabled and event logs maintained User Deletion: Users are deleted as per the MCX guidelines Reissue of User Ids: User Ids are reissued as per the MCX guidelines. Locked User Accounts: Users whose accounts are locked are unlocked only after documented unlocking requests are made.		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
9.	User management and authentication mechanism o Whether user management, password policy and procedures are documented? o Whether registration and de-registration of user IDs are carried out as per the approved policy? o Whether system has facility to manage users and roles assigned to them? o Whether system allows access to only authorised users? o Whether system has User ID and Password combination authentication mechanism which allows access only after providing valid details? o Whether system requests for identification and new password before login into the system? o Whether system allows access to functionality / module for which they are authorised?		
10.	Whether all successful and failed login attempts are logged with details like IP address and other data to enable traceability (optional)		
B	**Risk Management System**	Results	Opinions
11.	**The installed system is capable of assessing the risk of the client as soon as the order comes in and informs the client of acceptance/rejection of the order within a reasonable period.** Should allow for risk management of the orders placed and online risk monitoring of the orders being placed. Order Parameters There is online risk assessment of all orders placed through the system.		
12.	Whether the system carries out appropriate validations of the following risk parameters including Credit checks before the orders are released to the Exchange: a) Exposure limit b) Margin limit c) Order Quantity Limits d) Order Value Limits e) Daily Price Range Checks f) Cumulative limit on value of unexecuted orders		

13.	**The installed system provides a system based event logging and system monitoring facility which monitors and logs all activities / events arising**		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	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 MCX and includes Number of Users Logged In / hooked on to the network incl. privileges of each The installed systems has a provision for off line monitoring and risk management as per the requirements of MCX and includes reports / logs on a) Number of Authorized Users b) Activity logs c) Systems logs d) Number of active clients		
14.	**The installed system provides a system based control facility on the trading limits of the clients and exposures taken by the clients including set pre-defined limits on the exposure and turnover of each client.** Only orders that are within the parameters specified by the risk management systems are allowed to be placed.		
15.	System-based control on the pre-defined trading limits set by the Member.		
16.	**The installed system provides for reconfirmation of orders which are larger than that as specified by the member's risk management system.** Whether system has a manual override facility for allowing orders that do not fit the system based risk control parameters?		
17.	Facility to prompt the user when he puts in orders that are over and above the normal limits set by the Member.		
C	**Session Security**	Results	Options

18.	Whether system has secure end-to-end encryption for all data transmission between the client and the member system through a Secure Standardized Protocol.		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	A procedure of mutual authentication between the client and the member server is implemented?		
19.	**The installed system provides for session security f o r all sessions established with the server by the front end application.** a) The system uses session identification and authentication measures to restrict sessions to authorized user only. b) The system uses session security measures like encryption to ensure confidentiality of sessions initiated.		
20.	**The installed system has provision for security, reliability and confidentiality of data through use of encryption technology, SSL or similar session confidentiality protection mechanisms** a) The system uses SSL or similar session confidentiality protection mechanisms b) The system uses a secure storage mechanism for storing of usernames and passwords c) The system adequately protects the confidentiality of the user's trade data.		
D	**Password Security**	Results	Options
21.	**The installed system Authentication mechanism is as per the guidelines of the MCX** a) The installed system uses passwords for authentication. b) The system requests for identification and new password before login into the system. c) The Password is masked at the time of entry.		
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.		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
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/Client is deactivated if the same is not used for a continuous period of 12 (Twelve) months from date of last use of the account.		
32.	System allows user to change their passwords at their discretion and frequency.		
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	Options
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 MCX?		
39.	**Firewall** Whether suitable firewalls are implemented? Is specific port / services access granted on firewall by following a proper approval process?		
40.	**Anti-virus** Is a malicious code protection system implemented? If Yes, then are the definition files up-to-date? How frequently does antivirus patches are updated? Any instances of infection? Last date of virus check of entire system.		

41.	**Additional Access Control Security** **The installed system provides a dual factor**		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	authentication system for access to the various components. Extra Authentication Security The systems uses additional authentication measures like smart cards, biometric authentication or tokens etc. The system has a second level of password control for critical features. Whether adequate controls have been implemented for admission of personnel into the server rooms / place where algo servers are located and whether audit trails of all the entries / exits at the server room / locations are maintained?		
F	**Backup & Recovery Procedures**	Results	Options
42.	Does the organization's documented policy include a backup policy and 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 capabilities?		
44.	**The Installed systems backup capability is adequate as per the requirements of the MCX for overcoming loss of product integrity.** Are backups of the following system generated files maintained as per the MCX guidelines? a) At the server/gateway level b) Database c) Audit Trails Reports At the user level a) Market Watch b) Logs c) History d) Reports e) Audit Trails Are backup procedures documented and backup logs maintained? Are the backup logs maintained and are the backups		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	been verified and tested? Are the backup media stored safely in line with the risk involved? Are there any recovery procedures and have the same been tested?		
G	**Business Continuity & Disaster Recovery Procedures**	Results	Options
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 on regular basis? Are there any documented incident response procedures? Are there any documented risk assessments? Does the installation have a Call List for emergencies maintained? Whether redundancy is built at all level of infrastructure? Whether all critical systems / infrastructure are in HA mode?		
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 MCX? Is the backup network link adequate in case of failure of the primary link connecting the users?		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	Whether detailed network diagram is prepared and available for verification? Is network and network diagram in line with the one submitted to the Exchange?		
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 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.		
H	**Operational Integrity**	Results	Options
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**		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	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 MCX requirements must be established, implemented and maintained.** Does the organization's documented policy and procedures include the following policies and if so are they in line with the MCX requirements? a) Information Security Policy b) Password Policy / Standards c) User Management and Access Control Policy d) Network Security Policy e) Application Software Policy f) Change Management Policy g) Incident Management Policy h) Version & Patch Management Policy i) Backup & Restoration Policy j) BCP and Response Management Policy k) Audit Trail Policy Does the organization follow any other policy or procedures or documented practices that are relevant? o Whether member has proper procedures, systems and technical capability to carry out trading though CTCL software? o Whether member has proper procedure in place to report any abnormal incident to the Exchange on immediate basis? o Whether system has sufficient security features		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	including password protection for User ID, automatic expiry of password at the end of a reasonable duration and re-initialisation of access on entering fresh password? o Whether any changes / upgrades done to the CTCL software and system only after approval by the Exchange o Whether version and patch management controls are in place? o Whether approvals are in place for all the changes during the audit period? o Whether all backup is available for minimum period of 3 years o Whether backup logs are maintained? o Have backup been verified and tested? o Are there any recovery procedure and have the same been tested? o Whether backup media is stored safely? o Whether Members have defined and implemented recovery procedures to recover system and data from any unforeseen events / disaster? o Whether recovery procedures are tested regularly?		
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 Begins Day Ends Other system processes a) Audit Trails b) Access Logs c) Transaction Logs d) Backup Logs e) Alert Logs f) Activity Logs g) Retention Period h) Data Maintenance		

55.	**In case of failure, is there an escalation procedure implemented?** Day Begin		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	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	Options
57.	**Insurance (optional)** The insurance policy of the Member covers the		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	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** 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** a) The installed system has sufficient controls over the access to and integrity of the database. b) The access to the database is allowed only to authorized users / applications. c) The database is hosted on a secure platform. d) The database stores the user names / passwords securely. e) Whether database is hardened with latest security guidelines.		
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	Options

64.	**Verification of software testing done by Member in Exchange provided Test environment**		

<table>
<tr><th>Sr. No.</th><th>Area of Audit</th><th>Results & Observations</th><th>Auditor's Remark</th></tr>
<tr><td></td><td>Whether member has tested the Software in Exchange provided Test Environment

Details
a) No. of days software has been tested by member in Exchange provided Test environment
b) Member Id & User Id used by member for testing in the Exchange provided Test environment

Whether any abnormalities observed in the verification of Logs, Reports, Audit Trail and Database of the tests performed by member in Exchange provided Test environment</td><td></td><td></td></tr>
<tr><td>65.</td><td>Verification of participation by Member in Periodic Mock Session / Simulated Trading Environment conducted by Exchange

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

Details<table><tr><th>Sr.#</th><th>Mock/Simulated Trading Date</th><th>Segment</th><th>User ID</th><th>CTCL/IBT/WT/ATF</th></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></table>
Whether any abnormalities observed in the verification of Logs, Reports, Audit Trail and Database of the tests performed by member while participating in Periodic Mock Trading session conducted by Exchange</td><td></td><td></td></tr>
</table>

PART II

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
A.	**System Features & Functionality**	Results	Opinions

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
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) Price (Ensure DPR -price band / circuit limit and minimum tick size as allowed by Exchange) Execution status System captures the IP address (from where the orders are originating) for all IBT orders		
4.	Is the trade confirmation sent to the client via SMS/e-mail?		
5.	Can the IBT client choose the interval of receiving the e-mail?		
6.	Whether a unique identification number as prescribed by Exchange (i.e. 111111111111 in CTCL Unique number) is sent with each IBT Order?		
7.	Two-factor authentication for login session has been implemented for all IBT orders emanating using Internet Protocol?		
8.	Member ensures that a specific email id to receive emails is communicated to all clients.		
9.	Member has documented and implemented a procedure to escalate the issue if the email is not responded within one working day.		

B.	**Risk Management System**	Results	Opinions

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
10.	Whether System-based control is implemented by the Member for the Margin, Order Quantity and Value?		
11.	IBT Member shall ensure that logic / priorities used by the Exchange are followed by the System for treating IBT Client Orders.		
C.	**Session Security**	Results	Opinions
12.	In case of no activity by the IBT client, the system provides for automatic trading session logout after a configurable time period (as determined by the system).		
13.	Whether system use session identification and authentication measures to restrict sessions to authorized user only?		
D.	**Password Security**	**Results**	**Opinions**
14.	Does the organization's policy and procedure document have an access control policy for users of the service?		
15.	Whether all successful and failed login attempts are logged with details like IP address, MAC address and other data to enable traceability		
E.	**Network Security**	**Results**	**Opinions**
16.	Whether the web server is kept separate of the application and database server?		
17.	Whether suitable firewalls are present between the member trading setup and internet?		
F.	**Operational Integrity**	**Results**	**Opinions**
18.	The IBT member ensures that a specific email id to receive mails from IBT Clients is communicated to all clients.		
19.	Member has documented and implemented a procedure to escalate the issue if the email is not responded within one working day.		
G.	**Approvals, Undertaking, Policies and Other Area**	**Results**	**Opinions**
20.	Display of Investor protection rule, Arbitration rule and rules effecting member - client relationship on approved IBT member's website.		
21.	The web site of IBT approved member provides and displays prominently hyper link to the web site/page on the web site of the MCX displaying rules/Business Rules/circulars.		

PART III

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
A.	**System Features & Functionality**	Results	Opinions

1.	The installed Wireless Trading system provides a system based control facility over the trade		

Sr. No.	Area of Audit	Results & Observations	Auditor's Remark
	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 (i.e. 333333333333 in CTCL Unique number) is sent with each Order originating from a wireless device?		
4.	Whether audit trails are provided to the user on the wireless device?		
B.	**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.		

Summary Sheet

Sr. No.	Area of Audit	Control / Processes	Compliance S / M / W	Report Referenc
1.	System Features &	Gateway & System Parameters		

Sr. No.	Area of Audit	Control / Processes	Compliance S / M / W	Report Referenc
	Functionality	Application Features		
		Order Management / Identification		
2.	Risk Management System	Application Features		
		System Parameters		
		Monitoring System		
3.	Session Security	Session Security Parameters		
		Encryption Technologies		
4.	Password Security	Policies & Procedures		
		Password Management		
5.	Infrastructure & Capacity Management	Network & Redundant Connectivity		
		Scalability		
		Dependability		
6.	Backup & Recovery Procedures	Policies & Procedures		
		Backup & Archival process		
7.	Business Continuity & Disaster Recovery	Policies & Procedures		
		System Failure Backup		
		Disaster Recovery		
8.	Operational Integrity	Server Room / Network Room / Information Security		
		Qualified Personnel & Problem Escalation		
		Change Management		
		Audit Trail Management		
		Software Access Management		
9.	Vulnerability Assessment	Database		
		Operating System		
10.	Software Testing	Testing in Exchange provided Test environment		
		Testing & participation in Exchange conducted Mock		
11.	Any Other area/aspect which in the auditors opinion is not complied with and which is significant and material in relation to the size and the nature of the operations			

Overall rating for the Member's software and system:

(Strong / Medium / Weak)

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

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

_____

Signature
(Name of the Auditor & Auditing firm) CISA / DISA / CISM / CISSP Reg. No. :
Date:
Place:
Stamp/Seal:

Note: Process Area Controls Evaluation Criteria

Control Evaluation Criteria	Description
Strong (S)	The controls are defined as Strong if the following criteria are met Implemented controls fully comply with the stated objectives and no material weaknesses are found.
Medium (M)	The controls are defined as Medium if the following criteria are met Implemented controls substantially comply with the stated objectives and no material weakness result in substantial risk exposure due to the non-compliance with the criteria Compensatory controls exist which reduce the risk exposure to make it immaterial vis-à-vis the non-compliance with the criteria.
Weak (W)	The controls are defined as Weak if the following criteria are met Implemented controls materially fail to comply with the stated control objectives. Compensating controls fail to reduce the risk so as to make it immaterial vis-à-vis the non-compliance with the compliance criteria.

ANNEXURE 28

System Auditors' Certificate

(On the letterhead of System Auditor)

To

CTCL Department

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

It is hereby confirmed and certified that_____, a member of Multi Commodity Exchange of India Limited ('Exchange') has successfully completed the testing of all areas as laid down by the Exchange for the below mentioned 'CTCL Software'. The software and system have capacity to meet all requirements of the Exchange and SEBI as on date.

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

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

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

Whether any abnormalities observed in the verification of Logs, Reports, Audit Trail and Database of the tests performed by member in Exchange provided Test environment</td><td></td></tr>
<tr><td>3.</td><td>Verification of participation by Member in Mock Trading or in the simulated environment session conducted by Exchange
Tested in Mock or Simulated Environment:

<table>
<tr><td>Mock / Simulated Trading Date</td><td>Segment</td><td>User ID</td><td>CTCL/IBT/ATF/WT</td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
</table>
Whether any abnormalities observed in the verification of Logs, Reports, Audit Trail and Database of the tests performed by member while</td><td></td></tr>
</table>

	participating in Mock/Simulated Environment Trading session conducted by Exchange	
4.		

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

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

Signature
(Name of the Auditor & Auditing firm) CISA / DISA / CISM / CISSP Reg. No. :
Date:
Place:
Stamp/Seal:

ANNEXURE 29

Application of Empanelment as an Application Service Provider (ASP)

(to be provided on letter head of the ASP)

BASIC DETAILS:

Sr. #	Particulars	Details
1.	Applicant Name	
2.	Application for empanelment for: (CTCL / IBT / WT)	
3.	API required from Exchange: (NonFIX API / FIX API)	
4.	Registered Address	
5.	Telephone No.	
6.	Fax No	
7.	Name(s) & Designation of Authorised Signatory	
8.	Telephone No. of Authorised Signatory	
9.	Correspondence Address	
10.	Telephone No.	
11.	Fax No	

ORGANISATION DETAILS

Sr. #	Particulars	Details
1.	Organizational Structure	
2.	Promoters / Directors and their brief profile	

3.	Total Staff	
4.	No. of offices	
5.	ASP solution hosting location (Primary)	
6.	ASP solution hosting location (DR Site)	
7.	ASP Solution used for any other Exchange	

TECHNICAL DETAILS

Complete details of IT Infra Hardware:- Software:- Network:-	
Solution Architecture Diagram	

Solution details with brief write-up on following area • Functionality of the system • Details on Risk Management System of the Solution • Provisions for system redundancy, fault tolerance and load balancing • Database redundancy and standby databases (hot standby / cold standby) • Provisions to monitor system capacity and scalability of system on capacity utilisation • Provisions for back-up systems and data storage • Contingency planning in case of technical failure and capacity planning (including periodic evaluation of capacity based on historical and anticipated volumes) should be documented and be available for inspection • Alternate means of communication with the Exchange in case of primary mode of connectivity failure	

Security Requirements with brief write-up on following area • Physical security of hardware / systems at hosting location and controls on admission of personnel into location. • Access control of staff to system. Audit trail of all access by staff. • Maker – Checker for critical functions. • Authentication Mechanism • Password Policy and Encryption of passwords. • Security, reliability and confidentiality of data related to members and clients. Provisions to ensure that a member / client can see data only pertaining to himself and no other members / clients. • Integrity of the data - records maintained in electronic form should not be susceptible to manipulation • Logs of all activities / transaction to be maintained with proper audit facilities • Secured Socket Layer access through Internet – certified by an approved Certifying Authority • Firewalls between Internet and trading set-up • Other security provisions, if any	
Facilities for call center / Help Desk	

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

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

Date

Place:

ANNEXURE 30
Undertaking for ASP

I / We_____, an individual / a firm / company / a body corporate/ registered under the Indian Partnership Act, 1932 / a Company / Body Corporate incorporated under the Companies Act of 1956/ _____ Act, ___, and residing at / having our registered office at

_____ (hereinafter referred to as the "_____" which expression shall, unless repugnant to the context or meaning thereof, be deemed to mean and include his/her/its successors, and permitted assigns) give this UNDERTAKING on this_____day of_____20_____at_____IN FAVOUR OF Multi Commodity Exchange of India Ltd, a company incorporated under the Companies Act, 1956, with its Registered Office at Exchange Square, CTS No.255, Suren Road, Chakala, Andheri (East), Mumbai – 400 093 (hereinafter called 'MCX') (hereinafter referred to as the "**EXCHANGE**" which expression shall, unless repugnant to the context or meaning thereof, be deemed to mean and include its successors, and permitted assigns).

WHEREAS

a) MCX has provided Trading software to enable its members to trade.

b) MCX, provides a Computer to Computer Link Facility (hereinafter referred to as the "CTCL facility") by which it provides a facility for order entry, receipt of order and trade confirmation and also for receipt of data relating to its trade quotations etc.

c) The Trading Members may introduce Internet Based Trading through order routing system for trading (hereinafter referred to as "IBT facility") and Wireless Trading through order routing system for trading (hereinafter referred to as "WT facility"), after obtaining prior written permission from MCX.

d) MCX has decided that it shall make the CTCL Facility available to its Trading Members / grant permission to Trading Members to offer IBT and/or WT facility on a case to case basis subject to such terms and conditions as MCX may impose from time to time.

e) Trading Members may develop the necessary software at their end for the purposes of CTCL facility/ IBT facility /WT facility or procure the same from such of those software vendors as may be identified by MCX, or avail of the services provided by service providers to facilitate IBT/ WT, after duly complying with the requirements as may be stipulated by MCX in this regard from time to time.

f) MCX has decided that the service providers shall be identified for this purpose, based on the application received from them and subject to fulfillment of such criteria as may be prescribed by MCX from time to time, and subject to such service provider executing an Undertaking in favour of MCX in the format prescribed by it and agreeing to abide by and be bound by the various terms and conditions which MCX may prescribe from time to time.

g) MCX has agreed to identify me / us as a service provider for the above purpose and I / we am/are desirous of providing such services (which may, *inter-alia,* include software /

hardware / other infrastructure) to the Trading Member to enable the Trading Member to avail of the CTCL facility and/or IBT facility and/or WT facility, and shall fulfill all the terms and conditions as may be prescribed by MCX from time to time at its discretion in this regard.

NOW THEREFORE IN CONSIDERATION OF MCX having agreed to identify / identified me / us as a service provider for the aforesaid purposes, I / we hereby IRREVOCABLY UNDERTAKE and agree to abide by and be bound by the following terms and conditions:

1. I/We shall ensure that the connectivity of the CTCL facility and/or IBT facility and/or WT facility is as per MCX and Department of Telecommunications (DOT) approved network diagram of the CTCL facility and/or IBT facility and/or WT facility.

2. I/We undertake to pay any such license fees/charges/royalties as may be levied by MCX or any other regulatory/statutory authorities from time to time.

3. I/We shall provide the service to the Trading Member of MCX only after duly ensuring that all the requirements stipulated by MCX in this regard have been complied with by the Trading Member and that the Approved Users of the Trading Member shall not make the CTCL facility and/or IBT facility and/or WT facility available to any unauthorised person.

4. I/We undertake to ensure that the connectivity between the Trading Member and MCX shall be used only for application of the CTCL facility and/or IBT facility and/or WT facility.

5. I/We undertake to obtain the prior written approval of MCX for any changes to be made to the existing network diagram / software.

6. I/We undertake to ensure that access shall be given only to the individuals authorised and also a method shall be established to maintain an audit trail of all access and to ensure that unauthorised persons cannot access the system.

7. I/We undertake that the software design shall use only the specified messages given by MCX and shall consider all the structures defined by MCX from time to time. The Deliverables shall be:
   a. Basic functionalities as and when required by MCX
   b. Customisation of Trading Members needs as approved by MCX

8. I/We also undertake that the Software shall provide all the essential functions as may be prescribed by MCX from time to time.

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

10. I/We shall not develop any software which shall either directly or indirectly facilitate program trading, i.e. a software to generate buy/sell orders without manual entry of

orders on fulfillment of certain parameters.

11. 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.

12. I / We shall ensure that the Approved Persons shall not make the CTCL facility and/or IBT facility and/or WT facility available to any other person and that there shall be no provision in the Software to enable such persons to do so.

13. I / We shall ensure that position monitoring etc., shall be inbuilt in the CTCL facility and/or IBT facility and/or WT facility and it shall be flexible to change as per regulator and/or Exchange from time to time.

14. I / We shall ensure that the CTCL facility and/or IBT facility and/or WT facility shall be developed so as to generate the following from the System for the purpose of verification during the inspection:
    I. Number of Users connected on to the Network.
    II. Number of Dealers connected on to the Network including privileges to each Dealer.
    III. All the systems logs and audit trails of the Dealer and the Trading Member.
    IV. Provision for entering complementary dummy orders.

15. I/We undertake that:

    (i) MCX shall have the right and privilege of inspecting and testing the Software at my/our site and the Trading Members site without any prior intimation/notice. The source code of the Software shall be available at both, my/ our site as well as the Trading Member's site for verification.
    (ii) I / We shall make available Prototype and the technical specifications of the Software to MCX for testing purposes.
    (iii) I / We shall be responsible to fix the bugs in the Software if any, found at the time of testing.

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

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

18. I / We undertake to provide User training first when the product is installed and thereafter whenever a major upgrade is released to the Trading Member's Personnel for the following:
    (i) Use of Product
    (ii) Maintenance of the product.

Further, I / We also undertake that the frequency and caliber of the Vendor Personnel

providing the training shall be as specified.

19. I / We undertake that:

(i) All material and information which has or will come into my /our possession or knowledge in connection with this agreement or the performance hereof, consists of confidential and proprietary data, whose disclosure to or use by third parties shall be damaging or cause loss to MCX and its Trading Members, I / We agree to hold such material and information in strict confidence, not to make use thereof other than for the performance of this Agreement, to release it only to my/our employees requiring such information and that too only with the written consent of MCX, and not to release or disclose it to any other parties. I / We shall take appropriate action with respect to my / our employees to ensure that the obligations of non-use and non-disclosure of confidential information under this Agreement are fully satisfied and shall also ensure that my/our Employees are aware and comply with the above provisions. The provisions of this clause shall survive the termination of this agreement. For the purpose of this clause the term data shall include amongst other things technical data which may be divulged by the Trading Member during the normal course of development of the software and information relating to the operations of MCX.

(ii) I / We shall not in any way represent that the software developed is a part of the MCX Trading software.

(iii) I / We shall not advertise or publish any brochure, pamphlet, booklet, notice, or promotional material mentioning MCX or the services to be provided under this Agreement without the prior written consent of MCX.

(iv) I / We shall keep full security of MCX's / Trading Members' programs, databases and computer records in accordance with best computing practices.

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

21. I / We shall develop the software and make it compatible to other Operating Systems, in case of any need to transfer the Software from one piece of hardware to another due to technological changes with prior written consent of MCX.

22. I / We shall provide upgrade to the application software / hardware as and when the need for the same arises and in accordance with the requirements of MCX.

23. I / We undertake to make the Software compatible with the MCX Trading system, upon prior written consent of MCX, in case any modification is made to the MCX Trading software by MCX and the same is required to be incorporated in the Software.

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

25. I / We undertake to provide the training and documentation as and when the Software

is technically upgraded.

26. I / We undertake to ensure as follows:

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

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

(iii) That I/We shall provide services to Trading Member at any location in the country, which the Trading Member desires to operate from.

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

28. I / We am/are aware and agree that I / We am/are only acting as a facilitator, facilitating trading and other services, as and when provided, on the Internet, through maintenance of the application / systems / portal, etc., and I / We shall not involve or associate myself / ourselves directly or indirectly in any manner whatsoever with the act of trading.

29. I / We hereby undertake to duly inform MCX in case of any cause, resulting in any change to my/our entity, or any change in any of the eligibility criteria based on which we have been identified as an Application Service Provider (ASP) for these purposes by MCX at present.

30. I / We hereby undertake to duly inform MCX the list of Trading Members who are availing our services along with details required by MCX from time to time.

31. That during the continuation of this Agreement if any modification/amendment is required by MCX/Trading Member, to be made by us, I/We agree and undertake to make the same.

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

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

34. I / We shall indemnify and keep indemnified MCX harmless against every and all claims, demand, damages, liabilities, losses and expenses suffered by it directly or indirectly by reason of my / our non-compliance, contravention with any of the provisions of this Undertaking or by reason of bugs or malfunctioning of the software provided by us to the Trading Members.

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

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

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

38. I/We also agree that in the event of my/our non-compliance with any of the provisions as mentioned above, MCX shall take such action against us as it may deem fit in this regard.

39. I/ we agree that in the event that any terms, conditions or provisions of this Undertaking is held to be in violation of any applicable law, statute or regulation the same shall be deemed to be deleted from this Undertaking and shall not affect the validity or enforceability of the remaining rights, duties and obligations under this Undertaking.

40. I/ we hereby represent and warrant to MCX as follows:
    a) I/ we have duly organized and validly existing under the laws of India and has full power and authority and has all material governmental licenses, consents and approvals necessary to own my/our assets and properties and to carry on its business as now conducted.

    b) I/ we have all necessary powers, authority and approvals to execute and deliver

this undertaking and to perform all of its obligations arising or created hereunder.

c) There exists no undertaking, commitments or agreements of any nature which may conflict in interest with this undertaking, and

d) I/ we are financially sound and, other than as disclosed, do not have any pending debt or other financial obligations in any manner whatsoever.

e) Person signing onto this Undertaking on my/our behalf has been duly authorized to do so.

f) That upon execution and delivery hereof and at the execution of this Undertaking and any undertakings contemplated herein, all of such shall be legal, valid and binding obligations on me/ us and shall be enforceable against me/ us in accordance with their respective terms.

g) I/ we hereby agree that I/ we shall perform my/our role in the manner specified in this undertaking and fulfill my/our duties, and obligations in the manner specified in this undertaking.

41. I/ we hereby undertake that nothing in this Undertaking shall be deemed to constitute or be construed as constituting a partnership, joint venture, agency or the relationship of principal and agent and I/ we shall not have any authority to bind MCX in any way.

42. I/ we hereby undertake that except as agreed in this Undertaking, I/ we shall not have the right to assign or otherwise transfer this Undertaking, or any right or obligation under this Undertaking to any other party, without the prior written consent of the other Party.

43. I/ we hereby agree that no modification or amendment to this Undertaking and no waiver of any of the terms or conditions hereof shall be valid or binding unless made in writing and duly signed by MCX.

44. I we hereby further undertake and agree to the following:

a) Any and all disputes or differences between us and MCX arising out of or in connection with this Undertaking or its performance shall, so far as it is possible, be settled by negations between us and MCX amicably through consultation between our representatives and MCX.

b) Any dispute or difference arising out of or in connection with this Undertaking, which cannot be amicably settled within 30 (thirty) days, shall be referred to the sole arbitrator to be appointed by MCX. The arbitration shall be governed by the Arbitration and Conciliation Act, 1996. The award passed by the Arbitrator shall be final and binding on us. The language of arbitration shall be English and the venue of arbitration shall be Mumbai.

c) I/ we shall bear and pay all the costs and expenses in connection with the arbitration proceedings unless the arbitrators direct otherwise.

d) I/ we must continue to fulfill my/ our obligations under this Undertaking to the extent reasonably practicable based upon the nature of the dispute during the pendency of a Dispute Resolution.

e) The arbitration proceedings including the arbitral award shall be kept confidential.

45. I/ we hereby undertake and agree that this Undertaking shall be governed in accordance with the laws of India and shall be subject to the exclusive jurisdiction of the courts in Mumbai, India.

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

SIGNED, SEALED AND DELIVERED BY

_____

For and on behalf of _____

_____

ANNEXURE 31

Application for availing existing approved CTCL facility on additional User ID

(On letterhead of the Member)

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

Dear Sir,

I/We_____(Name of Trading Member & Member Id) do hereby apply for CTCL/IBT/ATF/WT facility enable on additional user id.

Sr. #	Particulars	Details
1.	Type of software (CTCL/IBT/WT/ATF)	
2.	Name of the Software with version number	
3.	Name of the Strategy with version number	
4.	Protocol	FIX / NON-FIX
5.	Existing approval ref. no. & date	
6.	Empanelled Vendor Name / Non-Empanelled Vendor Name / In-house Team	
7.	Member's Registered Office address	
8.	Telephone No (with STD code)	
9.	Fax No	
10.	Contact Person Name	
11.	Contact Person – Telephone No. & Mobile No.	
12.	Contact Person- Email ID	
13.	User ID	

For (Name of the Member)

Authorised Signatory
(Name and designation)
Date:
Place:

ANNEXURE 32

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

(On the letterhead of the Trading Member)

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

I/We …… (Name of the Trading Member) hereby apply for API for Tick by Tick Trading Market Data (MarketXstream)

Sr.#	Particulars	Details
1.	Name of the trading member	
2.	Member Id	
3.	Registered Office/ Correspondence address :	
4.	Telephone & Fax No.:	
5.	Name(s) & Designation of Authorised Signatory:	
6.	Contact details (Phone, Fax, Email) of Authorised Signatory:	
7.	Correspondence Address of Authorised Signatory:	
8.	Name of Software Vendor who will develop 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 undertake that MarketXstream API shall be used exclusively for the purpose of our own activities and for activities of our clients on MCX platform only.

I/We undertake that we shall keep MarketXstream API information received from the Exchange strictly confidential and shall not disclose the same to unauthorized persons.

I/We undertake to abide by any action deemed fit by the Exchange in case of non- compliance of the conditions so imposed by the Exchange from time to time.

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

Place:
Date:

_____
Signature of the Authorised representative of the trading member & Stamp

Annexure 33

Application for API for Tick by Tick Trading Market Data (MarketXstream) facility
(On the letterhead of the Empanelled ISV)

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

I/We …… (Name of the ISV) hereby apply for API for Tick by Tick Trading Market Data (MarketXstream)

Sr. No.	Particulars	Details
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:	

I / We certify that all the statements are true and correct to the best of our knowledge.

I/We undertake that MarketXstream API shall be used exclusively for the purpose activities of our clients on MCX platform only.

I/We undertake that we shall keep MarketXstream API information received from the Exchange strictly confidential and shall not disclose the same to unauthorized persons.

I/We undertake to abide by any action deemed fit by the Exchange in case of non-compliance of the conditions so imposed by the Exchange from time to time.

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

_____
Signature of the Authorised representative of the vendor & Stamp

Annexure 34

Application for enabling Tick by Tick Trading Market Data (MarketXstream)

(On the letterhead of the Trading Member)

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

I/We …… (Name of the Trading Member) hereby apply for enabling Tick by Tick Trading Market Data (MarketXstream)

Sr.	Particulars	Details
1.	Name of the trading member	
2.	Member Id	
3.	Registered Office/ Correspondence address :	
4.	Telephone & Fax No.:	
5.	Name(s) & Designation of Authorised Signatory:	
6.	Contact details (Phone, Fax, Email) of Authorised Signatory:	
7.	Correspondence Address of Authorised Signatory:	
8.	IP Address of Point to Point Leased Line (minimum 2 Mbps bandwidth)	
9.	Empanelled Vendor Name / In-house/ Name of Non-Empanelled vendor	
10.	Name of the Software and Version Number	
11.	Algo Strategy Name and Version number	
12.	Detailed Product Write-up	

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

I/We undertake that Tick by Tick Trading Market Data (MarketXstream) shall be used exclusively for the purpose of our own activities and for activities of our clients on MCX platform only.

I/We undertake that we shall keep Tick by Tick Trading Market Data (MarketXstream) data received from the Exchange strictly confidential and shall not disclose the same to unauthorized persons.

I/We undertake to abide by any action deemed fit by the Exchange in case of non- compliance of the conditions so imposed by the Exchange from time to time.

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

Place:
Date:

_____

Signature of the Authorised representative of the trading member & Stamp

ANNEXURE 35

Application form for permission to provide Computer to Computer Link (CTCL) / Internet based Trading (IBT) / Wireless Trading (WT) services using an ASP

(To be executed on letterhead of the Member)

We/I,_____am/are trading member/s of Multi Commodity Exchange of India Limited; hereby apply for the permission of the Exchange for providing CTCL / IBT / WT facility and services.

A. GENERAL

Member ID	
SEBI Registration number	
Registered Office/ Office address	
Telephone / Fax No.	
Email ID	
Name of the Authorised Signatory and designation	
Contact address of the Authorised Signatory, telephone numbers, fax number	
Name of the Application Service Provider (ASP)	
Copies of the agreement/MOU entered into with the ASP to be enclosed	
User ID to be used for CTCL / IBT / WT using ASP facility	

B. PERSONNEL REQUIREMENTS

Total number of personnel currently employed with breakup of dealers, back office personnel etc.	
No. of personnel to be dedicated to handle CTCL / IBT / WT service with break up for communication handling, back office etc.	
Names of personnel, qualification, etc. of personnel specified in point 2 above	
Whether above personnel handling Internet trading have obtained certification in the MCCP module of the Exchange (copies of mark sheet / certificates to be enclosed): YES / NO	

We certify that all the statements are true and correct to the best of our knowledge. We are aware that in case any of the statements are found to be incorrect or false, we are liable for disciplinary action. We undertake to ensure continuous compliance with the requirements of the Exchange, DoT policy and Regulatory directives and other statutory requirements etc. in this regard, as may be issued from time to time.

We confirm and certify that the software / system provided by the Application Service Provider (ASP) for trading has undergone testing and we are satisfied with the product and it complies with the stipulations of the Exchange.

Signed, sealed and delivered by the Authorised representative of the member.

Name
Designation

Signature of the Authorised Signatory

Date:
Place:

ANNEXURE 36
CTCL / IBT / WT UNDERTAKING

(To be submitted by member)

I / We,_____, an individual /a firm registered under the Partnership Act, 1932 / a Company / body corporate incorporated under the Companies Act of 1956 /_____Act, 19 , and residing at / having our office/ registered office at _____(hereinafter referred to as the 'Undersigned' which expression shall unless repugnant to the context include her/his / its successors, assigns and legal representatives) give this Undertaking on this_____day of _____20_____ at _____ IN FAVOUR of MULTI COMMODITY

EXCHANGE OF INDIA LTD, a company incorporated under the Companies Act, 1956 and a Commodity Exchange duly recognized by the Central Government/Forward Markets Commission having its registered office at Exchange Square, CTS No.255, Suren Road, Chakala, Andheri (East), Mumbai – 400 093, India (hereinafter referred to as "MCX", which expression shall unless repugnant to the context include its successors, assigns and legal representatives)

1. WHEREAS, MCX provides *inter-alia* a Computer To Computer Link (hereinafter referred to as the "CTCL facility" as well as facility to use Internet Based Trading and Wireless Trading) through Application Service Provider (ASP) by which MCX provides a facility to its Trading Members to access the trading system of MCX.

2. WHEREAS, MCX makes available the CTCL and/or Internet based trading and/or Wireless Trading facility to its Trading Members through ASP on case to case basis, subject to such terms and conditions as specified by MCX from time to time. One of the conditions is that each trading member willing to avail of the CTCL and/or internet based trading and/or Wireless Trading facility through ASP shall execute an undertaking in favour of MCX in the format prescribed by MCX and agree to abide by any modifications / additions, as may be carried out by MCX, from time to time.

3. WHEREAS, I/We have been admitted to the Trading Membership of MCX, and am/are desirous of availing the CTCL / Internet Based trading / Wireless Trading facility through ASP by fulfilling all the terms and conditions as may be prescribed by MCX from time to time at its discretion in this regard.

NOW THEREFORE IN CONSIDERATION OF MCX having agreed to allow the Member at his / its request, to avail of the CTCL and/or Internet based trading and/or wireless trading facility through ASP, the Trading Member hereby IRREVOCABLY UNDERTAKES and agrees to abide by and be bound by the following terms and conditions:

1. That I / We shall make the CTCL/IBT/WT facility available to the Authorized Persons only after obtaining the prior written consent of MCX and subject to such terms and conditions as may be prescribed by MCX from time to time.

2. I / We undertake and agree to adhere to the provisions of the Bye-laws, Rules, Regulations and Circulars of Exchange and the Regulations, Guidelines and Circulars issued by Securities Exchange Board of India (SEBI) from time to time relating to use, operation of the Trading System, CTCL, IBT and Wireless Trading facility.

3. That notwithstanding anything contained in this Undertaking, all my / our liabilities and obligations as a Trading cum Clearing Member of MCX shall not be affected nor shall be prejudiced in any manner whatsoever.

4. That without prejudice to the generality of the clause (3) of this Undertaking, I / we shall be responsible to settle all the trades executed by the Approved Persons on my / our behalf whether such trades were executed with or without my permission / knowledge and that I shall be bound to complete / fulfill all my / our obligations / liabilities / commitments arising due to the trades executed by the Approved Persons on my / our behalf.

5. That I/We shall abide by, comply with and be bound by the Rules, Bye-laws, and terms and conditions as applicable for CTCL and/or Internet Based Trading and/or Wireless Trading facility of MCX as in existence or as may be modified / amended by the relevant authority from time to time and any circular, order, direction, notice, instructions issued and / or as maybe modified or amended from time to time by the relevant authority.

6. That MCX may, at its discretion, make the CTCL/IBT/WT facility available to me / us at MCX address first mentioned above or at any other address as MCX from time to time may notify to me / us or approve as being the location.

7. That MCX shall be entitled to amend its Rules, Bye Laws, Regulations and terms and conditions for CTCL and/or Internet Based Trading and/or Wireless Trading facility unilaterally and I/We shall be deemed to have consented to them, and accordingly be bound by the Rules, Bye-laws, Regulations and terms and conditions for CTCL and/or Internet Based Trading and/or Wireless Trading facility prevailing from time to time and MCX shall be entitled to all powers vested in them under the Rules, Bye-laws and Regulations, by which I/We unconditionally agree to be bound.

8. That I/We shall execute, sign, subscribe, to such documents, papers, agreements, covenants, bonds and / or undertakings whether legal or otherwise as maybe required by MCX from time to time.

9. That without prejudice to the rights, remedies whether legal or otherwise available to MCX upon my / our non-compliance with this Undertaking, I/We shall indemnify and keep indemnified MCX and its directors, managers, officers, employees and authorized representatives against any loss / damage suffered by it whether legal or otherwise arising due to non-compliance by me/us with the provisions of this Undertaking.

10. That MCX, at its absolute discretion, may make the CTCL/IBT/WT facility available to me / us only from the date of my / our enablement on the CTCL/IBT/WT facility till such time as it may deem fit and further that the CTCL/IBT/WT facility may at any time be withdrawn by MCX at its discretion without giving me / us any notice or any reasons whatsoever.

11. That the CTCL/IBT/WT facility if made available to me / us by MCX will be made available to me / us by MCX on a non-exclusive basis only and that the same may be made available by MCX, at its discretion, to any other Trading cum Clearing Member whomsoever on such terms and conditions as it may deem fit.

12. That I / We may be entitled by giving one month's written notice to request MCX to withdraw the CTCL/IBT/WT facility extended to me / us and such withdrawal shall be subject to such terms and conditions as may be prescribed by MCX including payment of such compensation to MCX as may be decided by MCX at its discretion.

13. That I / We shall be responsible and take all such steps, actions and proceedings to ensure and keep ensured that no Authorized Persons in any way further makes the CTCL/IBT/WT facility available to any other person nor shall extend the CTCL/IBT/WT facility outside his/new premises and that in case I / We fail to ensure the same, MCX shall be empowered to take such action as it may deem fit, which action may include disabling me / us from having access to CTCL/IBT/WT facility, and taking of such disciplinary actions as it may deem fit.

14. I / we undertake that
    a) I / We shall at my / our own expenses provide all lines, cabling, software, hardware, equipment and other communication facilities required for transmission of the data between the Receiving Premises and my / our server at my / our office and also obtain the necessary approvals from relevant authorities.

    b) I / We shall ensure that the connectivity of the CTCL/IBT/WT facility is as per the MCX and Department of Telecommunications (DoT) and/or Mahanagar Telephone Nigam Limited (MTNL) and/or any other appropriate governmental / statutory authority approved network diagram and that I/we shall produce the necessary approvals to MCX in order to meet one of its requirements for enabling me/us for having access to the CTCL/IBT/WT facility.

    c) I / We undertake to ensure that access shall be given only to Authorized persons and also a method shall be established to ensure that non-Approved persons cannot access the system.

    d) I / We undertake to offer facility of IBT/WT to any client only after obtaining undertaking from the client that they are fully aware and agree for additional provisions specifying possible risks, responsibilities, obligations and liabilities associated with Internet Based Trading/ Wireless Trading as mentioned in Annexure -3 of Exchange circular MCX/COMP/469/2011 dated December 22, 2011.

e) I/We undertake to pay any such license fees/charges/royalties as may be levied by DoT/MTNL/MCX/any other regulatory/statutory authorities from time to time. MCX fees if any for using the CTCL/IBT/WT facility shall be paid in advance.

f) I / We shall provide MCX with the Network diagram and as adopted by me / us for having access to the CTCL/IBT/WT facility between the Receiving Premises and my / our server at my / our office and that we shall also provide MCX with the new network diagram as and whenever any changes are made to the existing network diagram with the prior written permission of MCX.

g) I / We shall notify MCX giving the details related to the Authorised Persons as per Annexure 7 format described attached hereto for prior approval of MCX and shall acquire the prior written permission from MCX for every additional Authorised Person taken subsequently before letting him / her have access to the CTCL/IBT/WT facility, further in case an Authorised Person is disabled from acting in his / her capacity as such for any reason whatsoever, then I / we shall acquire prior written permission from MCX before appointing any other individual to act as an Authorised Person in his / her place.

h) I / We shall make the necessary changes in the software used by me / us for accessing the CTCL/IBT/WT facility as and when any changes either technical or structural are made by MCX in the CTCL/IBT/WT facility.

i) I / We shall not develop / use any software for accessing the CTCL/IBT/WT facility, which software in the opinion of MCX shall resemble or result in duplication of TRADING SYSTEM software in any manner and further that no representation shall be made by me / us that the software developed by me / us for accessing the CTCL/IBT/WT facility is part of-the TRADING SYSTEM software.

j) I / We shall not assign or otherwise transfer the rights and obligations arising out of the use of the CTCL/IBT/WT facility and this undertaking whether in whole or in part without the prior written consent of MCX.

k) I / We agree not to use, without the express permission of MCX, the name of MCX to directly or indirectly promote my/ our business.

l) I / We shall not, either by myself / ourselves or through any person acting on my / our behalf, issue / release / publish any advertisement, brochure, pamphlet, booklet, notice or any other promotional material on any aspect relating to the CTCL/IBT/WT facility in any form, whether in writing or otherwise, in accordance to the Code of Advertisement as prescribed by the MCX except with the prior written approval of MCX.

m) I / We agree to obtain prior approval of MCX for change of its activities/operations from existing approved ASP vendor to another.

15. I / We agree that MCX does not warrant that the provision of the CTCL/IBT/WT facility will be error free or uninterrupted.

16. I / We undertake and agree that

a) I / We shall maintain all systems logs and make the same available for inspection by MCX at any time at its discretion.

b) I / We shall not under any circumstances match the respective orders entered in by my / our Authorised Persons from their terminals by myself / ourselves by using any means whatsoever and that I / we shall route all the orders entered in by my / our Authorised Persons to the Trading System of MCX so that they could be matched by the Central Computer of MCX only.

c) I/We shall ensure that the following guidelines on CTCL/IBT/WT and services would be adhered to:

i. System used by me / us has provision for security, reliability and confidentiality of data through the use of encryption technology.

ii. I / We shall maintain adequate backup systems and data storage capacity and also arrange for alternative means of communications in case of Internet Link failure.

iii. Order/Trade confirmation shall be sent to the investor through email at client's discretion at the time period specified by the client in addition to the other mode of display of such confirmations on real time basis on my/our web site. The investor shall be allowed to specify the time interval on the web site itself within which he/she would like to receive this information through email. Facility for reconfirmation of orders which are larger than that specified by the member's risk management system shall be provided on the internet based system.

iv. I / We shall ensure to have a system based control on the trading limits of clients and exposures taken by clients and also set pre-defined limits on the exposure and turnover of each client. The system will also be capable of assessing risk of the client as soon as the order comes in. The client also to be informed of acceptance/rejection of the order within a reasonable period. Reports on margin requirements, payment and delivery obligations etc. to be informed to the clients through the system.

v. I/We shall ensure that the following security measures shall be in-built in the system:
- User Id

- First Level Password (Private Code)
- Automatic expiry of passwords at the end of reasonable duration. Re-initialise access on entering fresh passwords.

vi. I/We shall ensure that all transaction logs with proper audit facilities are maintained in the system.

vii. I/We shall ensure that Secured Socket Layer Security for server access through Internet is installed.

viii. I/We shall ensure that shall integrate any advanced level security as specified by MCX from time to time.

ix. I/We shall ensure that the following systems operations procedures will be adhered to:

- Shall follow similar logic/priorities used by the Exchange to treat client orders.
- Shall maintain all activities / alerts log with audit trail facility.
- The Web-server shall have internally generated unique numbering for all client orders/trades.

d) I / We shall ensure that on-line surveillance and risk management features like trade-by-trade position monitoring etc., shall be inbuilt in the CTCL/IBT/WT facility and it shall be flexible to change as per MCX guidelines.

e) I / We shall not develop or use any software / program facility which shall either directly or indirectly facilitate program trading without prior written approval of the Exchange. For the purpose of this clause the term 'Program Trading' shall mean any software or program facility by the use of which, upon the fulfillment of certain specified parameters, without the necessity of manual entry of orders, buy/sell orders are automatically generated and entered by the software / program facility into the Trading System of MCX to be matched by the central computer.

f) I / We shall not develop or use any software / program which shall either directly or indirectly facilitate orders to cross the trades of the clients of MCX with each other. All orders shall be offered to the market for matching.

g) MCX shall be possessed with the absolute right to inspect the internal software used / being utilised me / us at any time at its discretion.

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

17. That MCX shall not be liable for any direct or indirect damage, costs, claims and expenses whatsoever.

    i. Arising from mechanical or electrical or telephone or network breakdown or power failure or malfunction of any computer and / or / our server and / or any other auxiliary equipment including but not limited to the use of such ASP facility provided by ASP or any other cause beyond the reasonable control of MCX.

    ii. Based upon special indirect economic or consequential loss or damage including, but not limited to loss of profit, business revenue, opportunity costs, and goodwill or anticipated savings.

    iii. Caused or contributed to by any event of Force Majeure. For purposes of this Clause, "Force Majeure" means and includes wars, insurrections, revolution, fires, floods, epidemic quarantine restrictions, declared general strikes in relevant industries, act of God, act of the Government of India and any concerned State Government and such other acts or events beyond MCX control, and further the above is without prejudice to the rights already accrued to MCX due to my / our failure to perform either in full or in part, my / our obligations prior to the occurrence of events of Force Majeure.

    iv. Or any other nature or type.

18. That MCX shall not be responsible for development, maintenance, updates upgrades, error-fixes and any other support of my / our software for accessing the CTCL/IBT/WT facility and shall not be liable for any loss suffered by me / us due to the use of the software for accessing the CTCL/IBT/WT facility.

19. That neither MCX nor the directors, managers, officers, employees or agents of MCX, guarantee the functioning of the CTCL/IBT/WT facility. MCX and the directors, managers, officers, employees and agents of MCX shall not be liable in any way to me / us or to any of my / our Authorized Persons or to any other person, for any non-performance or interruption of CTCL/IBT/WT facility or for any damages, consequential or otherwise, arising there from or occasioned thereby. No proceedings would be adopted by me / us or any third party neither against MCX nor against any individual officer or employee of MCX for any act done by such officer or employee of MCX in their official capacity.

20. I / We shall indemnify and keep indemnified MCX along-with its Directors, Employees, Officers, Servants, Agents and Representatives harmless against every and all claims demand, damages, liabilities, losses and expenses suffered by it directly by reason of the provision of the CTCL/IBT/WT facility to me / us or by reason of my / our non-compliance, negligence, contravention with the any of the provisions of this Undertaking.

21. That this Undertaking is applicable not only in respect of the information services and terminal equipment currently offered by me / us to Authorised Persons but also in respect of any information services and terminal equipment developed by or for me / us in the future, even if I / we should at any time alter my / our mode of supplying information to Authorised Persons provided MCX approves in writing of such alteration with all details.

22. That without prejudice to any other right under any law for the time being in force or which may become applicable, MCX shall be vested with the exclusive right, upon my / our non-compliance with any of the terms and conditions of this Undertaking or upon the termination, suspension of my / our Membership or upon my / our ceasing to be a Trading cum Clearing Member of MCX, to take, at its discretion, such actions, steps, proceedings, measures, decisions within such period of time and upon such terms and conditions as it may deem fit and that any such actions, steps, proceedings, measures, decisions may, *inter alia*, include denial of access to the CTCL/IBT/WT facility and / or take such disciplinary actions as it deems fit. I / we further undertake that I / we shall abide by and be bound by any actions, steps, proceedings, measures, decisions as may be taken by MCX.

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

24. I / We shall treat as confidential all information obtained from MCX pursuant to the arrangement and shall not divulge such information to any person (except to my / our own employees and then only to those employees who need to know the same) without the prior written consent of MCX and that I / we shall also ensure that my / our employees are aware of and comply with the provisions of this clause. The foregoing obligations as to confidentiality shall survive any termination of the availability of the CTCL/IBT/WT facility.

25. Any declaration or other notice to be given by me / us to MCX shall be sent by registered letter or telex / cable or facsimile transmission to the address first mentioned above.

26. A Member shall not advertise or use any software/ program, which may directly or indirectly facilitate matching of orders between or among two or more clients by way of grouping or otherwise. The CTCL/IBT/WT facility being used by a member shall have inbuilt feature of pushing in all the orders, entered by any of the Authorized persons only through CTCL/IBT/WT server of the member for which in turn will push such orders to the trading system of the Exchange, the purpose of execution.

27. The above undertaking will be binding on my / our successors and permitted assignees.

28. I/ we hereby represent and warrant to MCX as follows:

a) I/ we have duly organized and validly existing under the laws of India and has full power and authority and has all material governmental licenses, consents and approvals necessary to own my/our assets and properties and to carry on its business as now conducted.

b) I/ we have all necessary powers, authority and approvals to execute and deliver this undertaking and to perform all of its obligations arising or created hereunder.

c) There exists no undertaking, commitments or agreements of any nature which may conflict in interest with this undertaking, and

d) Person signing onto this Undertaking on my/our behalf has been duly authorized to do so.

e) That upon execution and delivery hereof and at the execution of this Undertaking and any undertakings contemplated herein, all of such shall be legal, valid and binding obligations on me/ us and shall be enforceable against me/ us in accordance with their respective terms.

f) I/ we hereby agree that I/ we shall perform my/our role in the manner specified in this undertaking and fulfill my/our duties, and obligations in the manner specified in this undertaking.

29. I/ we hereby further undertake and agree to the following:

a) Any and all disputes or differences between us and MCX arising out of or in connection with this Undertaking or its performance shall, so far as it is possible, be settled by negotiations between us and MCX amicably through consultation between our representatives and MCX.

b) Any dispute or difference arising out of or in connection with this Undertaking, which cannot be amicably settled within 30(thirty) days, shall be referred to the sole arbitrator to be appointed by MCX. The arbitration shall be governed by the Arbitration and Conciliation Act, 1996. The award passed by the Arbitrator shall be final and binding on us. The language of arbitration shall be English and the venue of arbitration shall be Mumbai.

c) I/ we shall bear and pay all the costs and expenses in connection with the arbitration proceedings unless the arbitrators direct otherwise.

d) I/ we must continue to fulfill my/ our obligations under this Undertaking to the extent reasonably practicable based upon the nature of the dispute during the pendency of a Dispute Resolution.

e) The arbitration proceedings including the arbitral award shall be kept confidential.

30. I / we hereby undertake and agree that this Undertaking shall be governed in accordance with the laws of India and shall be subject to the exclusive jurisdiction of the courts in Mumbai, India.

IN WITNESS WHEREOF this Undertaking is executed by me / us (*in terms of the resolution passed by the Board of Directors at the duly convened meeting held on_____) on the day, month, year and the place first mentioned above

(*I / We or me/us or my / our delete whatever is inapplicable)

SIGNED and DELIVERED by the within named)
_____, *for and on behalf of)
In the presence of Witnesses

1. _____(Name) _____

   _____(Address)

   _____

   _____

2. _____(Name) _____

   _____(Address)

   _____

   _____

ANNEXURE 37
Countersigned documents by ASP and member

(To be executed on letter head of the Application Service Provider)

We / I_____, having our registered office at _____ and

represented by _____ and hereinafter referred to as APPLICATION

SERVICE PROVIDER are providing to M/s._____, having their registered office at _____ who are

trading members of Multi Commodity Exchange of India Limited, and hereinafter referred to as MEMBER, services (inter alia including software / hardware / applications / infrastructure etc.) to facilitate CTCL / IBT /WT services to be provided by the member. We hereby certify that the software / system provided by us comply with all the stipulations and directives of Regulator & the Exchange in this regard.

NOTWITHSTANDING the generality of the above, the software provided by us complies with the following provisions in particular as directed by Regulator / the Exchange.

Srl No:	Particulars	Remarks
1	Access for order routing is permitted only through the use of specific user ids / client specific User ids	Yes / No
2	The access is permitted only through the use of specified / client specified password (private code)	Yes / No
3	The system provides for automatic expiry of passwords at the end of a reasonable duration and reinitializing of access on entering fresh passwords.	Yes / No
4	The system has provision for security, reliability and confidentiality of data related to members and clients	Yes / No
5	Records maintained in electronic form are not susceptible to manipulation	Yes / No
6	All transaction logs are maintained with proper audit facilities (a write-up in this regard shall be enclosed)	Yes / No
7	Secured socket level security for server access through Internet is available.	Yes / No
8	Suitable firewalls between trading set-up and Internet trading set up are available.	Yes / No
9	There are adequate provisions in respect of physical security of the hardware / systems at the hosting location and controls on admission of personnel into the location (audit trail of all entries-exits at location etc.)	Yes / No

10	There is role based access control of the APPLICATION SERVICE PROVIDER's staff to the system and audit trail of all access by the staff.	Yes / No
11	The optional advanced security products used for e-commerce, including SMART cards, dynamic password and 128 bit encryption or above, second level pass words are	Yes / No

Srl No:	Particulars	Remarks
	available. If so, details of the same.	
12	Between the trading web server and trading client terminals, interfaces standards as per recommendations of IETF and W3C (e.g. HTTP ver 4 or above, HTML ver 4/XML) are adopted.	Yes / No
13	Logic/priorities similar to those used by the Exchange are used to treat client orders.	Yes / No
14	Provision for maintenance of all activities / alerts log with audit trail is available	Yes / No
15	The CTCL / Web server internally generates unique numbering for all client orders/ trades.	Yes / No
16	Adequate provisions for backup systems and data storage capacity are available.	Yes / No
17	There are adequate provisions for system redundancy, fault tolerance and load balancing as well as database redundancy and standby databases (hot standby / cold standby)	Yes / No
18	Adequate provisions for capacity planning including provisions to monitor system capacity utilisation and scalability of system on capacity utilisation are available	Yes / No
19	An alternative means of communication is arranged for in case of Internet link failure / Exchange link failure. (A write up shall be provided in this regard)	Yes / No
20	The web site providing the internet based trading facility contains information meant for investor protection such as rules and regulations affecting client broker relationship, arbitration rules, investor protection rules, etc. The web site also provides and displays prominently hyper link to the web site/page on the web site of the Exchange displaying rules/regulations/circulars.	Yes / No
21	The web site displays the ticker/quote/order book of the Exchange along with the date and time stamp as well as the source of the information.	Yes / No
22	The software provides for sending of the order/trade confirmation through email at clients' discretion at the time period specified by the client in addition to the other mode of display of such confirmations on real time basis on the web site. The web site allows for specifying the time interval on the web site itself by the client.	Yes / No
23	The software provides for reconfirmation of orders which are larger than that as specified by the member's risk management system. In this regard the system is capable of assessing the risk of the member / client as soon as the order comes in and shall inform the member / client of acceptance/rejection of the order within a reasonable period.	Yes / No

24	The software provides a system-based control facility on the	Yes / No

Srl No:	Particulars	Remarks
	trading limits of the member's/ clients and exposures taken by the clients.	
25	All orders entered into the CTCL / internet-based trading /Wireless Trading system are offered to the market for matching and no cross trades are generated	Yes / No
26	The software has the facility of providing the reports on margin requirements, payment and delivery obligations etc to the member / clients through the system.	Yes / No

Signed sealed and delivered by the Authorised representative of the APPLICATION SERVICE PROVIDER

Date
Place:

We / I,_____having our registered office at _____ and represented by_____are trading members of the Exchange. We confirm and certify that the software / system provided by the APPLICATION SERVICE PROVIDER for CTCL / IBT / WT has undergone tests by us and we are satisfied that it complies with the stipulations of the Regulator and the Exchange. We also undertake to get the software / system modified, if necessary to continue compliance with the requirements of the Exchange, DOT policy and regulations with regard to levels of encryption, etc, Regulatory directives and other statutory requirements etc. as may be issued in this regard from time to time.

Countersigned, sealed and delivered by the Authorised representative of the MEMBER

Date:
Place:

ANNEXURE 38
NETWORK DIAGRAM
(Kindly enclose your network architecture)

ANNEXURE 39

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

(On letterhead of the member)

Member ID: ……

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

Dear Sir,

We……. (Name of Member) hereby apply for change of Authorised User of MCX Trading System to CTCL.

User ID	
Name of the User	
Address	
Telephone	
Fax No.	
Email ID	

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 execute any order on his/her own account or on account of anyone without such order having been approved by us in writing prior to execution.

For
(Name of the Member)

Authorised signatory
(Name and designation)

Date:
Place:

ANNEXURE 40
Annexure 40 - Part-A
Terms of Reference (ToR) - Type II

(To be on the letterhead of the system auditor)

System Audit Report for the period_____to_____)

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
1		**System Control and Capabilities**				
1	a	Order Tracking – The system auditor should verify system process and controls at CTCL terminals (CTCL / IBT / WT / ALGO) with regard to order entry, capturing of IP address of order entry terminals, modification / deletion of orders, status of the current order/outstanding orders and trade confirmation.				
1	b	Order Status/ Capture – Whether the system has capability to generate / capture order id, time stamping, order type, scrip details, action, quantity, price and validity etc.				
1	c	Rejection of orders – Whether system has capability to reject orders which do not go through order level validation at the end of the stock broker / CTCL / IBT / WT / ALGO and at the servers of Exchange.				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
1	d	Communication of Trade Confirmation / Order Status – Whether the system has capability to timely communicate to Client regarding the Acceptance/ Rejection of an Order / Trade via various media including e-mail; facility of viewing trade log.				
1	e	Client ID Verification – Whether the system has capability to recognize only authorized Client Orders and mapping of Specific user Ids to specific predefined location for proprietary orders.				
1	f	Order type distinguishing capability – Whether system has capability to distinguish the orders originating from CTCL / IBT/ DMA / WT / ALGO. Whether CTCL / IBT / WT / ALGO orders are having unique flag/ tag as specified by the Exchange and systems identify the orders emanating from CTCL / IBT / WT / ALGO by populating the 15-digit CTCL field in the order structure for every order. Whether Broker is using similar logic/ priorities as used by Exchange to treat CTCL / IBT / WT client orders.				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
1	g	The installed CTCL system parameters are as per MCX norms: • CTCL / IBT / WT / Algo Software Name Version No. (as applicable) • Software developed by • Risk Administration / Manager Version • Front End / Order Placement Version				
1	h	The installed system (viz. CTCL/ IBT / WT system) features are as prescribed by the MCX. Main Features Price Broadcast The system has a feature for receipt of price broadcast data Order Processing : The system has a feature : • Which allows order entry and confirmation of orders • which allows for modification or cancellation of orders placed Trade Confirmation • The system has a feature which enables confirmation of trades				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
1	i	**Execution of Orders / Order Logic** The installed system provides a system based control facility over the order input process Order Entry The system has order placement controls that allow only orders matching the system parameters to be placed. Order Modification The system allows for modification of orders placed. Order Cancellation The system allows for cancellation of orders placed. Order Outstanding Check The system has a feature for checking the outstanding orders i.e. the orders that have not yet traded or partially traded.				
1	j	Trades Information 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				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
2		**Software Change Management -** The system auditor should check whether critical changes made to the CTCL / IBT / WT are well documented and communicated to the Stock Exchange. The system auditor should check whether proper procedures have been followed and proper documentation has been maintained for the following:				
2	a	Processing / approval methodology of new feature request or patches				
2	b	Fault reporting / tracking mechanism and process for resolution				
2	c	Testing of new releases / patches / modified software / bug fixes				
2	d	Version control- History, Change Management process , approval etc				
2	e	Development / Test / Production environment segregation.				
2	f	New release in production – promotion, release note approvals				
2	g	Production issues / disruptions reported during last year, reasons for such disruptions and corrective actions taken.				
2	h	User Awareness				

2	i	The system auditor should check whether critical changes made to the CTCL / IBT / WT/ ALGO are well documented and communicated to the Stock Exchange.				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
3		**Risk Management System (RMS)**				
3	a	**Online risk management capability –** The system auditor should check whether the system of online risk management (including upfront real-time risk management) is in place for all orders placed through CTCL terminals (CTCL / IBT/ WT / ALGO).				
3	b	**Trading Limits –**Whether a system of pre-defined limits / checks such as Single Order Quantity and Single Order Value Limits, Symbol wise User Order / Quantity limit, User / Branch Order value Limit, Order Price limit, Spread order quantity and value limit, Cumulative open order value check(unexecuted orders) are in place and only such orders which are within the parameters specified by the RMS are allowed to be pushed into exchange trading engines. The system auditor should check that no user or branch in the system is having unlimited limits on the above parameters.				
3	c	**Order Alerts and Reports –** Whether the system has capability to generate alerts when orders that are placed are above the limits and has capability to generate reports relating to Margin Requirements, payments and delivery obligations.				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
3	d	**Order Review –**Whether the system has capability to facilitate review of such orders that were not validated by the system.				
3	e	**Back testing for effectiveness of RMS –** Whether the system has capability to identify trades which have exceeded the pre-defined limits (Order Quantity and Value Limits, Symbol wise User Order / Quantity limit, User / Branch Order Limit, Order Price limit) and also exceed corresponding margin availability of clients. Whether deviations from such pre-defined limits are captured by the system, documented and corrective steps taken.				
3	f	**Log Management –** Whether the system maintains logs of alerts / changes / deletion / activation / deactivation of client codes and logs of changes to the risk management parameters mentioned above. Whether the system allows only authorized users to set the risk parameter in the RMS.				
3	g	Order Reconfirmation Facility The installed CTCL system provides for reconfirmation of orders which are larger than that as specified by the member's risk management system. The system has a manual override facility for allowing				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
		orders that do not fit the system based risk control parameters				
3	h	Settlement of Trades The installed CTCL system provides a system based reports on contracts, margin requirements, payment and delivery obligations Margin Reports feature Should allow for the reporting of client wise / user wise margin requirements as well as payment and delivery obligations.				
4		**Password Security**				
4	a	Organization Access Policy – Whether the organization has a well-documented policy that provides for a password policy as well as access control policy for the API based terminals (CTCL terminals).				
4	b	**Authentication Capability** – Whether the system authenticates user credentials by means of a password before allowing the user to login, and whether there is is a system for authentication of orders originating from Internet Protocol by means of two-factor authentication, including Public Key Infrastructure (PKI) based implementation of digital				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
		signatures.				
4	c	**Password Best Practices –** Whether there is a system provision for masking of password, system prompt to change default password on first login, disablement of user id on entering multiple wrong passwords (as defined in the password policy document), periodic password change mandate and appropriate prompt to user, strong parameters for password, deactivation of dormant user id, etc.				

4	d	The installed system Authentication mechanism is as per the guidelines of the MCX a) The installed system uses passwords for authentication. b) The system requests for identification and new password before login into the system. c) The Password is masked at the time of entry. System authenticates user with a User Name and password as first level of security. System mandates changing of password when the user logs in for the first time? Automatic disablement of the user on entering erroneous password on five consecutive				

Sr. No.	Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
	occasions. 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. Prior intimation is given to the user before such expiry? System controls to ensure that the password is alphanumeric (preferably with one special character), instead of just being alphabets or just numerical. System controls to ensure that the changed password cannot be the same as of the last 6 passwords. System controls to ensure that the Login id of the user and password should not be the same. System controls to ensure that the password should be of minimum six characters and not more than twelve characters. User/Client is deactivated if the same is not used for a continuous period of 12 (Twelve) months from date of last use of the account. System allows user to change their passwords at their discretion and frequency. 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				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
5		**Session Management**				
5	a	**Session Authentication –** Whether the system has provision for Confidentiality, Integrity and Availability (CIA) of the session and the data transmitted during the session by means of appropriate user and session authentication mechanisms like SSL etc.				
5	b	Session Security – Whether there is availability of an end-to-end encryption for all data exchanged between client and broker systems. or other means of ensuring session security Whether session login details are stored on the devices used for IBT and WT.				
5	c	**Inactive Session** – Whether the system allows for automatic trading session logout after a system defined period of inactivity.				
5	d	**Log Management** – Whether the system generates and maintain logs of Number of users, activity logs, system logs, Number of active clients.				
5	e	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				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
		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.				
6		**Database Security**				
6	a	Access – Whether the system allows CTCL database access only to authorized users / applications.				
6	b	Controls – Whether the IML database server is hosted on a secure platform, with Username and password stored in an encrypted form using strong encryption algorithms.				
7		**Network Integrity**				
7	a	**Seamless connectivity** – Whether stock broker has ensured that a backup network link is available in case of primary link failure with the exchange.				
7	b	**Network Architecture** – Whether the web server is separate from the Application and Database Server.				
7	c	**Firewall Configuration** – Whether appropriate firewall is present between stock broker's trading setup and various communication links to the exchange. Whether the firewall is appropriately configured to ensure maximum security.				
8		**Access Controls**				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
	a	**Access to server rooms** – Whether adequate controls are in place for access to server rooms and proper audit trails are maintained for the same.				
8	b	**Additional Access controls –** Whether the system provides for any authentication/two factor authentication mechanism to access to various components of the CTCL terminals (CTCL / IBT/ WT / ALGO)respectively. Whether additional password requirements are set for critical features of the system. Whether the access control is adequate.				
8	c	**Physical & Environmental Security** Are adequate provisions in respect of physical security of the hardware / systems at the hosting location and controls on admission of personnel into the location (audit trail of all entries-exits at location etc.)? Are periodic reviews conducted for the accesses granted to defined perimeters? Are CCTV cameras deployed for monitoring activities in critical areas? Are suitable controls deployed for combating fire in Data Center? Does the organization maintain physical access controls for · Server Room/Network Room security (environmental controls)				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
		· Server Room .Network Room Security (UPS) · Server room. network room security (HVAC) Are suitable controls deployed for combating fire in the data center?				
8	d	**Access Control** 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? Is access to the information assets based on the user's roles and responsibilities? Does the system have a password mechanism which restricts access to authenticated users?				
8	e	**Extra Authentication Security** The systems uses additional authentication measures like smart cards, biometric authentication or tokens etc.				
9		**Backup and Recovery**				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
9	a	**Backup and Recovery Policy** – Whether the organization has a well-documented policy on periodic backup of data generated from the broking operations.				
9	b	**Log generation and data consistency -** Whether backup logs are maintained and backup data is tested for consistency.				
9	c	**System Redundancy** – Whether there are appropriate backups in case of failures of any critical system components.				
9	d (i)	Backup & Restoration The Installed systems backup capability is adequate as per the requirements of the MCX for overcoming loss of product integrity. Are backups of the following system generated files maintained as per the MCX guidelines? a) At the server/gateway level b) Database c) Audit Trails Reports At the user level a) Market Watch b) Logs c) History d) Reports e) Audit Trails				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
9	d (iii)	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? Audit trail, Event logging and monitoring o Member should maintain logs of all trading activity to facilitate audit trail. o Whether system generates, captures and maintains audit trail of all transactions for at least 3 years? o Audit trail should capture record of control parameters, orders, trades and data points emanating from trades executed through algorithmic trading? o All events, changes in master, strategy parameters shall be logged and maintained for at least 3 years o Whether all logs generated are secured from unauthorized modifications?				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
9	e	How will the organization assure customers prompt access to their funds and securities in the event the organization determines it is unable to continue its business in the primary location - Network / Communication Link Backup Is the backup network link adequate in case of failure of the primary link to the MCX? Is the backup network link adequate in case of failure of the primary link connecting the users? 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? Whether detailed network diagram is prepared and available for verification? Is network and network diagram in line with the one submitted to the Exchange?				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
9	f	How will the organization assure customers prompt access to their funds and securities in the event the organization determines it is unable to continue its business in the primary location - System Failure Backup Are there suitable backups for failure of any of the critical system components like a) Gateway / Database Server b) Router c) Network Switch Infrastructure breakdown backup Are there suitable arrangements made for the breakdown in any infrastructure components like a) Power Supply b) Water c) Air Conditioning Primary Site Unavailability: Have any provision for alternate physical location of employees been made in case of non-availability of the primary site Disaster Recovery: Are there suitable provisions for Books and records backup and recovery (hard copy and electronic). Have all mission-critical				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
		systems been identified and provision for backup for such systems been made?				
10		**BCP/DR (Only applicable for Stock Brokers having BCP / DR site)**				
10	a	**BCP / DR Policy –** Whether the stock broker has a well-documented BCP/ DR policy and plan. The system auditor should comment on the documented procedures.				
10	b	**Alternate channel of communication** – Whether the stock broker has provided its clients with alternate means of communication including channel for communication in case of a disaster. Whether the alternate channel is capable of authenticating the user after asking for additional details or OTP (One-Time-Password).				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
10	c	**High Availability** – Whether BCP / DR systems and network connectivity provide high availability and have no single point of failure for any critical operations as identified by the BCP/DR policy.				
10	d	**Connectivity with other FMIs** – The system auditor should check whether there is an alternative medium to communicate with Stock Exchanges and other FMIs.				
10	e	**Business Continuity** Does the Organisation have a suitable documented Business Continuity or Disaster Recovery or Incident Response process commensurate with the organization size and risk profile to ensure a high degree of availability of the installed system Is there any documentation on Business Continuity / Disaster Recovery / Incident Response? Does a BCP / DRP plan exist? If a BCP/DRP plan exists, has it been tested on regular basis? Are there any documented incident response procedures? Are there any documented risk assessments? Does the installation have a Call List for emergencies maintained? Whether redundancy is built at				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
		all level of infrastructure? Whether all critical systems / infrastructure are in HA mode?				
11		**Segregation of Data and Processing facilities**				
11	a	The system auditor should check and comment on the segregation of data and processing facilities at the Stock Broker in case the stock broker is also running other business.				
12		**Back office data**				
12	a	**Data consistency** – The system auditor should verify whether aggregate client code data available at the back office of broker matches with the data submitted / available with the stock exchanges through online data view / download provided by exchanges to members.				
12	b	**Trail Logs** – The system auditor should specifically comment on the logs of Client Code data to ascertain whether editing or deletion of records have been properly documented and recorded and does not result in any irregularities.				
13		**User Management**				
13	a	**User Management Policy** – The system auditor should check whether the stock broker has a well-documented policy that provides for user management and the user management policy explicitly				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
		defines user, database and application Access Matrix.				
13	b	**Access to Authorized users** – The system auditor should check whether the system allows access only to the authorized users of the CTCL System. Whether there is a proper documentation of the authorized users in the form of User Application approval, copies of User Qualification and other necessary documents.				
13	c	**User Creation / Deletion** – The system auditor should check whether new users ids were created / deleted as per CTCL guidelines of the exchange and whether the user ids are unique in nature.				
13	d	**User Disablement** – The system auditor should check whether non-complaint users are disabled and appropriate logs (such as event log and trade logs of the user) are maintained.				
13	e	**User Management system:** User Deletion: Users are deleted as per the MCX guidelines Reissue of User Ids: User Ids are reissued as per the MCX guidelines. Locked User Accounts: Users whose accounts are locked				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
		are unlocked only after documented unlocking requests are made				
14		**IT Infrastructure Management** (including use of various Cloud computing models such as Infrastructure as a service (IaaS), Platform as a service (PaaS), Software as a service (SaaS), Network as a service (NaaS))				
14	a	**IT Governance and Policy** – The system auditor should verify whether the relevant IT Infrastructure-related policies and standards exist and are regularly reviewed and updated. Compliance with these policies is periodically assessed.				
14	b	**IT Infrastructure Planning** – The system auditor should verify whether the plans/policy for the appropriate management and replacement of aging IT infrastructure components have been documented, approved, and implemented. The activities, schedules and resources needed to achieve objectives related to IT infrastructure have been integrated into business plans and budgets.				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
14	c	**IT Infrastructure Availability (SLA Parameters)** – The system auditor should verify whether the broking firm has a process in place to define its required availability of the IT infrastructure, and its tolerance to outages. In cases where there is huge reliance on vendors for the provision of IT services to the brokerage firm the system auditor should also verify that the mean time to recovery (MTTR) mentioned in the Service Level Agreement (SLA) by the service provider satisfies the requirements of the broking firm				
14	d	**IT Performance Monitoring (SLA Monitoring)** – The system auditor should verify that the results of SLA performance monitoring are documented and are reported to the management of the broker.				
14	e	**Infrastructure & Capacity Management** System has built-in high system availability to address any single point failure. Service has adequate bandwidth and multiple links to ensure reliability and redundancy. Are the resources monitored, tuned and calculations made for future capacity requirements to ensure the required performance. Adequate un-interrupted power				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
		supply for smooth operation of the System is available at the Site? Whether backup network link is available in case of failure of the primary link to the MCX?				
14	f	To ensure information security for the Organization in general and the installed system in particular policy and procedures as per the MCX requirements must be established, implemented and maintained. Does the organization's documented policy and procedures include the following policies and if so are they in line with the MCX requirements and whether they have been implemented by the organization? Information Security Policy Password Policy User Management and Access Control Policy Network Security Policy Application Software Policy Change Management Policy Backup Policy BCP Management Policy Audit Trail Policy Capacity Management Plan Does the organization follow any other policy or procedures or documented practices that are relevant?				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
14	g	Are documented practices available for various system processes Day Begins Day Ends Other system processes a) Audit Trails b) Access Logs c) Transaction Logs d) Backup Logs e) Alert Logs f) Activity Logs g) Retention Period h) Data Maintenance				
14	h	In case of failure, is there an escalation procedure implemented? Day Begin Day End Other system processes				
14	i	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				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
14	j	**Vulnerability Assessment, Penetration Testing & Application Security Assessments:** Are periodic vulnerability assessments for all the critical assets including Servers, OS, Database, Middleware, Network Devices, Firewalls, IDS /IPS etc conducted?				
15		**Software Testing Procedures -** The system auditor should check whether the stock broker has complied with the guidelines and instructions of SEBI / stock exchanges with regard to testing of software and new patches, including the following:				
15	a	**Test Procedure Review** – The system auditor should review and evaluate the procedures for system and software/program testing. The system auditor should also review the adequacy of tests.				
15	b	**Documentation** – The system auditor should verify whether the documentation related to testing procedures, test data, and resulting output were adequate and follow the organization's standards.				
15	c	**Test Cases** – The system auditor should review the internal test cases and comment upon the adequacy of the same with respect to the requirements of the Stock Exchange and various SEBI				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
		circulars.				
16		Additional Points				
16	a	**Anti-virus** Is a malicious 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				
16	b	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 MCX and includes Number of Users Logged In / hooked on to the network incl. privileges of each The installed systems has a provision for off line monitoring and risk management as per				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
		the requirements of MCX and includes reports / logs on a) Number of Authorized Users b) Activity logs c) Systems logs d) Number of active clients				
16	c	**Insurance** The insurance policy of the Member covers the additional risk of usage of system and probable losses in case of software malfunction.				
16	d	**Firewall** Whether suitable firewalls are implemented?				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
16	e	Compliance Whether the order routing servers routing CTCL/ALGO/IBT/WT orders are located in India. Provide address of the CTCL / IBT / WT server location (as applicable) Whether the required details of all the CTCL user 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. Whether all the CTCL 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. The system has an internal unique order numbering system. All orders generated by CTCL terminals (CTCL/IBT/WT/ALGO) are offered to the market for matching and system does not have any order matching function resulting into cross trades. Whether algorithm orders are				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
		having unique flag/ tag as specified by the Exchange. All orders generated from algorithmic system are tagged with a unique identifier – 13th digit of CTCL field is populated as per published API? All orders routed through CTCL / IBT / WT are routed through electronic / automated Risk Management System of the broker to carry out appropriate validations of all risk parameters before the orders are released to the Exchange.				
16	f	The system and system records with respect to Risk Controls are maintained as prescribed by the Exchange which are as follows : · The limits are setup after assessing the risks of the corresponding user ID and branch ID · The limits are setup after taking into account the member's capital adequacy requirements · All the limits are reviewed regularly and the limits in the system are up to date				

Sr. No.		Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
16	g	IBT/WT Compliance: Does the broker's IBT / WT system complies with the following provisions : · The system captures the IP (Internet Protocol) address (from where the orders are originating), for all IBT/ WT orders · The system has built-in high system availability to address any single point failure · The system has secure end-to-end encryption for all data transmission between the client and the broker system through a Secure Standardized Protocol. A procedure of mutual authentication between the client and the broker server is implemented · In case of no activity by the client, the system provides for automatic trading session logout · Name of the website provided in the application form is the website through which Internet based trading services is to be provided to the clients. · Secured socket level security for server access through Internet is available. · SSL certificate is valid and trading member is the owner of the website provided. Any change in name of the website or ownership of the website shall be incorporated only on approval from the				

Sr. No.	Particulars	Compliant / Non Compliant /Work In progress /Observation/ Suggestion/ NA	Major / Minor deviations	Remarks/ Observations of the auditor	Management comments in case of non / compliance
	Exchange				

Annexure 40

Annexure 40 - Part-B
Terms of Reference (ToR) - Type III

System Audit Report for the period_____to_____)

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
1		**System Control and Capabilities**				
1	a	**Order Tracking –** The system auditor should verify system process and controls at CTCL terminals (CTCL / IBT / WT / ALGO) with regard to order entry, capturing of IP address of order entry terminals, modification / deletion of orders, status of the current order/outstanding orders and trade confirmation.				
1	b	**Order Status/ Capture –** Whether the system has capability to generate / capture order id, time stamping, order type, scrip details, action, quantity, price and validity etc.				
1	c	**Rejection of orders –** Whether system has capability to reject orders which do not go through order level validation at the end of the stock broker / CTCL / IBT / WT / ALGO and at the servers of Exchange.				
1	d	**Communication of Trade Confirmation / Order Status –** Whether the system has capability to timely communicate to Client regarding the Acceptance/ Rejection of an				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		Order / Trade via various media including e-mail; facility of viewing trade log.				
1	e	**Client ID Verification –** Whether the system has capability to recognize only authorized Client Orders and mapping of Specific user Ids to specific predefined location for proprietary orders.				
1	f	**Order type distinguishing capability –** Whether system has capability to distinguish the orders originating from CTCL / IBT/ WT / ALGO. Whether CTCL / IBT / WT / ALGO orders are having unique flag/ tag as specified by the Exchange and systems identify the orders emanating from CTCL / IBT / WT / ALGO by populating the 15-digit CTCL field in the order structure for every order. Whether Broker is using similar logic/ priorities as used by Exchange to treat CTCL / IBT / WT client orders				
1	g	The installed CTCL system parameters are as per MCX norms: • CTCL / IBT / WT/Algo Version (as applicable) • Software developed by • Order Gateway Version • Risk Administration / Manager Version				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		• Front End / Order Placement Version				
1	h	The installed system (viz. CTCL/ IBT / WT system) features are as prescribed by the MCX. Main Features Price Broadcast The system has a feature for receipt of price broadcast data Order Processing : The system has a feature : • Which allows order entry and confirmation of orders • which allows for modification or cancellation of orders placed Trade Confirmation • The system has a feature which enables confirmation of trades				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
1	i	**Execution of Orders / Order Logic** The installed system provides a system based control facility over the order input process Order Entry The system has order placement controls that allow only orders matching the system parameters to be placed. Order Modification The system allows for modification of orders placed. Order Cancellation The system allows for cancellation of orders placed. Order Outstanding Check The system has a feature for checking the outstanding orders i.e. the orders that have not yet traded or partially traded.				
2		**Software Change Management - The system auditor should check whether proper procedures have been followed and proper documentation has been maintained for the following:**				
2	a	Processing / approval methodology of new feature request or patches				
2	b	Fault reporting / tracking mechanism and process for resolution				
2	c	Testing of new releases / patches / modified software /				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		bug fixes				
2	d	Version control- History, Change Management process , approval etc				
2	e	Development / Test / Production environment segregation.				
2	f	New release in production – promotion, release note approvals				
2	g	Production issues / disruptions reported during last year, reasons for such disruptions and corrective actions taken.				
2	h	User Awareness				
2	i	The system auditor should check whether critical changes made to the CTCL / IBT / WT/ ALGO are well documented and communicated to the Stock Exchange.				
2	j	**Change Management** 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?				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		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.				
2	k	**Patch Management** Whether version and patch management controls are in place? Does the organization periodically update all assets including Servers, OS, Database, Middleware, Network Devices, Firewalls, IDS /IPS Desktops etc. with latest applicable versions and				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		patches?				
2	I	**SDLC - Application Development & Maintenance** In case of members self-developed system SDLC documentation and procedures if the installed system is developed in-house				
3		**Risk Management System (RMS)**				
3	a	Online risk management capability – The system auditor should check whether the system of online risk management (including upfront real-time risk management) is in place for all orders placed through CTCL terminals (CTCL / IBT/ WT / ALGO).				
3	b	**Trading Limits –**Whether a system of pre-defined limits / checks such as Single Order Quantity and Single Order Value Limits, Symbol wise User Order / Quantity limit, User / Branch Order value Limit, Order Price limit, Spread order quantity and value limit, Cumulative open order value check(unexecuted orders) are in place and only such orders which are within the parameters specified by the RMS are allowed to be pushed into exchange trading engines. The system auditor should				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		check that no user or branch in the system is having unlimited limits on the above parameters.				
3	c	**Order Alerts and Reports –** Whether the system has capability to generate alerts when orders that are placed are above the limits and has capability to generate reports relating to Margin Requirements, payments and delivery obligations.				
3	d	**Order Review –**Whether the system has capability to facilitate review of such orders that were not validated by the system.				
3	e	**Back testing for effectiveness of RMS –** Whether the system has capability to identify trades which have exceeded the pre-defined limits (Order Quantity and Value Limits, Symbol wise User Order / Quantity limit, User / Branch Order Limit, Order Price limit) and also exceed corresponding margin availability of clients. Whether deviations from such pre-defined limits are captured by the system, documented and corrective steps taken.				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
3	f	**Log Management –** Whether the system maintains logs of alerts / changes / deletion / activation / deactivation of client codes and logs of changes to the risk management parameters mentioned above. Whether the system allows only authorized users to set the risk parameter in the RMS.				
3	g	Order Reconfirmation Facility The installed CTCL system provides for reconfirmation of orders which are larger than that as specified by the member's risk management system. The system has a manual override facility for allowing orders that do not fit the system based risk control parameters				
3	h	Settlement of Trades The installed CTCL system provides a system based reports on contracts, margin requirements, payment and delivery obligations Margin Reports feature Should allow for the reporting of client wise / user wise margin requirements as well as payment and delivery obligations.				
4		**Algorithmic Trading -** The system auditor should check whether proper procedures have been followed and proper documentation has been maintained for the following:				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
4	a	**Change Management** – Whether any changes (modification/addition) to the approved algos were informed to and approved by stock exchange. The inclusion / removal of different versions of algos should be well documented.				
4	b	Online Risk Management capability- The ALGO server have capacity to monitor orders / trades routed through algo trading and have online risk management for all orders through Algorithmic trading. The system has functionality for mandatorily routing of orders generated by algorithm through the automated risk management system and only those orders that are within the parameters specified in the risk management systems are allowed to be released to exchange trading system. The risk management system may have following risk controls functionality and only algorithm orders that are within the parameters specified by the risk management systems are allowed to be placed. A) Individual Order Level: · Quantity Limits · Price Range checks · Trade price protection checks · Order Value Checks (Order should not exceed the				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		limit specified by the Exchange) · Market price protection · Spread order Quantity and Value Limit B) Client Level: · Cumulative Open Order Value check · Automated Execution check · Net position v/s available margins · Market-wide Position Limits (MWPL) violation checks · Position limit checks · Trading limit checks · Exposure limit checks at individual client level and at overall level for all clients · Identifying dysfunctional algorithms Does system has functionality to specify values as unlimited for any risk controls listed above? Does the member have additional risk controls / policies to ensure smooth functioning of the algorithm? (if yes, please provide details)				
4	c	**Risk Parameters Controls** – The system should allow only authorized users to set the risk parameter. The System should also maintain a log of all the risk parameter changes made.				
4	d	**Information / Data Feed** – The auditor should comment on the various sources of information / data for the algo and on the likely impact (run away /loop situation) of the failure one or				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		more sources to provide timely feed to the algorithm. The system auditor should verify that the algo automatically stops further processing in the absence of data feed.				
4	e	**Check for preventing loop or runaway situations** – The system auditor should check whether the brokers have real time monitoring systems to identify and shutdown/stop the algorithms which have not behaved as expected.				
4	f	**Algo / Co-location facility Sub-letting** – The system auditor should verify if the algo / co-location facility has not been sub-letted to any other firms to access the exchange platform.				
4	g	**Audit Trail – The system auditor should check the following areas in audit trail:** i. Whether the audit trails can be established using unique identification for all algorithmic orders and comment on the same. ii. Whether the broker maintains logs of all trading activities. iii. Whether the records of control parameters, orders, traders and data emanating from trades executed through algorithmic trading are preserved/ maintained by the Stock Broker. iv. Whether changes to the control parameters have been made by authorized users as				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		per the Access Matrix. The system auditor should specifically comment on the reasons and frequency for changing of such control parameters. Further, the system auditor should also comment on the possibility of such tweaking leading to run away/loop situation. v. Whether the system captures the IP address from where the algo orders are originating.				
4	h	**Systems and Procedures** – The system auditor should check and comment on the procedures, systems and technical capabilities of stock broker for carrying out trading through use of Algorithms .The system auditor should also identify any misuse or unauthorized access to algorithms or the system which runs these algorithms				
4	i	**Reporting to Stock Exchanges –** The system auditor should check whether the stock broker is informing the stock exchange regarding any incidents where the algo has not behaved as expected. The system auditor should also comment upon the time taken by the stock broker to inform the stock exchanges regarding such incidents.				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
4	j	**Mock Testing:** Have all user-ids approved for Algo trading, irrespective of the algorithm having undergone change or not, participated in the mock trading sessions minimum once a month?				
5		**Password Security**				
5	a	**Organization Access Policy** – Whether the organization has a well-documented policy that provides for a password policy as well as access control policy for the API based terminals (CTCL terminals).				
5	b	**Authentication Capability** – Whether the system authenticates user credentials by means of a password before allowing the user to login, and whether there is a system for authentication of orders originating from Internet Protocol by means of two-factor authentication, including Public Key Infrastructure (PKI) based implementation of digital signatures.				
5	c	**Password Best Practices –** Whether there is a system provision for masking of password, system prompt to change default password on first login, disablement of user id on entering multiple wrong passwords (as defined in the password policy document), periodic password change mandate and appropriate prompt to user, strong				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		parameters for password, deactivation of dormant user id, etc.				

5	d	The installed system Authentication mechanism is as per the guidelines of the MCX a) The installed system uses passwords for authentication. b) The system requests for identification and new password before login into the system. c) The Password is masked at the time of entry. System authenticates user with a User Name and password as first level of security. System mandates changing of password when the user logs in for the first time? Automatic disablement of the user on entering erroneous password on five consecutive occasions. 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. Prior intimation is given to the user before such expiry? System controls to ensure that the password is alphanumeric (preferably with one special character), instead of just being alphabets or just numerical. System controls to ensure that				

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		the changed password cannot be the same as of the last 6 passwords. System controls to ensure that the Login id of the user and password should not be the same. System controls to ensure that the password should be of minimum six characters and not more than twelve characters. User/Client is deactivated if the same is not used for a continuous period of 12 (Twelve) months from date of last use of the account. System allows user to change their passwords at their discretion and frequency. 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.				
6		**Session Management**				
6	a	**Session Authentication –** Whether the system has provision for Confidentiality, Integrity and Availability (CIA) of the session and the data transmitted during the session by means of appropriate user and session authentication mechanisms like SSL etc.				
6	b	Session Security – Whether there is availability of an end-to-end encryption for all data exchanged between client and				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		broker systems. or other means of ensuring session security Whether session login details are stored on the devices used for IBT and WT.				
6	c	**Inactive Session** – Whether the system allows for automatic trading session logout after a system defined period of inactivity.				
6	d	**Log Management** – Whether the system generates and maintain logs of Number of users, activity logs, system logs, Number of active clients.				
6	e	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.				
7		**Database Security**				
7	a	**Access –** Whether the system allows CTCL - database access only to authorized users / applications.				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
7	b	**Controls –** Whether the CTCL database server is hosted on a secure platform, with Username and password stored in an encrypted form using strong encryption algorithms.				
8		**Network Integrity**				
8	a	**Seamless connectivity** – Whether stock broker has ensured that a backup network link is available in case of primary link failure with the exchange.				
8	b	**Network Architecture** – Whether the web server is separate from the Application and Database Server.				
8	c	**Firewall Configuration** – Whether appropriate firewall is present between stock broker's trading setup and various communication links to the exchange. Whether the firewall is appropriately configured to ensure maximum security.				
9		**Access Controls**				
9	a	**Access to server rooms** – Whether adequate controls are in place for access to server rooms and proper audit trails are maintained for the same.				

9	b	**Additional Access controls – Whether the system provides for any authentication/two factor authentication mechanism to access to various components of the CTCL terminals (CTCL / IBT/ WT / ALGO)respectively. Whether additional password**				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		requirements are set for critical features of the system. Whether the access control is adequate.				
9	c	**Access Control** 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? Is access to the information assets based on the user's roles and responsibilities? Does the system have a password mechanism which restricts access to authenticated users?				
9	d	**Extra Authentication Security** The systems uses additional authentication measures like smart cards, biometric authentication or tokens etc.				
10		**Backup and Recovery**				
10	a	**Backup and Recovery Policy** – Whether the organization has a well documented policy on periodic backup of data generated from the broking operations.				
10	b	**Log generation and data consistency -** Whether backup logs are maintained and backup data is tested for consistency.				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
10	c	**System Redundancy** – Whether there are appropriate backups in case of failures of any critical system components.				
10	d	Backup & Restoration The Installed systems backup capability is adequate as per the requirements of the MCX for overcoming loss of product integrity. Are backups of the following system generated files maintained as per the MCX guidelines? a) At the server/gateway level b) Database c) Audit Trails Reports At the user level a) Market Watch b) Logs c) History d) Reports e) Audit Trails Are backup procedures documented and backup logs maintained? Are the backup logs maintained and are the backups been verified and tested? Are the backup media stored safely in line with the risk involved? Are there any recovery procedures and have the same been tested?				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
10	e	Audit trail, Event logging and monitoring o Member should maintain logs of all trading activity to facilitate audit trail. o Whether system generates, captures and maintains audit trail of all transactions for at least 3 years? o Audit trail should capture record of control parameters, orders, trades and data points emanating from trades executed through algorithmic trading? o All events, changes in master, strategy parameters shall be logged and maintained for at least 3 years o Whether all logs generated are secured from unauthorized modifications?				
10	f	How will the organization assure customers prompt access to their funds and securities in the event the organization determines it is unable to continue its business in the primary location - Network / Communication Link Backup Is the backup network link adequate in case of failure of the primary link to the MCX? Is the backup network link adequate in case of failure of the primary link connecting the users?				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		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? Whether detailed network diagram is prepared and available for verification? Is network and network diagram in line with the one submitted to the Exchange?				
10	g	How will the organization assure customers prompt access to their funds and securities in the event the organization determines it is unable to continue its business in the primary location - System Failure Backup Are there suitable backups for failure of any of the critical system components like a) Gateway / Database Server b) Router c) Network Switch Infrastructure breakdown backup Are there suitable				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		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?				
11		**BCP/DR (Only applicable for Stock Brokers having BCP / DR site)**				
11	a	**BCP / DR Policy – Whether the stock broker has a well-documented BCP/ DR policy and plan. The system auditor should comment on the documented incident response MCX procedures.**				
11	b	**Alternate channel of communication** – Whether the stock broker has provided its clients with alternate means of communication including channel for communication in				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		case of a disaster. Whether the alternate channel is capable of authenticating the user after asking for additional details or OTP (One-Time-Password).				
11	c	**High Availability** – Whether BCP / DR systems and network connectivity provide high availability and have no single point of failure for any critical operations as identified by the BCP/DR policy.				
11	d	**Connectivity with other FMIs** – The system auditor should check whether there is an alternative medium to communicate with Stock Exchanges and other FMIs.				
11	e	**Business Continuity** Does the Organisation have a suitable documented Business Continuity or Disaster Recovery or Incident Response process commensurate with the organization size and risk profile to ensure a high degree of availability of the installed system Is there any documentation on Business Continuity / Disaster Recovery / Incident Response? Does a BCP / DRP plan exist? If a BCP/DRP plan exists, has it been tested on regular basis? Are there any documented incident response procedures?				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		Are there any documented risk assessments? Does the installation have a Call List for emergencies maintained? Whether redundancy is built at all level of infrastructure? Whether all critical systems / infrastructure are in HA mode?				
12		**Segregation of Data and Processing facilities**				
12	a	The system auditor should check and comment on the segregation of data and processing facilities at the Stock Broker in case the stock broker is also running other business.				
13		**Back office data**				
13	a	**Data consistency** – The system auditor should verify whether aggregate client code data available at the back office of broker matches with the data submitted / available with the stock exchanges through online data view / download provided by exchanges to members.				
13	b	**Trail Logs** – The system auditor should specifically comment on the logs of Client Code data to ascertain whether editing or deletion of records have been properly documented and recorded and does not result in any irregularities.				

14		**User Management**				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
14	a	**User Management Policy** – The system auditor should check whether the stock broker has a well-documented policy that provides for user management and the user management policy explicitly defines user, database and application Access Matrix.				
14	b	**Access to Authorized users –** The system auditor should check whether the system allows access only to the authorized users of the CTCL System. Whether there is a proper documentation of the authorized users in the form of User Application approval, copies of User Qualification and other necessary documents.				
14	c	**User Creation / Deletion –** The system auditor should check whether new users ids were created / deleted as per CTCL guidelines of the exchange and whether the user ids are unique in nature.				
14	d	**User Disablement** – The system auditor should check whether non-complaint users are disabled and appropriate logs (such as event log and trade logs of the user) are maintained.				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
14	e	**User Management system:** User Deletion: Users are deleted as per the MCX guidelines Reissue of User Ids: User Ids are reissued as per the MCX guidelines. Locked User Accounts: Users whose accounts are locked are unlocked only after documented unlocking requests are made				
15		**IT Infrastructure Management** (including use of various Cloud computing models such as Infrastructure as a service (IaaS), Platform as a service (PaaS), Software as a service (SaaS), Network as a service (NaaS))				
15	a	**IT Governance and Policy** – The system auditor should verify whether the relevant IT Infrastructure-related policies and standards exist and are regularly reviewed and updated. Compliance with these policies is periodically assessed.				
15	b	**IT Infrastructure Planning** – The system auditor should verify whether the plans/policy for the appropriate management and replacement of aging IT infrastructure components have been documented, approved, and implemented. The activities, schedules and resources needed to achieve objectives				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		related to IT infrastructure have been integrated into business plans and budgets.				
15	c	**IT Infrastructure Availability (SLA Parameters)** – The system auditor should verify whether the broking firm has a process in place to define its required availability of the IT infrastructure, and its tolerance to outages. In cases where there is huge reliance on vendors for the provision of IT services to the brokerage firm the system auditor should also verify that the mean time to recovery (MTTR) mentioned in the Service Level Agreement (SLA) by the service provider satisfies the requirements of the broking firm				
15	d	**IT Performance Monitoring (SLA Monitoring)** – The system auditor should verify that the results of SLA performance monitoring are documented and are reported to the management of the broker.				
15	e	**Infrastructure High Availability** - Does the organization have a documented process for identifying single point of failure? - Does the organization have a documented process for failover?				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		- Does the organization ensure that various components pertaining to networks, servers, storage have sufficient redundancy? - Does the organization conduct periodic redundancy/contingency testing?				
15	f	To ensure information security for the Organization in general and the installed system in particular policy and procedures as per the MCX requirements must be established, implemented and maintained. Does the organization's documented policy and procedures include the following policies and if so are they in line with the MCX requirements and whether they have been implemented by the organization? Information Security Policy Password Policy User Management and Access Control Policy Network Security Policy Application Software Policy Change Management Policy Backup Policy BCP Management Policy Audit Trail Policy Capacity Management Plan Does the organization follow any other policy or procedures or documented practices that are relevant?				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
15	g	Are documented practices available for various system processes Day Begins Day Ends Other system processes a) Audit Trails b) Access Logs c) Transaction Logs d) Backup Logs e) Alert Logs f) Activity Logs g) Retention Period h) Data Maintenance				
15	h	In case of failure, is there an escalation procedure implemented? Day Begin Day End Other system processes				
15	i	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				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
15	j	**Vulnerability Assessment, Penetration Testing & Application Security Assessments:** Are periodic vulnerability assessments for all the critical assets including Servers, OS, Database, Middleware, Network Devices, Firewalls, IDS /IPS etc conducted?				
16		**Software Testing Procedures -** The system auditor should check whether the stock broker has complied with the guidelines and instructions of SEBI / stock exchanges with regard to testing of software and new patches, including the following:				
16	a	**Test Procedure Review** – The system auditor should review and evaluate the procedures for system and software/program testing. The system auditor should also review the adequacy of tests.				
16	b	**Documentation** – The system auditor should verify whether the documentation related to testing procedures, test data, and resulting output were adequate and follow the organization's standards.				
16	c	**Test Cases** – The system auditor should review the internal test cases and comment upon the adequacy of the same with respect to the requirements of the Stock Exchange and various SEBI circulars.				
17		**Additional Points**				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
17	a	**Anti-virus** Is a malicious 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				
17	b	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 MCX and includes Number of Users Logged In / hooked on to the network incl. privileges of each The installed systems has a provision for off line monitoring and risk management as per the requirements of MCX and includes reports / logs on a) Number of Authorized Users b) Activity logs c) Systems logs				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		d) Number of active clients				
17	c	Insurance The insurance policy of the Member covers the additional risk of usage of system and probable losses in case of software malfunction.				
17	d	**Firewall** Whether suitable firewalls are implemented?				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
17	e	Compliance Whether the order routing servers routing CTCL/ALGO/IBT/WT orders are located in India. Provide address of the CTCL / IBT / WT server location (as applicable) Whether the required details of all the CTCL user 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. Whether all the CTCL 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. The system has an internal unique order numbering system. All orders generated by CTCL terminals (CTCL/IBT/WT/ALGO) are offered to the market for matching and system does not have any order matching function resulting into cross trades. Whether algorithm orders are having unique flag/ tag as specified by the Exchange. All				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		orders generated from algorithmic system are tagged with a unique identifier – 13th digit of CTCL field is populated as per published API? All orders routed through CTCL / IBT / WT are routed through electronic / automated Risk Management System of the broker to carry out appropriate validations of all risk parameters before the orders are released to the Exchange.				
17	f	The system and system records with respect to Risk Controls are maintained as prescribed by the Exchange which are as follows : · The limits are setup after assessing the risks of the corresponding user ID and branch ID · The limits are setup after taking into account the member's capital adequacy requirements · All the limits are reviewed regularly and the limits in the system are up to date				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
17	g	IBT/WT Compliance: Does the broker's IBT / WT system complies with the following provisions : · The system captures the IP (Internet Protocol) address (from where the orders are originating), for all IBT/ WT orders · The system has built-in high system availability to address any single point failure · The system has secure end-to-end encryption for all data transmission between the client and the broker system through a Secure Standardized Protocol. A procedure of mutual authentication between the client and the broker server is implemented · In case of no activity by the client, the system provides for automatic trading session logout · Name of the website provided in the application form is the website through which Internet based trading services is to be provided to the clients. · Secured socket level security for server access through Internet is available. · SSL certificate is valid and trading member is the owner of the website provided. Any change in name of the website or ownership of the website shall be incorporated only on approval from the				

Sr. No.		Particulars	Compliant / Non Compliant / Work In progress /Observation /Suggestion/ NA	Major / Minor deviations	Remarks / Observations of the auditor	Management comments in case of non / compliance
		Exchange				

Annexure 40 - Part-C
Part – C Executive Summary Reporting Format

I. For Preliminary Audit

(To be on the letterhead of the system auditor)

System Audit Report for the period____to ___

I/We, M/s._____(Name of the system auditor / system audit firm) _____ have conducted the system audit of Trading system facility/ies of the below mentioned trading member of Multi Commodity Exchange of India Limited in accordance with the provisions and scope laid down by the Exchange in Annexure-I. The detailed audit report has been submitted to the trading member. The summary of findings are grouped under the broad categories as below and classified as "High Risk", "Medium Risk" or "Low Risk".

Audit Date	Observation No.	Description of Finding	Department	Status / Nature of Findings	Risk Rating of Findings	Audit TOR Clause	Audited By	Root Cause Analysis	Impact Analysis	Suggested Corrective Action	Deadline for the Corrective Action	Verified By	Closing Date	Management Comments

Declaration:

- All the branches/locations trading software facility is provided have been audited.
- There is no conflict of interest with respect to the member being audited. If any such instance arises, it shall be brought to the notice of the Exchange immediately before undertaking the audit.
- With regard to the areas mentioned in the Terms of Reference (ToR), compliance / non-compliance status has been specified. Observations on minor / major deviations as well as qualitative comments for scope for improvement also have been specified in the report.

_____
Signature
(Full Name of the Auditor & Auditing firm)
DISA/CISA/CISM/CISSP Registration Number:
Date:
Place:

Description of relevant Table heads

1. Audit Date – This indicates the date of conducting the audit.
2. Description of Findings/ Observations – Description of the findings in sufficient detail, referencing any accompanying evidence (e.g. copies of procedures, interview notes, screen shots etc.)
3. Status/ Nature of Findings - the category can be specified for example:
   a. Non-Compliant
   b. Work In progress
   c. Observation
   d. Suggestion
4. Risk Rating of Findings – A rating has to been given for each of the observations based on their impact and severity to reflect the risk exposure, as well as the suggested priority for action.

Rating	Description
HIGH	Weakness in control those represent exposure to the organization or risks that could lead to instances of non-compliance with the requirements of TORs. These risks need to be addressed with utmost priority.
MEDIUM	Potential weakness in controls, which could develop into an exposure or issues that represent areas of concern and may impact internal controls. These should be addressed reasonably promptly.
LOW	Potential weaknesses in controls, which in combination with other weakness can develop into an exposure. Suggested improvements for situations not immediately/directly affecting controls.

5. Audit TOR Clause – The TOR clause corresponding to this observation
6. Root cause Analysis –A detailed analysis on the cause of the nonconformity
7. Impact Analysis – An analysis of the likely impact on the operations/ activity of the organization
8. Suggested Corrective Action –The action to be taken by the broker to correct the nonconformity

II. Follow-on Report

(To be on the letterhead of the system auditor)

Follow-on System Audit Report with respect to the period__to ___

I/We, M/s._____(Name of the system auditor / system audit firm) _____ have

conducted the follow-on system audit of Trading system facility/ies of the below mentioned trading member of Multi Commodity Exchange of India Limited for the observations about the non-compliance / non-conformities (NCs) made in the preliminary audit report. The summary of findings is reproduced below:

Preliminary audit date	Sr. No.	Preliminary observation number	Preliminary status	Preliminary Corrective action	Current Finding	Current Status	Revised Corrective Action	Deadline for the revised corrective action	Verified by	Closing date	Management Comment

Declaration:

- All the branches/locations where the trading software facility is provided have been audited.
- There is no conflict of interest with respect to the member being audited. If any such instance arises, it shall be brought to the notice of the Exchange immediately before undertaking the audit.
- With regard to the areas mentioned in the preliminary audit all observations specified as not-compliant have been complied and met the requirement as specified in the Terms of Reference (TOR).

_____

Signature

(Full Name of the Auditor & Auditing firm)

DISA/CISA/CISM/CISSP Registration Number:

Date:

Place:

Description of relevant Table heads

- Preliminary Status- The original finding as per preliminary System Audit Report
- Preliminary Corrective Action- The original corrective action as prescribed in the preliminary System Audit report
- Current Finding-The current finding w.r.t. the issue
- Current Status-Current status of the issue viz Compliant, Non-compliant
- Revised Corrective Action-The revised corrective action prescribed w.r.t. the Non-Compliant/WIP issues

1. Annexures-Network Connectivity

6.1 Network Connectivity Form

On Member's letterhead

Date:
To,
The Membership Department

Multi Commodity Exchange of India Ltd
Exchange Square,
CTS No. 255, Suren Road, Andheri East Mumbai – 400093

Member Name:
Member ID:

Network Connectivity Preference

	MPLS		NPN_POP		Point to Point		VSAT

Application Type

APPLICATION TYPE	**Tick √**
New Order*	
Shifting	
Surrender	
Upgradation	
Downgrade	
VSAT Under Limited Promotion Scheme	
Activation of Existing VSAT (Member Own VSAT)	
Transfer Of VSAT	
No Objection Certificate (NOC) for Private Point to Point Leased Line	

*Application for new NPN POP Leased Line to be filled online as per procedure.

Details of site are as follows: -

Sr. No.	Description	Details
1	Service Provider	
2	Bandwidth * (applicable for MPLS /NPNPOP/ Point to Point)	
3	NPN_POP_ID **	
4	Connectivity Installation Address ***	
5	City & PIN code	
6	District and State	
7	Contact person Name	
8	Mobile Number of Contact Person	
9	Contact Number with STD code	
10	FAX Number	
11	Email Address	
12	Feasibility of the location checked with the Exchange	YES / NO
13	Circuit ID / VSAT ID ****	
14	IP Address ****	
15	NPN_POP **Scenario** *(only for NPN_POP)* *****	
16	NPN_POP **Option***(only for NPN_POP)* *****	

**Bandwidth to be mentioned for shifting of MPLS / NPN POP / Point to Point connectivity and in case of upgrade of leased line connectivity please mention from and to bandwidth.*
***NPN POP ID to be mentioned for NPN POP Leased Line connectivity.*
**** In case of shifting please mention new address.*
***** Mandatory for shifting / upgrade / downgrade/ surrender application.*
****** In case of **upgrade / downgrade** of **Scenario & Option of NPN POP** connectivity please mention from and to* **Scenario & Option**.

Name of Service Provider for additional connectivity.

Preference – 1	Preference -2

We hereby confirm that the installation address mentioned above is (please tick the option as applicable)

- Registered Office Address of the Member
- Branch Office address of the Member
- Address of our Registered Authorized Person (AP) with the Exchange

Thanking you.
Yours faithfully
For ……. (Name and signature of the authorized signatory with Company seal)

Terms and Condition:

Surrender:

Kindly remove mapping of the following USER IDs from the said VSAT/ NPN POP / MPLS / Point to Point (Provide only the user ids below):

a) b) c) d) e)

We hereby certify that No USER IDs other than mentioned above are mapped on the said VSAT/ NPN POP / MPLS / Point to Point.

We hereby agree and bind ourselves to be responsible for all acts, quotations and transactions done, trade made of affected by the users mapped on the said connectivity on the trading system. We will be responsible to Exchange for clearing any dues for these User(s).

For VSAT New & Limited Promotion Scheme application:

I / we submit the following documents for the above stated request

1. Undertaking on Rs.500/- stamp paper
2. No objection Certificate
3. Questionnaire for VSAT
4. CST/LST Declaration
5. VSAT Undertaking

Activation of Existing VSAT (Member Own VSAT):

I / we submit the following documents for the above stated request:

1. Undertaking on Rs.500/- stamp paper
2. Declaration on Member's letter head
3. No objection certificate from the existing Network to activate the VSAT in MCX network.
4. Annual Maintenance Contract
5. Invoice of the VSAT purchased from HCL Comnet

Transfer of VSAT:

Member need to mention name of the Transferor and Transferee having no objection toward transfer of VSAT
Please fill up the relevant details as below.

EXISTING Installation Address ***	
City & PIN code	
District and State	
Contact person Name	
Mobile Number of Contact Person	
Contact Number with STD code	
FAX Number	
Email Address	

NEW Installation Address ***	
City & PIN code	
District and State	
Contact person Name	
Mobile Number of Contact Person	
Contact Number with STD code	
FAX Number	
Email Address	

6.1.1 Authorization letter

Format for **Trading Member** (Authorization letter from PCM/ITCM/TCM in favour of the Exchange to debit Annual Recurring Charges)

To be printed on letter head of the respective PCM / ITCM / TCM

Date:

To
The Membership Department
Multi Commodity Exchange of India Limited
Exchange Square, CTS No-255, Suren Road,
Chakala, Andheri (East),
Mumbai – 400 093
Fax No.: 022 – 6726 9566

Dear Sir,

Sub: VSAT /NPN POP/ MPLS / Point to Point Leased line annual recurring charges debit facility for our Trading member,

_____(Name of the Trading Member) having Member ID_____.

This has reference to Exchange circular no._____dated_____.

I / we authorize Exchange to debit our settlement account no._____in _____(Name of the bank) towards the annual recurring charges of leased line.

For_____
(Name of PCM / ITCM / TCM)

Thanking you.
Yours faithfully
For ……. (Name and signature of the authorized signatory with Company seal)

**Only For VSAT*

6.1.2 NOC-VSAT

NO OBJECTION CERTIFICATE (NOC) - VSAT

Date:
To
The Membership Department
Multi Commodity Exchange of India Ltd
Exchange Square,
CTS No. 255,
Suren Road, Andheri East
Mumbai – 400093

Dear Sir,

Sub: No-objection Certificate for installation of VSAT – Dish Antenna

We hereby declare that the following building/premises where the VSAT - Dish Antenna will be installed for the use of (name of the member), belongs to us and we have no objection in your installing the VSAT - Dish Antenna in the said building/premises:

Address	
Tel. No.	

Details of the (Name of the Member):

Tel. No.	
Fax No.	
Email	
Contact person	
Mobile No.	

Thanking you.
Yours faithfully
For ……. (Name and signature of the authorized signatory with Company seal

6.1.3 Declaration

Only For VSAT

Declaration

(For member registered / not registered with CST/LST)

(To be printed on the letter head of the Member)

HCL Comnet Ltd.
C-9, Sector III,
Noida – 201301

This is to certify that I/we, M/s._____is registered / not registered with the Central Sales Tax or Local Sales Tax Authorities.

(If Registered) My/Our CST Registration number is_____and LST Registration number is_____

I/We also declare that the equipment's procured from HCL Comnet Limited are for my / our company use and not for re-sale.
The site address for the installation of VSAT equipment is as given below:

Address	
Contact Person Name and Number	

Thanking you.
Yours faithfully
For ……. (Name and signature of the authorized signatory with Company seal)

6.1.4 Questionnaire for VSAT

DATE: _____

Member Name	
Address	
Contact Person Name & Number	

Sr.No.	Particulars		Member's Comments
1	Working Days & Hours at Site	Days :	
		Timings :	
2	Building Details	No. of Floors	
		Height of the Building	
		Floor on which Trading Workstation is located	
		Voltage between Earth & Neutral	
		(Not exceeding 2 V)	
3	Rooftop	Flat / Inclined	
		Dimension of the door for entering the rooftop.	
		Nearest electrical earth point near the antenna.	
4	VSAT Antenna	Any restriction to access the site	
		VSAT Antenna to be taken to the rooftop via :	
		By Elevator	
		By Staircase	
		Other mode : Please specify	
		Provision of conduiting from the antenna to the trading workstation.	
		Minimum requirement :	

5	Hardware for the Trader Workstation	Intel i5 (2.9 Ghz) Processor.	
		Minimum 4 GB RAM	
		Hard Disk (HDD) 500 GB	
		Network Card : 10/100 Mbps	
		Color Monitor - 15"	
		Windows 2008/Windows 2010	
6	Capacity of UPS connected to the PC - Trader Work Station	Recommended: 2 KVA Online UPS	_____ KVA Online UPS

Thanking you.
Yours faithfully
For ……. (Name and signature of the authorized signatory with Company seal)

Note:

1. Necessary permissions / Security pass to be arranged by the Member for accessing the rooftop and office of the Member.

2. Enclose a sketch describing the route of IFL cable from the VSAT Antenna to IDU.

3. Provide any other pertinent information about the site that wasn't asked elsewhere in this form.

6.2 Network Connectivity Undertaking-Leased Line

(On Non-judicial stamp paper of Rs. 500/-)

UNDERTAKING CUM INDEMNITY

(For Leased Line Connectivity)

This Non-Judicial Stamp paper of Rs. forms part and parcel of this Undertaking cum Indemnity submitted to Multi Commodity Exchange of India Limited executed by

Mr. /Mrs. /M/s. _____

_____on_____day of_____, 20_____.

THIS UNDERTAKING CUM INDEMNITY is made on this ..... day of ....., 20…….. by ..... admitted as a Trading-Cum-Clearing Member/ Institutional Trading Cum Clearing Member/ Professional Clearing Member (Member ID No:_) of Multi Commodity Exchange of India Limited and having his address/its registered office at ……
……..(Hereinafter referred to as "member/I/we/me/us" which expression shall unless repugnant to the context or meaning thereof include his/its heirs, successors, assigns and legal representatives)

IN FAVOUR OF

Multi Commodity Exchange of India Limited, a company incorporated under the Companies Act, 1956 with its corporate office at CTS No. 255, Exchange Square, Suren Road, Andheri east, Mumbai- 400 093 (hereinafter referred to as "MCX" which expression shall unless repugnant to the context or meaning thereof include its successors or assigns

WHEREAS PURSUANT TO MCX MASTER CIRCULAR NO. …….. DATED September 28, 2016 AND IN CONSIDERATION OF MCX PERMITTING ME/US AS A MEMBER TO USE THE ……., I / WE UNCONDITIONALLY AND IRREVOCABLY UNDERTAKE AND AGREE:

1. I/We agree that the Leased Line will be used purely for the purpose of trading on MCX only.

2. I/We agree that this Leased Line will not be interconnected to any of the Leased Line / Data circuit / Network / PSTN / EPABX etc. of any other service providers which are not permitted by the terms and conditions of Telegraph Authority. I / We further agree to extend facility to the Telegraph authority in order to enable monitoring of the purpose, performance and operation of the circuit, as and when required.

3. I/We hereby agree to abide by the provisions of Indian Telegraph Rules in force and as modified from time to time and such other terms and conditions prescribed by the telegraph Authority.

4. I/We agree that necessary charges for registration / installation / Advance annual rental / Arrears, if any will be paid to the controlling / billing authority of service provider & MCX, as and when we receive demand note / advice from service provider / MCX and when such charges become due.

5. I/We agree that I/We shall pay the surrender charges and other expense as prescribed under MCX Circular Ref No. …… dated …….. and any subsequent circulars issued in this respect, from time to time, in the event of surrender of my /our leased line(s) connectivity.

6. I /we agree that I / we shall pay the cancellation charges and other expenses incurred to establish the Leased Line as requested by me / us that may become payable, in the event of cancellation of the application / closure of the Leased line at a later date.

7. I/We do hereby agree to indemnify the Govt. of India / DOT / Service provider and keep them indemnified against any loss damage claim, cost, charges, expenditure incurred by or made against them in respect of loss of rent / call charges, violation of C.U.G. norms due to misuse of the Leased Line or otherwise whatsoever in the matter.

8. In case service provider provides us modems, it will be our responsibility to maintain the same safely. In case of any physical damage or theft we will bear the charges specified by service provider.

9. I/ we undertake to authorize MCX to inspect and test IT Infrastructure related to trading system at my/our site without any prior notice.

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

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

12. I / We shall not hold MCX responsible or liable for any loss, damage, etc., suffered due to any delay, disturbance or non-availability of connectivity or due to any reason because of Service Provider /Network Integrator or otherwise, at any time including the reasons stated in Force Majeure clause hereinabove.

13. I / We shall indemnify and keep indemnified MCX harmless against every and all claims, demands, damages, liabilities, losses and expenses, etc., suffered by it directly by reason of my / our non-compliance, contravention with any of the provisions of this Undertaking or any penalty imposed by Service Provider /Network Integrator or DOT /Regulatory or statutory Authorities, due to my/ our non-compliances or violation of any provisions of the applicable Act(s) or Rules and Regulations in force.

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

15. I/ We hereby undertake and agree that this Undertaking-cum-Indemnity shall be valid and effective for any leased line(s) obtained by the undersigned for connecting to MCX, from time to time. Further, this Undertaking-cum-Indemnity does not lapse till such time, the Exchange discharges the undersigned.

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

17. I/We also agree that in the event of my/our non-compliance with any of the provisions as mentioned above, MCX shall take such action(s) against us as it may deem fit in this regard.

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

Name, address & signature Witness 1 ……. Witness 2 ……	Stamp & Signature of the Authorized Signatory of Member …….. ……..

Date: Place:

The common seal of _____ _____was hereunto affixed pursuant to a resolution passed at a meeting of The Board of Directors of the company held on _____ day of _____, 20____ in the presence of * _____ - _____ .

Signature 1 **Signature 2**

Stamp **Stamp**

* As required by the Articles of Association of the Company

6.3 Network Connectivity Undertaking-VSAT

(On Non-judicial stamp paper of Rs 500/-)

UNDERTAKING CUM INDEMNITY

(For VSAT Connectivity)

This Non-Judicial Stamp paper of Rs. forms part and parcel of this Undertaking cum Indemnity submitted to Multi Commodity Exchange of India Limited executed by

Mr. /Mrs. /M/s. _____

_____on_____day of_____, 20_____.

THIS UNDERTAKING CUM INDEMNITY is made on this ..... day of.....20 …… by ..... admitted as a Trading-Cum-Clearing Member/ Institutional Trading Cum Clearing Member/ Professional Clearing Member (Member ID No: _) of Multi Commodity Exchange of India Limited and having his address/its registered office at ……
…
…..(Hereinafter referred to as "member/I/we/me/us" which expression shall unless repugnant to the context or meaning thereof include his/its heirs, successors, assigns and legal representatives.)

- MCX has introduced a trading system, for the purpose of providing a screen based trading facility for the whole territory of India, known as Online Automated Trading System (hereinafter referred as 'MCX System').
- MCX through its MCX System has established trading facilities in the whole territory of India by setting up a central trading system at Mumbai connected to the Trading-Cum- Clearing Members workstations through appropriate communication network using a Very Small Aperture Terminal (VSAT) Network. The Trading-Cum-Clearing Members will be connected to the central trading system through the hub of the VSAT network.
- In order to use the said network known as MCXNET, MCX has extended the facility to use the MCXNET, to the Trading-Cum-Clearing Members subject to certain restrictions and conditions prescribed or to be prescribed by the Department of Telecommunications (DoT) and MCX.
- Network provider engaged on shared hub basis by MCX had applied to the DoT for issue of a license for the installation and operation of private Closed User Group (CUG) VSAT network and which license was granted by the Director General of DoT.
- Network provider has extended the facility to use the MCXNET to the Trading-

Cum- Clearing Members subject to certain restrictions and conditions prescribed or to be prescribed by the Department of Telecommunications and MCX.

- MCX upon completion of feasibility study for the prospective locations of leased line requirements will apply to DoT for issue of a license for the installation and operation of private Closed User Group (CUG) network and license would be issued by DoT.

NOW IN CONSIDERATION OF MCX permitting me/us as a Trading-Cum-Clearing Member to use the above mentioned MCXNET,

IN FAVOUR OF

Multi Commodity Exchange of India Limited, a company incorporated under the Companies Act, 1956 having its registered and corporate office at Exchange Square, CTS No. 255, Suren Road, Andheri (East), Mumbai- 400 093 (hereinafter referred to as "MCX" which expression shall unless repugnant to the context or meaning thereof include its successors or assigns).

WHEREAS PURSUANT TO MCX MASTER CIRCULAR NO. …….. DATED **September 28, 2016** AND IN CONSIDERATION OF MCX PERMITTING ME/US AS A MEMBER TO USE THE MCXNET, I / WE UNCONDITIONALLY AND IRREVOCABLY UNDERTAKE AND AGREE:

1. That ownership of the MCXNET will remain with MCX and will not be transferable to me/us in any manner.

2. That Closed User Group for the MCXNET will consist of MCX and its Members trading in the Commodity Market.

3. To display in such manner at all locations connected with MCXNET all such notices or signs boards as may be prescribed or approved by MCX.

4. To use MCXNET and all related or connected equipment only for the purposes prescribed or approved by MCX.

5. To subject network engineering and interface equipment to the examination and supervision of MCX or its authorized representatives or approved persons.

6. To ensure that any communication emanating from the VSAT will first be routed to the hub and to ensure that there will be no direct communication by passing the hub between two VSAT's.

7. To use MCXNET subject to the condition that the license issued by the Director General, Department of Telecommunication may be amended or altered from time to time and is issued only for the specific approved systems/equipment/circuits/ services and users and subject to the condition that the Director General, Department of Telecommunication, reserves the right to revoke the license suo moto at any time.

8. To use MCXNET subject to the provisions of the Indian Telegraph Act, 1885, The Indian Telegraph Rules, The Indian Wireless Telegraphy Act 1933 and all other Rules and Regulations wherever applicable.

9. To use all communications through MCXNET for the exclusive in house communication of only approved users of the MCXNET and in no way, at no place and at no time to connect to Public Telecommunications/ Telex/ Data/ Telephone Network of Department of Telecommunication/ BSNL/ MTNL/ VSNL or any network of any other party unless permitted to do so by MCX upon permission to do so being granted to it by Department of Telecommunication.

10. To use the services provided on MCXNET for the bonafide use of authorized users of the MCXNET only.

11. To ensure that the operation of the systems/equipment of the MCXNET does not cause any harm/loss to the Department of Telecommunication or MCX.

12. To ensure that the equipment approved for MCXNET is installed, replaced, repaired or removed only in the presence of authorized persons of MCX and for this purpose to provide reasonable facilities and assistance.

13. To use MCXNET in accordance with the Rules and Regulations and prescribed parameters of MCX.

14. To allow MCX to take over any part/component/equipment of MCXNET and also to replace any such equipment/services.

15. To ensure that no communication/message which is prejudicial to the interests of the nation or to the security of India is passed over any part of MCXNET.

16. Notwithstanding anything contained in the terms and conditions applicable for operation of MCXNET, not to carry such messages (e.g. Electronic Transfer of Funds) which law, on any part of MCXNET prohibits.

17. Not to hold the Department of Telecommunications or MCX responsible for any harm/loss damage of any kind to the user/users of MCXNET on account of any interruption on DOT/MCX systems or network.

18. To use MCXNET subject to and in accordance with the Byelaws, Rules, Regulations of MCX and such other conditions as may be prescribed by DOT or MCX from time to time.

19. To ensure that the VSAT and related equipment (cable, antenna and VSAT IDU) are installed and used only in the approved premises under my/our control only by persons authorized or approved by MCX and to take all responsibility for authorized or unauthorized use of the MCXNET through such VSAT and related equipment.

20. To render all possible assistance and co-operation to MCX by providing access to any kind of information in any form as it may require and hereby undertake to produce such documents, records, accounts, books, data howsoever stored including data stored in magnetic tapes, floppy diskettes, etc. and any other information as may be required by

MCX at its discretion.

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

22. To not to hold MCX responsible or liable for any loss, damage, etc., suffered due to any delay, disturbance or non-availability of connectivity or due to any reason because of Service Provider /Network Integrator or otherwise, at any time including the reasons stated in Force Majeure clause hereinabove.

23. To indemnify and keep indemnified MCX harmless against every and all claims, demands, damages, liabilities, losses and expenses, etc., suffered by it directly by reason of my / our non-compliance, contravention with any of the provisions of this Undertaking or any penalty imposed by Service Provider /Network Integrator or DOT /Regulatory or statutory Authorities, due to my/ our non-compliances or violation of any provisions of the applicable Act(s) or Rules and Regulations in force.

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

25. To undertake and agree that this Undertaking-cum-Indemnity shall be valid and effective for any VSAT/leased line(s) obtained by the undersigned for connecting to MCX, from time to time. Further, this Undertaking-cum-Indemnity does not lapse till such time, the Exchange discharges the undersigned.

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

27. To agree that in the event of my/our non-compliance with any of the provisions as mentioned above, MCX shall take such action(s) against us as it may deem fit in this regard.

28. Contravention of any of the Bye-laws, Rules, Regulations, circulars etc. framed by MCX upon which MCX may adopt any course of action which may be either disciplinary or legal or impose any other penalty which MCX may deem necessary, which shall include the

right of MCX to demand any amount of monetary compensation for any default on the part of Member/from the Trading-cum clearing member, and which amount in the case of a default in payment, may be adjusted by MCX at its discretion against my/our security deposit with MCX.

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

Name of the Member

Name, address & signature Witness 1 ……. Witness 2 ……	Stamp & Signature of the Authorized Signatory of Member …….. ……..

Date:

Place:

The common seal of _____ _____was hereunto affixed pursuant to a resolution passed at a meeting of The Board of Directors of the company held on _____ day of _____, 20____ in the presence of * _____ - _____ .

Signature 1 **Signature 2**

Stamp **Stamp**

* As required by the Articles of Association of the Company

6.4 VSAT Transferor undertaking

Request-cum-Undertaking from the Transferor for transfer of VSAT on a Non-Judicial stamp paper of Rs. 500/-.

To,
The Membership Department
Multi-Commodity Exchange of India Ltd.
5th Floor, Exchange Square, CST No: 255
Suren Road, Chakala, Andheri (East),
Mumbai – 400 093.

Sub: Request for Transfer of VSAT Networking Equipment (Member ID__)

Dear Sir,

With reference to the above captioned subject, we hereby request you to kindly transfer our VSAT from_____(name of the Transferor) to ____ (name of the Transferee) and convey herewith our no objection towards the same. The relevant details are given below:

EXISTING Installation Address	
City & PIN code	
District and State	
Contact person Name	
Mobile Number of Contact Person	
Contact Number with STD code	
FAX Number	
Email Address	

NEW Installation Address	
City & PIN code	
District and State	
Contact person Name	
Mobile Number of Contact Person	
Contact Number with STD code	
FAX Number	
Email Address	

Further you are requested to remove mapping of the following USER IDs from the said VSAT. (Provide only the user ids below):-

a)

b)

We hereby agree and bind ourselves to be responsible for all acts, quotations and transactions done, trades made, or affected by these user(s) on the Trading System.

We will be responsible to Exchange for clearing any dues for these user(s).

This VSAT networking equipment is open for Inspection by MCX at my/our above mentioned premises at any time upon request by MCX, before the transfer to the transferee's address as mentioned above.

I/we hereby guarantee that the above VSAT networking equipment is free of encumbrances of any kind or lien or pledge or claims, which may impair the clear title of Multi Commodity Exchange of India Ltd. over the said Equipment.

Kindly do the needful at the earliest.

Yours faithfully,

For (Name of the Transferor Member)

Authorized Signatory
(Designated Director)

Rubber stamp

Date:-
Place:-

6.5 VSAT Transferee undertaking

Request-cum-Undertaking from the Transferee for transfer of VSAT on a Non-Judicial stamp paper of Rs. 500/-.

To,
The Membership Department
Multi-Commodity Exchange of India Ltd.
5th Floor, Exchange Square, CST No: 255
Suren Road, Chakala, Andheri (East),
Mumbai – 400 093.

Sub: Request for Transfer of VSAT Networking Equipment (Member ID__)

Dear Sir,

With reference to the above captioned subject, we hereby request you to kindly transfer the VSAT from_____(name of Transferor) to _____ (name of the transferee). The relevant details are given below:

EXISTING Installation Address	
City & PIN code	
District and State	
Contact person Name	
Mobile Number of Contact Person	
Contact Number with STD code	
FAX Number	
Email Address	

NEW Installation Address	
City & PIN code	
District and State	
Contact person Name	
Mobile Number of Contact Person	
Contact Number with STD code	
FAX Number	
Email Address	

I/we am/are also convinced that the VSAT Networking Equipment is in good condition for my/our use.

I/we hereby guarantee that I/we shall not impair the title of Multi Commodity Exchange of India Ltd. over the said VSAT Networking Equipment nor shall I/we pledge, lend, or create any charge or encumbrances of any kind.

I/we also guarantee that I/we shall maintain the said VSAT Networking Equipment with utmost care and shall make payments towards the VSAT Installments /Annual Maintenance etc. Promptly when demanded.

Kindly do the needful at the earliest.

Yours faithfully,

For (Name of the Transferee Member)

Authorized Signatory
(Designated Director)

Rubber stamp

Date:-
Place:-

6.6 Router Specification

Connectivity - 2Mbps

Router Model & Component	**Specifications**
Model	CISCO 1921
Cards	EHWIC-2T Card
IP Base License	IP Base License for CISCO 1900 (SL-19-IPB-K9)
IOS	CISCO 1900 IOS Universal
Cable	V.35 Cable, DTE Male to Smart Serial,10 Feet
Security License	Security license for CISCO 1900

Connectivity - 10Mbps

Router Model & Component	**Specifications**
Model	CISCO 1921
IP Base License	IP Base License for CISCO 1900 (SL-19-IPB-K9)
IOS	CISCO 1900 IOS Universal
Security License	Security license for CISCO 1900

Connectivity - 20Mbps*

Router Model & Component	**Specifications**
Model	CISCO 1941
IP Base License	IP Base License for CISCO 1900 (SL-19-IPB-K9)
IOS	CISCO 1900 IOS UNIVERSAL (S190UK9-15501T)
Security License	Security License for CISCO 1900 (SL-19-SEC-K9)

[*Members will now have the option to connect with high end CISCO Network devices.]

[1] Inserted vide MCX Circular No. MCX/TECH/073/2017 dated March 14, 2017

Connectivity - 30Mbps / 40Mbps / 45Mbps*

Router Model & Component	**Specifications**
Model	CISCO 2921
IP Base License	IP Base License for CISCO 2901-2951(SL-29-IPB-K9)
IOS	CISCO 2901-2921 IOS UNIVERSAL (S29UK9-15501T)
Security License	Security License for CISCO 2901-2951 (SL-29-SEC-K9)

[*Members will now have the option to connect with high end CISCO Network devices.][1]

[1] Inserted vide MCX Circular No. MCX/TECH/073/2017 dated March 14, 2017

6.7 Technical support contact details of service provider

AIRTEL

Centralized Fault Management : 1800102001
Email address : enterprise.data@airtel.in

VSAT/BSNL/MTNL

Technical Helpdesk : 022 - 6649 4060
Email address : Techdesk@mcxindia.com

TCL

Members are requested to try respective city number as the first preference. If for any reason the helpdesk number is not accessible, please call TCLs centralized Mumbai Helpdesk number.

CITY	**PHONE NO**	**CITY**	**PHONE NO**
Bangalore	080 - 66600245	Hyderabad	040 - 66234600
Bhubaneshwar	0674 - 2546357	Indore	0731 - 2550734
Chandigarh	0172 - 5047357	Jaipur	0141 - 5104357
Chennai	044-66664357	Jalandhar	0181- 5084357
Coimbatore	0422-6554357	Kanpur	0512 - 2584300
Dehradun	0135- 2774357	Kolkata	033 - 23554357
Delhi	011- 66514357	Mumbai	022-66504357
Ernakulam	0484 - 2421740	Patna	0612 - 2234634
Gandhinagar	079- 64512375/76	Pondicherry	0413 - 6554357
Goa	0832- 6653695	Pune	020- 66154357
Guwahati	0361 - 2464357	Thiruvanthapuram	0471 - 2334357
Centralized Mumbai Helpdesk number : +91-22-66504357 / 18002660660			
Email address : corp.helpdesk@tatacommunications.com			

Videocon

Centralized Fault Management : 120-30030308/120-30030309

Level	Contact Details	Contact Details
1	**Amit Kohli – Business Head / Videocon Team** Mobile: +919877012750 Email: amit.kohli@infotelconnect.com	**Manmohan Kumar** Mobile: +91 9717112271 Email: manmohan.kumar@videocon.com
2	**Suneel Saxena – Head Enterprise Business** Mobile: +919877012277 Email: suneel.saxena@infotelconnect.com	**Sanjeev Sharma - Head Enterprise Business** Mobile: +919711525651 Email: sanjeev.sharma@videocon.com
3	**Arvind Jalota – Business Head** Mobile: +91 9876342211 Email: arvind.jalota@videocon.com	

6.8 Reference – List of Circulars

Connectivity Type	Circular No.
VSAT	MCX/224/2006 dated May 29, 2006
	MCX/291/2006 dated July 25, 2006
	MCX/TECH/078/2010 dated March 12, 2010
	MCX/095/2006 dated March 2, 2006
	MCX/380/2005 dated November 10, 2005
	MCX/116/2004 dated October 12, 2004
	MCX/116/2005 dated March 24, 2005
	MCX/TECH/123/2007 dated April 04, 2007
Leased Line - Point to Point	MCX/142/2004 dated November 17, 2004
	MCX/TECH/507/2009 dated December 5, 2009
	MCX/TECH/342/2008 dated October 25, 2008
	MCX/TECH/193/2015 dated July 3, 2015
	MCX/TECH/035/2014 dated February 11, 2014
	MCX/TECH/376/2012 dated November 2, 2012
	MCX/TECH/028/2013 dated January 28, 2013
	MCX/TECH/069/2016 dated March 10, 2016
	MCX/TECH/034/2016 dated February 5, 2016
	MCX/TECH/235/2008 dated July 8, 2008
	MCX/TECH/107/2008 dated March 15, 2008
MPLS Leased Line	MCX/TECH/068/2016 dated March 10, 2016
	MCX/TECH/098/2010 dated March 25, 2010
	MCX/107/2004 dated October 1, 2004
	MCX/130/2004 dated October 30, 2004
	MCX/142/2004 dated November 17, 2004

Connectivity Type	Circular No.
	MCX/TECH/038/2013 dated February 1, 2013
Internet & RSA	MCX/431/2005 dated December 21, 2005
	MCX/TECH/148/2008 dated April 23, 2008
	MCX/019/2006 dated January 14, 2006
	MCX/395/2006 dated September 16, 2006
	MCX/010/2005 dated January 11, 2005