



# NATIONAL STOCK EXCHANGE OF INDIA LIMITED

## CAPITAL MARKET SEGMENT

Circular No. 025 / 2011

### Sub. : Decision Support Tools / Algorithms for trading through Non-Neat front end

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This is in continuation of Circular No. NSE/CMO/31/2008 dated June 09, 2008 and NSE/CMO/039/2009 dated July 22, 2009 pertaining to Decision Support Tools / Algorithms for trading through Non-Neat front end.

Trading members have represented to the Exchange to smoothen the process and facilitate the early approval of the Decision Support Tools / Algorithms for trading through Non-Neat front end. Accordingly, to facilitate efficient and speedy approval of the Decision Support Tools / Algorithms, the approval process for the same has been revised.

#### 1. Procedure for granting permission to Trading members

The Decision Support Tools / Algorithms applications submitted by the members would be categorized as follows for granting of approval.

##### a) 'Approved algorithms' through CTCL

This procedure will be applicable for granting approval to trading members for 'Approved Algorithms' supplied by vendors (procedure for identification of 'Approved Algorithms' is provided below).

Members desirous of seeking approval for 'Approved Algorithms' shall make an application to the Exchange. The format of the Application is enclosed (Annexure A). On verification of the documents and fulfillment of the conditions as satisfactory and meeting SEBI / Exchange minimum requirements, the Exchange shall grant permission to the member for the usage of 'Approved Algorithms' through CTCL.

##### b) 'Non-approved algorithms' through CTCL

This procedure will be applicable for granting approval to trading members for 'Non-approved algorithms'. These algorithms may be in-house developed by member or vendor supplied.



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Members desirous of seeking approval for 'Non-approved Algorithms' shall make an application to the Exchange. The format of the Application is enclosed (Annexure A).

The Member shall be required to give demonstration of the automated Risk Management features for each Decision Support Tool / Algorithmic trading product. On verification of the documents and fulfillment of the conditions as satisfactory and meeting SEBI / Exchange minimum requirements, the Exchange shall grant permission to the member for the usage of 'Non-Approved Algorithms' through CTCL. Subsequently, the member shall be required to inform the Exchange in case of any changes to the version number or risk management features of the Decision Support Tool / Algorithmic trading product.

**c) DMA algorithms – Trading Member / Institutional Client algorithms**

This procedure will be applicable for granting approval to trading member for DMA algorithms – Trading member or institutional client algorithms. These algorithms may be in-house developed by member, vendor supplied or institutional client proprietary algorithms.

Members desirous of seeking approval of algorithms through Direct Market Access facility as approved by the Exchange shall make an application to the Exchange. The format of the Application is enclosed (Annexure A). On verification of the documents and fulfillment of the conditions as satisfactory and meeting SEBI / Exchange minimum requirements, the Exchange shall grant permission to the member for the usage of 'Approved Algorithms' through CTCL.

**2. Procedure for Identification of Decision Support Tools / Algorithms as 'Approved Algorithm'**

Vendors offering Decision Support Tools / Algorithmic trading products to trading members and desirous of having their Decision Support Tools / Algorithmic trading products identified as 'Approved Algorithms' shall apply to the Exchange. The format of the Application is enclosed (Annexure B).

On fulfillment of the conditions as satisfactory and meeting SEBI / Exchange minimum requirements, the Exchange may identify the vendor's Decision Support Tools / Algorithmic trading product as 'Approved Algorithm'. The Exchange may request for any additional information as it deems fit.

**3. Additional category of Non- Neat User:**

Members using Non- Neat Front End have represented to provide a separate user in addition to current categories without a NEAT login facility. The rationale behind this requirement was that such user id is used only for control and validation and not for trading.

Hence, Exchange proposes to provide a separate category of Non-Neat user without NEAT login facility along with the current categories of users. Members are requested to note that such category of user shall not be allowed to login/ trade through NEAT/NEAT Plus. Members will be required to build additional back up facilities for exigency. This category of user will not be required to provide any certification as the user does not have trading eligibility by itself.

The procedure for requesting such user ids will be provided separately.

#### **4. Risk Managers for Algorithmic Terminals:**

Pursuant to representation from trading members, it is proposed that, each risk manager shall be allowed to manage multiple algorithms under a single risk management system. Hence it would be considered as single dealer for the compliance purpose.

**For National Stock Exchange of India Limited**

**Suprabhat Lala**  
**Vice President**



## Annexure A

### Application form for permission for providing Decision Support Tools / Algorithms trading (To be executed on letterhead of the Member)

We/I, \_\_\_\_\_ having my/our Registered Office/Office at \_\_\_\_\_ am/are trading member/s of the Capital Market segment / Futures and Options segment / Currency Derivatives segment of the National Stock Exchange of India Limited; hereby apply for the permission of the Exchange for providing Decision Support Tools / Algorithms trading.

S No.	Particulars	Details
1	Name of the Trading Member :	
2	SEBI Registration number :	
3	Registered Office/ Office address : Telephone : Fax No. :	
4	Name of the Authorised Signatory and Designation	
5	Contact address of the Authorised Signatory : Telephone No. : Fax No. :	
6	Approval for	<ul style="list-style-type: none"><li>• 'Approved Algorithm through CTCL'</li><li>• 'Non-approved Algorithm through CTCL'</li><li>• 'DMA Algorithms – Trading Member or Institutional Client Algorithms'</li></ul>
7	Type of algorithm	<ul style="list-style-type: none"><li>• Execution Algorithm</li><li>• Arbitrage Algorithm</li><li>• Alpha seeking Algorithm</li><li>• High Frequency Trading</li><li>• Others</li></ul>
8	Whether the software providing Decision Support Tools / Algorithms trading is being developed by the member on his own	YES / NO
9	If not, name of software vendor developing Software	
10	Strategy Name and Version number	
11	Complete address of server routing Algorithm orders to the Exchange	

	trading system.	
12	Confirmation letter from the vendor supplying the Decision Support Tool / Algorithmic trading product is attached (Applicable only in case of 'Approved Algorithm through CTCL')	YES / NO
13	Details regarding the vendor who has developed the CTCL / adapter and automated risk management system using which the Decision Support Tools / Algorithmic trading product shall connect to the Exchange Trading system (Applicable only in case of 'Non-approved Algorithm through CTCL')	
14.	Details of approved Direct Market Access (DMA) using which the algorithm orders shall be released to the Exchange DMA Application Name : Version number : DMA Approval Date : (Applicable only in case of 'DMA Algorithms')	
15	Trading Member / Institutional client Algorithms (Applicable only in case of 'DMA Algorithms')	Trading Member / Institutional client Algorithms
16	Name of Institutional client (Applicable only in case of DMA Algorithm - Institutional client Algorithms)	

We confirm and certify that the software for Decision Support Tools / Algorithms trading 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, SEBI, RBI and any other statutory and regulatory body(ies) as may be applicable from time to time.

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

We understand that the Exchange reserves the right to call for additional information / documents / demonstration related to any Decision Support Tool / Algorithm at any time as it may deem fit.

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

**Authorised Signatory Name**

**Stamp of the Trading Member**

## Annexure A1

NOTWITHSTANDING the generality of the above, the software provided complies with the following provisions in particular as directed by SEBI / NSE.

S No.	Requirement	Whether complied (Yes / No)
1	<p>The software provides for routing of orders through electronic / automated risk management systems of the broker to carry out appropriate validations of all risk parameters before released to the Exchange trading system including</p> <p><b>Individual Order Level:</b></p> <ul style="list-style-type: none"> <li>• Quantity Limits check</li> <li>• Price Range checks</li> <li>• Trade price protection checks</li> <li>• Order value checks</li> </ul> <p><b>Client Level:</b></p> <ul style="list-style-type: none"> <li>• Net position v/s available margins</li> <li>• RBI violation checks for FII restricted stocks</li> <li>• MWPL violation checks</li> <li>• Position limit checks</li> <li>• Trading limit checks</li> <li>• Exposure limit checks at individual client level and at overall level for all clients</li> </ul>	YES / NO
2	The system has Provision for generating and maintaining complete Audit Trail.	YES / NO
3	The orders generated by Decision Support Tools / Algorithmic trading products are identified as 'Algorithm orders' while releasing to the Exchange	YES / NO
4	All orders generated by Decision Support Tools / Algorithmic trading products are offered to the market for matching and no cross trades are generated	YES / NO
5	The system has sufficient security features including password protection for the user ID, automatic expiry of passwords as the end of a reasonable duration and reinitialisation of access on entering fresh passwords	YES / NO

## Annexure B

### Application form for identification of Decision Support Tools / Algorithms trading as 'Approved Algorithms'

(To be executed on letterhead of the Vendor)

I / We \_\_\_\_\_, an individual / a firm 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 \_\_\_\_\_.

We are desirous of making available Decision Support Tools/Algorithms to trading members of the Exchange in Capital Markets/ Future & Options Segments/ Currency Derivative Segments for the purpose of Algorithmic Trading; hereby apply for the permission of the Exchange for identification of Decision Support Tools / Algorithms trading as 'Approved Algorithm'

S No.	Particulars	Details
1	Name of the Software Vendor	
2	Registered Office/ Office address : Telephone : Fax No. :	
3	Name of the Authorised Signatory and Designation	
4	Contact address of the Authorised Signatory : Telephone No. : Fax No. :	
5	Strategy Name and Version number	
6	Type of algorithm	<ul style="list-style-type: none"><li>• Execution Algorithm</li><li>• Arbitrage Algorithm</li><li>• Alpha seeking Algorithm</li><li>• High Frequency Trading</li><li>• Others</li></ul>
7	Whether CTCL / adapter and automated risk management system using which the Decision Support Tools / Algorithmic trading product shall connect to the Exchange Trading system is developed by the vendor on his own	YES / NO
8	If not, name of vendor who has developed CTCL / adapter automated risk management system to which the Decision Support Tools / Algorithmic trading product is integrated	

**Signature of Authorized Signatory of the Vendor**

**Name of the Vendor**

**Date :**

**Place:**

**Stamp/Seal :**

## Annexure B1

NOTWITHSTANDING the generality of the above, the software provided complies with the following provisions in particular as directed by SEBI / NSE.

S No.	Requirement	Whether complied (Yes / No)
1	<p>The software provides for routing of orders through electronic / automated risk management systems of the broker to carry out appropriate validations of all risk parameters before released to the Exchange trading system including</p> <p><b>Individual Order Level:</b></p> <ul style="list-style-type: none"> <li>• Quantity Limits check</li> <li>• Price Range checks</li> <li>• Trade price protection checks</li> <li>• Order value checks</li> </ul> <p><b>Client Level:</b></p> <ul style="list-style-type: none"> <li>• Net position v/s available margins</li> <li>• RBI violation checks for FII restricted stocks</li> <li>• MWPL violation checks</li> <li>• Position limit checks</li> <li>• Trading limit checks</li> <li>• Exposure limit checks at individual client level and at overall level for all clients</li> </ul>	YES / NO
2	The system has Provision for generating and maintaining complete Audit Trail.	YES / NO
3	The orders generated by Decision Support Tools / Algorithmic trading products are identified as 'Algorithm orders' while releasing to the Exchange	YES / NO
4	All orders generated by Decision Support Tools / Algorithmic trading products are offered to the market for matching and no cross trades are generated	YES / NO
5	The system has sufficient security features including password protection for the user ID, automatic expiry of passwords as the end of a reasonable duration and reinitialisation of access on entering fresh passwords	YES / NO