

National Stock Exchange Of India Limited**Department : MEMBER SERVICE DEPARTMENT**

Download Ref No: NSE/MSD/38935

Date : September 21, 2018

Circular Ref. No: 41/2018

All Members,

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

Exchange has received approval from SEBI for setting up Exchange traded commodity derivatives segment. In pursuance of the same, members are requested to note the revised circular.

The term 'software' shall mean electronic systems or applications used by trading members for connecting to the Exchange and for the purposes of trading and real-time risk management, including software used for CTCL (Computer to Computer Link), IBT (Internet Based Trading), DMA (Direct Market Access), STWT (Securities Trading through Wireless Technologies), SOR (Smart Order Routing), AT (Algorithmic Trading).

1. Testing of Software:**a. Testing in a simulated test environment:**

It is mandatory for members to test new software or existing software that has undergone change prior to seeking approval from the Exchange. Members must obtain prior approval from the exchange before putting the software to use.

The test market details are available on the member portal at the below mention link:

<https://www.connect2nse.com/MemberPortal/testMrktHome.jsp#>

b. Mock testing:

i. Testing of new software or existing software that has undergone change in mock testing environment is mandatory.

ii. The exchange conducts contingency drill / mock testing session as per the calendar published every year.

c. User Acceptance Test (UAT):

The trading member shall undertake UAT of the software to satisfy themselves that the newly developed / modified software meets its requirements.

2. Trading members seeking approval for new software or change to the existing approved software shall be required to engage system auditor(s) to examine reports of tests performed in simulated test environment, contingency drill / mock test and UAT and to certify that the tests were satisfactorily undertaken. Trading members shall be required to submit the auditor's certificates, as per the format

specified in Annexure-‘B’, along with the application to the Exchange at the time of seeking approval for the software.

3. Trading members shall ensure that all user-ids approved for Algorithmic trading, irrespective of the algorithm having undergone change or not, shall participate in the contingency drill / mock trading session.

4. For pre-approval / periodic system audit of CTCL, IBT, DMA, STWT, SOR and AT, trading members shall engage a system auditor, as specified vide SEBI circular dated CIR/MRD/DP/16/2013 dated May 21, 2013, given at Annexure ‘C’. While finalizing the system auditor, trading members shall ensure that the system auditor does not have any conflict of interest with the trading member and that the directors / promoters of the system auditor are not directly or indirectly related to the current directors or promoters of the trading member

5. Trading members shall submit the application, given at Annexure ‘A’ and seek approval from the Exchange for deployment of the software.

6. Penalty on malfunction of software used by trading member: The Exchange shall examine the cases of malfunctioning of software used by trading members and apply deterrent penalties in form of fines or suspension on the trading member for software malfunctions.

This circular shall supersede Exchange circular Ref No : NSE/CMTR/24583 dated September 27, 2013 and shall be effective immediately.

**For and on behalf of
National Stock Exchange of India Limited**

**Suzie D’Souza
Chief Manager**

Annexure A: Approval Process
Annexure B: Audit certificate
Annexure C: Auditors Qualification
Annexure D: Software audit scope

Toll Free No	Fax No	Email id
1800-266-0053	+91-22-26598449	msm@nse.co.in