

National Stock Exchange of India Limited

Circular

Department: MEMBER SERVICE DEPARTMENT	
Download Ref No: NSE/MSD/61829	Date: April 30, 2024
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All Participants,

Sub: Co-location - Consolidated Circular

Exchange has been issuing various circulars from time to time for content relating to Colocation Facility. This consolidated circular replaces earlier consolidated circular NSE/MSD/57389 dated June 30, 2023, on the captioned subject. This Consolidated circular is prepared which is a compilation of subsequent circulars related to Colocation facility issued till April 5, 2024. This consolidated circular encapsulates regulations / instructions of all earlier circulars issued by Exchange from time to time and new instructions as applicable.

The circular covers all aspects of Co-location services. Circulars for matters pertaining to connectivity offering via POP (Point of Presence) based Leased Line connectivity and User ID are to be referred to separately.

Participants desirous of availing Co-location facility or who have already subscribed to Exchange's Co-location facility shall have to strictly abide by the Co-location access policy, Guidelines (updated from time to time) and Circulars, at all times. Additionally, all communications/ instructions/ circulars/ directions from the Exchange have to be complied with in this regard. Any non-compliance shall invite disciplinary action by the Exchange which will be in accordance with Exchange Byelaws, Rules and Regulations.

Participants are requested to note that Exchange will provide co-location facility on a best effort basis and shall not be responsible for any direct/indirect/consequential loss/damage/claim of any kind for any reason whatsoever including but not limited to power failure, air conditioning failure, system failure and loss of connectivity etc. Further, the Exchange shall not be liable for discontinuation of co-location facility owing to legal and/or regulatory requirement. Colo participants are requested to note that the Exchange Co-location facility does not have a separate BCP / DR site and Co-location is **not available in the Exchange's DR facility**. Considering the current technology intensive environment in which Indian Securities market operates, to ensure stability in operations of colo participants and to protect the interest of investors and market at large, colo participants are advised to sufficiently review all potential risks along with its impact on the business and put in place Business Continuity Planning (BCP)/Disaster Recovery (DR) systems.

National Stock Exchange of India Limited

No information has been rescinded for this consolidation, however, in future for any rescinded information, members may note the below:

Notwithstanding such rescission,

- I. Anything done or any action taken or purported to have been done or contemplated under the rescinded guidelines before the commencement of this Master Circular shall be deemed to have been done or taken or commenced or contemplated under the corresponding provisions of the Master Circular or rescinded guidelines whichever is applicable.
- II. The previous operation of the rescinded guidelines or anything duly done or suffered thereunder, any right, privilege, obligation or liability acquired, accrued or incurred under the rescinded guidelines, any penalty, incurred in respect of any violation committed against the rescinded guidelines, or any investigation, legal proceeding or remedy in respect of any such right, privilege, obligation, liability, penalty as aforesaid, shall remain unaffected as if the rescinded guidelines have never been rescinded.

In case of any technical queries relating to Co-location Services participants may contact the Colo support team on 022-26598815, 022-61124900 or mail on colosupport@nse.co.in . For all business-related queries participants can contact Member Service Department on 1800 266 0050 / or mail us at msm@nse.co.in

For and on behalf of
National Stock Exchange of India Limited

Bharat Gandhi
Chief Manager

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National Stock Exchange of India Limited

CONSOLIDATED CIRCULAR
ON CO-LOCATION SERVICES

April 2024

NATIONAL STOCK EXCHANGE OF INDIA LIMITED

National Stock Exchange of India Limited

Table of Contents

I.	Introduction	1
II.	Rack and the services provided by the Exchange	2
	A. Rack	2
	B. Rack allotment process.....	2
	C. Additional pair of Uplink (handoff)/ cross-connect	7
	D. Charges	8
III.	Power at Co-location racks	9
IV.	Co-location as a Service (CaaS)	10
V.	Point to Point Connectivity at Co-location	12
VI.	Process for Empanelment/ Dis-empanelment of Connectivity Service Providers in Exchange Co-location	13
VII.	Co-location Datacenter access	15
VIII.	Co-location Advisory.....	15
IX.	Various types of Co-location service requests offered by the Exchange	17
X.	List of important circulars issued by the Exchange related to Co-location.....	19

National Stock Exchange of India Limited

I. Introduction: -

In keeping up with the global trends and in continuation of service excellence, the Exchange is facilitating its members and vendors (under CaaS) hereafter referred as “Participants” to co-locate their Non-NEAT Front end (NNF) infrastructure at NSE premises.

Following are some salient features of co-location facility:

1. Co-location facility is used exclusively for NNF trading (i.e., CTCL / IBT / STWT / DMA / ALGO / SOR etc.) on NSE.
2. Order Connectivity and market data connectivity will be provided on 10Gbps network port.
3. Facilities with dual UPS power source and 100% DG capacity which ensures uninterrupted power.
4. Multiple Precision air conditioning units, with N+1 redundancy ensuring optimal temperature at all times.
5. Basic IT services namely Help Desk (24*7), Hardware Checks, Incident Management (Level 1), On-site coordination, Daily reports, named resource (SPOC) for the account and Power ON/OFF / Boot on request will be provided.
6. Exchange has two Time Synchronization services in Co-location facility i.e., Network Time Protocol (NTP) & Precision Time Protocol (PTP). Interested participants can use the same by contacting colo support team. Participants at their discretion can use any of the Time Synchronization service as per their requirement.
7. Exchange provides Multicast TBT feed in CM, F&O & CD segments to all racks in Co-location facility. Participants need not request for MTBT activation on rack as the same shall be provided as default along with rack allotment.
8. Exchange has made available access to test market environment (upon request) and daily simulated market environment (Live like environment) to members from Co-location facility. Members may refer circulars issued from time to time regarding the said facilities.
9. The Exchange shall continue to review the offering and various applicable features, charges, eligibility criteria etc. from time to time based on the experience gained and inputs received from market participants / regulators etc.

National Stock Exchange of India Limited

II. Rack and the services provided by the Exchange:

- A. Rack: Rack is a designated space provided to the Participants in NSE premises. Racks in Co-location facility at the Exchange is provided in 3 variants as detailed below:

Particulars	Full Rack	Half Rack	Quarter Rack
Rack Space (Standard Units)	42	21	9
Power	6 KVA	3.5 KVA	1.75 KVA
Maximum Permissible Interactive IPS	60	30	15

Note: The Quarter racks shall be available for subscription only to Trading members.

B. Rack allotment process:

1. Exchange has provided electronic member interface 'ENIT' to participants for submission of all requests detailed in the circular pertaining to Co-location facility.
2. Participants intending to procure a rack shall be required to place rack allotment application via ENIT and subscribe to rack of their choice, if available. In case non-availability of racks, participants can submit a rack desire request through the same ENIT path.
3. On submission of rack desire request:
 - i. Deposit amount equivalent to 50% of the rack charges shall be payable within 2 working days till 3.30 pm from the request submission date. The said amount shall be collected from members Exchange dues account.
 - ii. A request shall be considered complete only if the requisite payment is received within the prescribed timeline.
 - iii. An estimated timeline for provisioning of rack shall be communicated to participants on processing of such request.
4. On provisioning of rack against a desire request:
 - i. Participants shall be informed via separate email alert.
 - ii. Participants shall be required to procure the provisioned rack by submitting the rack allotment request via ENIT within 3 working days from the date of such email alert.
 - iii. Participants will have an option to pass the available rack if they do not wish to subscribe for the same only if the rack variant available and variant requested in the rack desire are different. The same needs to be communicated via ENIT within 3 working days from the date of such email alert.

National Stock Exchange of India Limited

5. In case no action is taken as mentioned in point 4 within the prescribed timeline, the deposit amount collected shall be forfeited and such desire request shall be deemed rejected. Further, no request for extension of timeline shall be considered.
 6. Participants are requested to read the user manual before submitting the request on ENIT. The same is available on ENIT (Co-location module path).
 7. Member shall follow the existing process for user id as per Exchange circulars issued and updated from time to time.
 8. Separate waitlist queues shall be maintained by the Exchange for rack desire requests received.
 - a. 1st Waitlist - Requests submitted by members for FPI/FII clients.
 - b. 2nd Waitlist - New / Prospective members
 - c. 3rd Waitlist - Existing members with less than X number of racks allotted (any variant)
 - d. 4th Waitlist - Existing members with X or more than X number of racks allotted (any variant)
- a. 1st Waitlist - Rack desire request by members for new FPI/FII clients:
1. Members applying for additional racks to host New FPI / FII clients (currently not trading from NSE colocation facility through any member) shall be included in the 1st waitlist and waitlist number shall be allotted to the request on FIFO basis.
 2. Rack desire requests submitted only through 1st member for only first 3 rack desire requests (any rack variant) for an FPI/FII client shall be considered in the 1st waitlist.
 3. Members will be required to submit a request letter as per Annexure 1 providing details of the client along with letter from the client as per Annexure 2. (to be submitted within T+2 working days of the rack desire request submission date)
 4. Members can also apply for racks for Newly registered or Prospective FPI / FII
 5. Member shall not be allowed to modify the client details for the pending rack desire request once submitted.
 6. Subsequent rack desire request submitted for the same FPI / FII client by the member shall be included in waitlist queue of existing members. In such case member need not specify the details of the FPI / FII client.
 7. In case any statement declared by member / client is found to be false the Exchange shall cancel the rack desire request / rack allotment against such rack desire request without intimation to member / client and the deposit amount if any shall be deemed forfeited.
 8. Points to be noted while applying for racks for FPI / FII clients
 - o Members should surrender the rack allotted in case the client does not start utilizing the rack within 6 months of allotment.
 - o In case the FPI/FII client dissociates with the member, the member should surrender the racks back to the Exchange.

National Stock Exchange of India Limited

- b. 2nd Waitlist - Rack desire request for new/prospective members:
1. Any member who is currently not holding an active rack / rack desire at the time of submission of new rack desire request is considered as new member from perspective of Co-location facility and all rack desire requests submitted on the same day shall be included in the 2nd waitlist. A waitlist number shall be allotted to the request on FIFO basis.
 2. Only first 10 rack desire requests (any rack variant) submitted by member on the same day shall be considered for inclusion in the 2nd waitlist.
 3. Provisional members (members in the process of seeking membership registration of the Exchange and have been offered provisional membership) who wish to procure racks in Co-location may apply to the Exchange in physical format and email on msm@nse.co.in
 4. Rack desire requests submitted subsequently by new/ prospective members shall be added to the waitlist queue of existing members.
 5. Prospective members will be required to submit a physical form as per Annexure 3 (Rack Desire) and Annexure 4 (Rack Allotment) and email on msm@nse.co.in
- c. 3rd and 4th Waitlists - Rack desire request for existing members:
1. Exchange shall maintain separate waitlist queues for Members having less than 10 racks (any rack variant) and members having 10 or more racks allotted (any variant).
 2. Members having less than 10 racks (any rack variant) shall be included in 3rd waitlist and members having more than 10 racks (any rack variant) shall be included in 4th waitlist. A waitlist number shall be allotted to the request on FIFO basis in the respective waitlist queue.
 3. In case a member who holds less than 10 racks applies for additional racks, the rack desire requests submitted by the member will be included in the 3rd waitlist till the count of rack (i.e. Rack allotted + rack desire request) reaches 10 racks (any rack variant).
 4. Additional rack desire requests submitted by member above 10 count of rack (i.e. Rack allotted + rack desire request of any variant) will be included in the 4th waitlist.
 5. In case a member who holds more than 10 racks any variant and also has pending rack desire request under 4th waitlist, surrenders few racks wherein his holding comes down to less than 10 racks, such rack desire request shall continue to remain in the 4th waitlist without any change in the waitlist number.

With respect to a, b and c members are also requested to note the following:

- Complete rack desire requests received shall be considered for allocating racks on first come first served basis based on the aforesaid waitlist queues.
- For rack desire requests submitted by member for a FPI / FII client, Members are required to submit a request letter as per Annexure 1 providing details of the client along with letter from the client as per Annexure 2. (to be submitted within T+2 working days of the rack desire request submission date)

National Stock Exchange of India Limited

- A waitlist number shall be allotted to all existing rack desire request submitted by participants bifurcated as per the 4 categories / wait lists mentioned above. The waitlist number shall be allotted based on FIFO basis of rack desire submission request date.
- d. Reservation of available racks to respective waitlist
1. All available racks for allotment shall be earmarked for respective waitlists as follows:
 - a. 15 % of available racks shall be allocated to 1st waitlist applicable for FPI / FII client
 - b. Next 15 % shall be allocated to waitlist maintained for rack desire requests submitted by new/prospective members as per the 2nd waitlist
 - c. Next 25 % shall be allocated to waitlist maintained for rack desire requests submitted by Existing members with less than 10 racks allotted (any variant) as per 3rd waitlist.
 - d. Remaining 45 % shall be allocated to waitlist maintained for rack desire requests submitted by Existing members with 10 or more than 10 racks allotted (any variant) as per 4th waitlist.
 2. Complete requests received (along with prescribed rack deposit/charges) through rack desire module will be considered for provisioning for allocating racks in future on first come first served basis in the respective waitlist category.
 3. Once new rack capacity is created or some capacity becomes available due to surrender of racks by any of the existing participants, based on the earmarked available racks for respective waitlist; an email alert shall be sent to participants listed in the rack desire module of the respective waitlist, sequentially informing them about the availability of racks and requesting them to submit the rack allotment request through ENIT. Such email alerts shall be sent sequentially to participants irrespective of the rack variant available and variant requested by the participant in the module.
 4. Participants are required to procure the provisioned rack by submitting the rack allotment request via ENIT within 3 working days from the date of such email alert.
 5. Participants have an option to pass the available rack if they do not wish to subscribe for the same only if the rack variant available and variant requested in the rack desire are different. The same needs to be communicated via ENIT within 3 working days from the date of such email alert.
 6. In case no action is taken by the participant as mentioned in the above point within the prescribed timeline, the deposit amount collected shall be forfeited and such rack desire request shall be deemed rejected.
 7. If the participant selects Pass option, the email alert shall be sent to the next participant in the rack desire list of the respective waitlist for subscribing the rack.

Note -

- Racks are made available on account of surrender of rack by existing members in colocation facility or in case new inventory is added to the existing capacity.
- For the purpose for earmarking available racks to a particular waitlist, the same shall be converted to Half Rack Equivalent (HRE) and then earmarked to respective waitlist.

National Stock Exchange of India Limited

- The % quota specified above is indicative due to the fact that Exchange currently has 3 rack variants i.e. Full, Half and Quarter for which members submit the rack desire request and exact % distribution may not be feasible. However, the same shall be considered as guiding principle for provisioning for allotment.
- Accordingly, the provisioning for allotment to respective waitlist category shall be in absolute count of racks and it may exceed or be of lower percentage than as defined above.
- Once the available racks are earmarked for a waitlist and there is a scenario where there is no rack desire request pending for allotment within the waitlist, the available racks earmarked within the waitlist will not be available to any other waitlist. Such count of HRE racks will continue to be available for future rack desire applications within the waitlist. This shall be reviewed by the Exchange from time to time.

e. Cancellation of rack desire request

- Participants are allowed to cancel the rack desire request in the same calendar month in which the request is submitted, and advance deposit collected, if any is refunded else the entire amount collected is forfeited.
- Participants shall be eligible for refund, if such cancellation is requested to avail a cross connect facility.
- In event wherein Exchange is unable to provision racks of desired rack type within the prescribed timelines (i.e. on or before 6 months starting from the following month of submission of rack desire request), the participants will be allowed to submit a cancellation request for such rack desire request. Request should be submitted as per format Annexure 5.
- In such a scenario wherein in cancellation of rack desire request is received due to non - provisioning of racks of desired rack type within the specified timelines; the deposit amount received against the request shall not be considered as forfeited and shall be credited back to the colo participant.
- Further the rack desire request status shall be updated as cancelled and such request shall be excluded from the wait list.

Participants who have procured racks are directed to commence operations/trading from the said racks within 6 months from the date of allotment. In case the member or FPI/FII client fails to commence usage of racks within 6 months of allotment, Exchange will cancel the said allotment and the next allotment will be done after a cooling period of 6 months.

Exchange strongly advises all its Co-location participants to:

- a. Surrender the unused racks, if any.
- b. Consider consolidation of procured racks, if feasible.
- c. Use the racks space for server placement optimally.

National Stock Exchange of India Limited

- C. Additional pair of Uplink (handoff)/ cross-connect: Exchange provides 1 pair of uplinks (i.e. 2 cross connects) on each rack variant by default which carries the interactive and multicast traffic over the 10G network. Participants (Members/CaaS vendors) can avail additional pair(s) of 10 G uplink (i.e. cross connects) for their existing colocation rack(s) on demand. Members/ CaaS vendors who wish to avail additional pair of Uplink (handoff)/ cross-connect can submit digital application through electronic member interface 'ENIT', details of the aforesaid functionalities are given below:

Rack Type	Pair of uplinks (cross connects)
Full	1 Default + Additional 4 on demand basis
Half	1 Default + Additional 1 on demand basis
Quarter	1 Default

The salient features of the same are as below:

- The participant shall be required to submit request for additional cross connect through relevant module on ENIT.
- The Exchange shall commence allotment of additional pair of uplinks on FIFO basis subject to availability of infrastructure for fulfilling participants request.
- Each cross connect will be offered from a different access layer switch which are in the same server room / server hall / colo phase. The facility of additional pairs of cross-connect shall also be available for CaaS vendors.
- Application submitted in the month shall be considered for allotment process anytime during the next 6 months as applicable for allotment for colocation rack.
- Exchange shall not be held liable in case of delays due to unforeseen circumstances beyond control of the Exchange.
- Participant shall be allotted separate IP schema for each additional pair of uplinks subscribed by them.
- Given the fact that each pair of uplinks will have a **dedicated pool of IP's**, members while requesting IP(s), must select specific pair of uplinks under which IP is requested.

National Stock Exchange of India Limited

D. Charges: -

Co-location facility is a paid facility and the list of charges for different rack variants are as below:

RACK variant	CHARGES PER RACK P.A. (INCL. BASIC IT CHARGES) (IN RS.)	INITIAL SETUP CHARGES (IN RS.) (ONE TIME CHARGE PER RACK)
Full Rack	12,00,000	1,00,000
Half Rack	6,00,000	50,000
Quarter Rack	3,00,000	25,000

Members can opt from various message category mentioned below:

SR. NO.	MESSAGE CATEGORY (IP)	ANNUAL RECOVERY CHARGES (ARC)
1	Category A (40 m.p.s)	50,000
2	Category B (100 m.p.s)	2,50,000
3	Category C (200 m.p.s)	5,00,000
4	Category D (400 m.p.s)	10,00,000
5	Category E (1000 m.p.s)	25,00,000

Note:

1. Base rate for first 10 Half Rack Equivalent (HRE) racks will be as above for a participant.
2. Charges for next 15 HREs will be 25% over the base rate.
3. Charges for racks above 25 HREs will be 50% over the base rate.
4. Billing for annual recurring charges for the rack shall commence from 28 days after allotment of rack to Colo participant. However, the initial setup charges shall be applicable from the date of allotment of rack.
5. The Annual Recurring Charges (ARC) for each additional pair of cross connect / uplink / handoff connectivity would be Rs 75000 + applicable taxes. The charges levied would be on pro-rata basis and would be applicable from date of allotment of such pair of uplinks.
6. Backup restore facility (optional) will be charged at Rs 66000/- per rack.
7. Applicable service tax shall be levied on all the above charges.
8. There are no charges for the first category A (40 m.p.s) connection / IP on a rack.
9. The NIL ARC Provision shall be considered as forfeited on such IP as mentioned in point 8, if after the allotment, category of such IP is changed by the member.
10. For subsequent connections / IP's subscribed by the member, applicable ARC charges shall be levied as per the respective category.
11. The Exchange reserves its right to revise the charges at its discretion.
12. Detailed information on charges is also available on Exchange website under path: NSE India > Trade > Platform and services > Connectivity & User Id > Co-Location facility.

National Stock Exchange of India Limited

III. Power at Co-location racks:

Participants availing the racks in Co-location are required to monitor their power utilization in their respective racks and take steps to ensure that at no point of time they exceed the prescribed limits. To encourage participants to strictly adhere to the power consumption limits, the Exchange has made effective following process to ensure enough deterrence coupled with fair warning and chance to correct course without affecting members' trading activity as far as possible.

A. Following are some important points for power consumption at Co-location racks: -

- Participants can install their own PDU's subject to adherence to the minimum technical specification specified by the Exchange from time to time.
- All IT equipment's installed in Co-location Rack should be branded and dual power supply only. In case a participant is installing single power supply equipment's in the rack Exchange will not be held responsible for any power outage.
- In case of power consumption exceeding 90%, the rack users shall receive information from Exchange via emails using the escalation matrix available with Exchange.
- On exceeding 100% utilization, the rack users shall be provided an opportunity to verify the consumption readings provided by the PDU installed by NSE / Rack users. Rack users shall be provided time till the ensuing weekend to satisfy themselves in this regard.

B. Actionable by the Exchange in case of Non-Adherence to Power consumption limits:

Any instances of exceeding 100% utilization shall result in initiation of action by Exchange as per the following stage wise action plan:

Stage	Number of days non-compliance in a calendar month	Action
I	1	Email warning
II	3	Charges of Rs.10,000 per rack per day of violation in the calendar month toward fair usage charges for power.
III	5	Charges as per stage 2 plus switching off power for 1 working day after providing 1 working day notice to provide time to member to rectify the issues, if any.
IV	Violation of 1 day after restart of rack	Charges as per stage 2 plus switching off power for 3 working days after providing 1 working day notice to provide time to the rack users to rectify the issues, if any.

- Note:
1. Taxes as applicable shall be levied on above charges.
 2. The charges will be collected from the Exchange Dues account for the participant.
 3. For any technical queries regarding excess power consumption, requesting to get in touch with Colo_Support team at colosupport@nse.co.in

National Stock Exchange of India Limited

IV. 'Co-location as a Service' (CaaS)

This initiative by the Exchange is to facilitate small and medium sized Members, who are not able to avail Co-location facility, due to various reasons including but not limited to high cost, lack of expertise in maintenance and troubleshooting, etc. Under CaaS, rack in co-location facility is allotted to empaneled vendors of the Exchange along with provision for receiving market data for further dissemination of the same to the trading member of the Exchange and the facility to place orders (algorithmic / non-algorithmic) by the trading members from Co-location.

Following are the salient features of CaaS in co-location facility:

- Vendors empanelled by the Exchange are eligible to provide CaaS service. List of empanelled vendors who shall be eligible to provide such service are as follows and is available on Exchange website on the below mentioned link:

<https://www.nseindia.com/trade/platform-services-non-neat-empanelled-vendors-of-the-exchange>

Sr. No.	Existing Empaneled Vendors
1	M/s. Greeksoft Technologies Pvt. Ltd.
2	M/s. Symphony Fintech Solutions Pvt. Ltd.

- Vendors shall provide a fully managed end to end solution which can be used by trading members to **trade from the Exchange's** Co-location facility. Empanelled vendors shall have to make an application for rack in Exchange's Co-location facility through ENIT portal (<https://enit.nseindia.com/ENITInternal/VendorLogin.jsp>) along with the undertaking in the format as per Annexure 6.
- Vendor can apply for Point 2 Point (P2P) connectivity from any of the existing eligible service providers in Co-location through ENIT. Vendors may take one or more leased line to the co-location facility as per the Exchange policy in this regard from time to time.
- Vendor and desirous trading members are required to execute the Service Provider Agreement (SPA), in the format as per Annexure 7 for availing the service. (Certified true copy to be submitted to the Exchange).
- Vendors providing Co-location services to members of the Exchange shall have to adhere to the rules and provisions given as below:
 - Maximum permitted members availing vendor services per full rack shall be 30 and half rack shall be 15.
 - Vendor shall be permitted to have only one such contract with a particular member at any given point of time for CaaS.
 - Vendors shall be liable to all such charges as currently applicable to member for availing Co-location facility and as amended from time to time.
 - Vendor shall provide fair, transparent, and equitable access to all members availing the service and ensure confidentiality of information and data pertaining to each member.
 - Vendor shall be responsible for upkeep and maintenance of all infrastructure in their racks.

National Stock Exchange of India Limited

- f. Vendor shall provide support to the members including BCP provisions, system audit etc. if required by the member.
- g. Vendors shall be liable for half yearly system audit and shall refer the Exchange Terms of Reference (TOR) attached as Annexure 8 or as amended from time to time as per the following:

Sr. No.	Period	Timelines for submission
1	01 st April to 30 th September	On or before 30 th November
2	01 st October to 31 st March	On or before 31 st May

- h. Vendors are required to submit the System Audit Report within the timelines on msm@nse.co.in , to avoid any penal/disciplinary action, as prescribed by the Exchange from time to time.
 - i. Exchange reserves the right to inspect and audit the infrastructure deployed by the Vendor for the service offering to members.
 - j. Vendor will not be allowed to use MTBT data for commercial purposes other than providing it to members availing their service in the rack allotted for trading on the Exchange.
6. Members shall be permitted to have only one contract with an empanelled vendor, subject however to maximum of 2 Vendors, at any given point of time for CaaS. Beyond this, members desirous of expanding their presence in Co-location are encouraged to seek independent racks in Co-location. Thus, members who have matured/ in future mature to independent rack ownership shall not have access to CaaS.
 7. Rack charges shall be borne by the vendor and order connectivity charges shall be borne by the member as applicable from time to time.
 8. Member shall exercise appropriate due diligence in respect of the services offered by Vendors. Exchange shall not be liable towards any member for any failure/incident which is the outcome of hosting solution provided by Vendor. Vendors providing services to members shall be out of Exchange purview, in relation to this service.
 9. Members shall execute a separate commercial contract/agreement with Vendor for availing his **services which shall not be under the Exchange's purview.**
 10. Member shall be required to take NNF product approval as per existing process and guidelines of the SEBI and Exchange before deploying through the Non-Neat Frontend (NNF) Trading System as per Exchange circulars as updated from time to time.
 11. Any member, who is desirous of availing such services from vendor, shall apply for interactive connectivity to Exchange via ENIT.
 12. **Members may note that only 2 order connectivity's shall be permitted per member and vendor combination in any message category available from time to time.**
 13. Member shall follow the existing process for user id as per Exchange circulars issued and updated from time to time.
 14. **Member shall ensure fulfilment of Exchange compliance's related to trading such as base minimum capital requirement, mandatory monthly mock participation, periodic system audit report submission, etc. as communicated by Exchange from time to time.**

National Stock Exchange of India Limited

V. Point to Point Connectivity at Co-location:

Trading Members/Vendors availing Co-location facility are allowed to take one or more leased lines to the co-location facility from different telecom service providers for the purpose of setting up or modifying parameters, trading related activities and hardware, software, network related access, software download / upload and monitoring and data downloads. Such lines are called Point to Point links. Such link does not lie on the trading/data dissemination path of the Exchange. Point To Point links are not within the purview of the Exchange as they are procured by, paid for and maintained by the participant without Exchange intervention. The Exchange shall only provide NOC against the PTP application submitted by the participant.

The trading members/Vendors can submit Point to Point connectivity application through ENIT on the below mentioned path,

Members via ENIT Member Portal on Path: ENIT-NEW-TRADE > Membership > Co-location > PTP Requests

Vendors via ENIT Vendor portal on path: CaaS > PTP Request

For Provisional members (members in the process of seeking membership registration of the Exchange and have been offered provisional membership) who wish to apply Point to Point Connectivity at Co-location may apply to the Exchange in physical format as per Annexure 9 and email on msm@nse.co.in

Following are some of the location types, where members/vendors are allowed to extend the PTP link in India:

1. Members registered / dealing / branch office / Authorised Person
2. Members rack in Co-location facility of another recognized stock exchange in India
3. Members owned/hired rack in a third-party data center in India
4. A common designated access point/switch/router provided for the purpose at any other recognized Exchange in India
5. A common switch in India provided by the empanelled telecom service providers of Co-location
6. A common designated access point/switch/router provided by Financial Market Infrastructures regulated by RBI that offers trading/reporting of underlying assets on which the Exchange provides derivatives contracts.

To enable members to seek such links, the Exchange provides infrastructure in the form of racks to connectivity service providers based on Legal/technical/physical/commercial feasibility and limitations. Connectivity service providers can host their infrastructure in NSE designated areas and provide Point to Point Leased Line / MPLS services to NSE members located in Co-location facilities.

The following reputed national level telecom vendors are currently present in the Exchange Co-location to cater to member's needs with respect to leased lines to the co-location facility.

- Tata Teleservices Maharashtra Ltd.
- Tata Communications Ltd.
- Bharti Airtel.

National Stock Exchange of India Limited

- o Microscan Infocommtech Private Limited.
- o Tikona Infinet Private Limited.

VI. Process for Empanelment/ Dis-empanelment of Connectivity Service Providers in Co-location:

A. Empanelment:

New Point to Point Link service providers desirous of providing leased line services to members in Co-location may make an appropriate application to the Exchange. The application shall have to be supported by the relevant documents as below on msm@nse.co.in

1. The entity has at least 3 years standing in the telecom industry with extensive coverage across metro cities and other major cities.
2. The applicant has necessary letter of intent/provisional orders from at least 10 unique members of the Exchange for PTP links at NSE Co-location.
3. Necessary licenses (DOT / NLD etc. as applicable) are available with the applicant to provide Point to Point connectivity. Service providers are required to submit the appropriate eligibility certificate from KPMG/ E&Y along with the application. The cost of such certificate shall be borne by the applicant. Applicants can contact the following consultants for the relevant details:

KPMG	
Kunal Pande Partner M: +91 9892600676 Email: kpande@kpmg.com	Deepak Varde Associate Director M: +91 9967604099 Email: deepakvarde@kpmg.com

E&Y	
Basant Shroff Partner M: +919820305923 Email: basant.shroff@in.ey.com	Dipen Thakkar Senior manager M: +919820444865 Email: dipen.thakkar@in.ey.com

Such applications shall be placed before the relevant authority/committee for scrutiny and processing. All applications received till April 30 of the respective financial year shall be considered. All applications shall be reviewed only once in a financial year. The review shall be completed by May 31st of the year. The applicants shall be communicated about the status of their application within 15 working days from the end of the review period. The revised list of connectivity service providers shall be updated in this document and uploaded on the Exchange website.

National Stock Exchange of India Limited

The authority/committee shall inter alia also consider the following while assessing the applications:

1. Availability of physical infrastructure such as rack space, cable duct space, inter rack cabling trays/duct, power etc. at NSE Co-location.
2. Any other norms/pre-conditions that the appropriate authority/committee may decide from time to time.
3. The number of empanelled vendors shall be maintained at a minimum of four and a maximum of six.

Without prejudice to the right of the relevant authority/committee to frame rules; general rules and processes with respect to rack allocation to connectivity service providers at NSE designated areas (MMR- Meet me room) shall be as follows:

1. Only half rack shall be allotted at a time.
2. An existing empanelled connectivity service provider can later apply for additional racks.
3. Exchange shall endeavour to provide a rack in the designated area subject to availability on first come first served basis.
4. Currently there shall be a charge of Rs 50,000 plus applicable taxes per half rack per annum payable in advance for the financial year.
5. The service providers shall be liable to pay the rack charges in advance, within 30 days of billing date.
6. Additional racks shall be allotted subject to availability if connectivity service provider is not able to service clients located in Co-location due to technical/physical constraints via current allocated racks.
7. Exchange shall permit the connectivity service provider to interconnect racks based on technical and physical feasibility.
8. Such racks are not meant for trading and hence service/data etc. provided to normal racks shall not be available to such rack. Further, any scheme of rebate, discount, free period etc. by whatever name called shall not be applicable to such racks if made applicable to normal racks in Co-location.
9. It shall be the responsibility of the service providers to ensure that they are at all points of time eligible to provide such services as per the applicable rules and regulations. The Exchange shall have the right to take appropriate action as deemed necessary on receipt of any information that could result in the ineligibility of a connectivity service provider to provide such services.

B. Dis-empanelment:

The relevant authority/committee shall inter alia consider the following while assessing the continuous eligibility of a service provider:

1. After the end of one year from initial empanelment, service provider should have at least 12 distinct member clients OR should have at least 24 links being serviced AND the average number of links across all racks held should be at least 6.
2. There should be no amount outstanding from the service provider for over 6 months from the due date.

National Stock Exchange of India Limited

3. All documents as decided by the relevant authority/committee should have been duly executed and provided to the Exchange.
4. The conduct of the service provider in terms of service to NSE members and sharing of relevant information with the Exchange from time to time should meet the expected minimum industry standards.

On failing to meet any one or more of the above criteria, the relevant authority/committee may issue an appropriate notice to the service provider giving 15 calendar days' time to represent its case. On **being satisfied with the service provider's submission**, the relevant authority/committee may accordingly pass appropriate directions. However, if the relevant authority/committee is not satisfied with the submissions, it may issue a termination notice providing 4 calendar months' time. After the end of the said notice period, the Exchange shall disconnect power to the racks held by the service provider and remove any material of the service provider from the rack without further notice or liability to NSE.

The relevant authority/committee, while conducting the above review shall always hold the interest of Exchange members as supreme and shall be guided accordingly.

VII. Co-location Datacenter access:

1. Physical access to co-location facility will be restricted only to the initial set up and access for periodic or urgent maintenance if any would be only with prior permission from NSE.
2. Physical access to Co-location facility to the participants and their authorized member/vendors will not be provided to Colo participant during market hours. Accordingly access during market hours shall not be allowed.
3. For seeking access, participants must provide work permit to Colo support team and abide by guidelines as updated from time to time.
4. **The Exchange will not be responsible for insuring the member's assets at the co-location premises. Participants should do the insurance of their IT equipment's installed in Co-location Datacenter.**

VIII. Colocation Advisory:

Members subscribing racks in Colocation facility of the Exchange and vendors offering CaaS services in Colocation facility, (herein after referred as Colo participants) are requested to follow below advisory guidelines. We request all participants to note that below mentioned guidelines are indicative and not exhaustive. Further, it is the responsibility of all participants to use Exchange Co-location services judiciously and in a prudent manner.

1. Participants shall deploy adequate and real time monitoring:

National Stock Exchange of India Limited

- Only intended and relevant traffic (Orders and relevant interactive traffic etc.) should flow to the Exchange Colocation Network.
 - Any spurious traffic flow (irrespective Hardware /configuration / software / Cyber-attack scenarios) must be monitored & stopped by the appropriate Observability & cybersecurity solution deployed for their infrastructure by the respective Participant.
 - To avoid malicious unwanted dataflow/requests towards the Exchange side of the network, A Participant is required to perform thorough testing of any new hardware/ Hardware Config changes before deploying it in Production. This includes any type of hardware, connections, switches, NIC cards and the like.
2. Software applications are prone to updates/changes and hence, it is imperative for the participants to ensure that all software changes that are taking place in their applications are rigorously tested before they are used in production systems. It is hereby advised to validate application-level changes in mock / simulation market environment in coordination with Exchange colo support team to ensure no performance or adverse impact on exchange network / trading operations.
 3. Implement change management process to avoid any risk arising due to planned and unplanned changes for all its information security assets (hardware, software, network, etc.) Participants should avoid changes to hardware/software during market hours.
 4. Participant should provide details of hardware change like new Hardware installation, modification, decommissioning along with proposed date & time of the change execution in the specific format as part of work permit to execute any hardware related changes. Further, post execution of changes participant should also provide details of hardware changes implemented in their Co-location racks.
 5. All participants are being advised that any new hardware introduction OR upgrades in their colo setup can be made Live only after the changes have been validated in mock drills or using Simulation market. Participants must inform their plan in advance to the Exchange colo support team and the team will monitor the impact of new hardware introduced by member on network / trading operations during mock or during the simulation market and Participants have to record outcome of these activities for system audits.
 6. Participants should have latest applicable versions for all their assets (at all point of time) including Servers, OS, databases, middleware, network devices, firewalls, IDS /IPS desktops etc. with latest applicable versions and patches.
 7. Participants are requested to note that if any instance of abnormality is observed by the Exchange, the Exchange shall have the exclusive right to take, at its discretion, such actions, steps, measures, proceedings, decisions within such period and upon such conditions and / or requirements as the Exchange may deem fit. It is understood that such actions, steps, proceedings, decisions may entail and include immediate rack port disconnection of all racks of the Participant,-user disablement etc., without notice to the participant and / or such disciplinary action as the Exchange may deem fit and that the participant shall abide by and be bound by such actions, steps, measures, proceedings, decisions as may be initiated by the Exchange from time to time.
 8. Participants may also be required to conduct forensic audit and cyber security audit, at the instance of the Exchange.

National Stock Exchange of India Limited

9. The Exchange reserves the right to conduct audit including simulations and to this end, may direct the Participant to hand over equipment for the purpose of audit / investigation, which in the opinion of the Exchange, caused unwanted dataflow.
10. As a part of colocation compliance, the Exchange may get an independent audit conducted to confirm and verify the adherence of the process mentioned above by the participant and to confirm compliance to Exchange / SEBI circulars.
11. Colo Participants desirous of availing Co-location facility or who have already subscribed to Exchange's Co-location facility shall have to strictly abide by the Co-location access policy, Guidelines (updated from time to time) and Circulars, at all times. Additionally, all communications/ instructions/ circulars/ directions from the Exchange must be complied with in this regard. Any non-compliance shall invite disciplinary action by the Exchange which will be in accordance with Exchange Byelaws, Rules and Regulations.
12. Colo participants shall be required to confirm adherence to all Exchange and SEBI circulars periodically through a separate report. The format for such a report and Terms of Reference (TOR) for same will be shared vide a separate circular.

IX. Various types of Co-location service requests offered by the Exchange:

Exchange has provided electronic member interface 'ENIT' to all members and CaaS Vendors for submission of co-location related requests.

Trading members can place Co-location related requests electronically through the interface provided by the Exchange i.e. ENIT (<https://enit.nseindia.com/MemberPortal/>) on path-ENIT-NEW-TRADE > Membership > Co-location

The various types of requests and reports available under Co-location facility are as follows:

Sr. No.	Particulars	Summary
1.	Rack Desire	In case non-availability of racks, participants can submit a rack desire request.
2.	Rack Allotment	Member can place request for new rack allocation.
3.	Rack Surrender	Member can place request for surrender of active rack.
4.	IP Activation	Member can place request for new interactive IP on an active rack.
5.	IP Surrender	Member can place request for surrender of active interactive IP on a rack.
6.	Message Rate Change	Member can place request for change in existing message category of an active interactive IP.
7.	Cancellation of Request	Member can place cancellation request for cancellation of requests which are in submitted to Exchange status.
8.	PTP Request	Member can place request for PTP connectivity.
9.	Active IPs Report	Details of all active Co-location IPs, are available under this section.
10.	Status Report	Status of all co-location requests such as (rack allotment, rack surrender, IP activation, IP surrender etc.) can be tracked here.

National Stock Exchange of India Limited

11.	Additional Handoff	Member can place request for Activation of Additional Handoff
12.	Surrender Handoff	Member can place request for Surrender of Additional Handoff
13.	Handoff Status Report	Status of Handoff requests can be tracked here.

Vendors are requested to login on <https://enit.nseindia.com/ENITInternal/VendorLogin.jsp> and submit the applications for “CaaS” (Co-location as a Service’) on path-

Sr. No.	Particulars	Summary
1.	Rack Desire	In case non-availability of racks, participants can submit a rack desire request.
2.	Rack Allotment	Vendor can place request for new rack allocation.
3.	Rack Surrender	Vendor can place request for surrender of active rack.
4.	TM Enrolment	Vendor can place request for activating trading member for CaaS facility on a rack.
5.	TM Deactivation	Vendor can place request for deactivating trading member for CaaS facility on a rack.
6.	PTP Request	Vendor can place request for PTP connectivity.
7.	Status Report	Status of all co-location requests such as (rack allotment, rack surrender, IP activation, IP surrender etc.) can be tracked here.
8.	Additional Handoff	Member can place request for Activation of Additional Handoff
9.	Surrender Handoff	Member can place request for Surrender of Additional Handoff

Notes:

- Trading members are required to submit digitally signed Co-location requests through ENIT.
- Requests submitted on or before 3:00 p.m. on a given working day shall be processed on best effort basis latest by T+2 working days.
- Point to Point connectivity (PTP) requests submitted on or before 4:00 p.m. on a given working day shall be processed on best effort basis latest by T+2 working days.

National Stock Exchange of India Limited

X. List of important circulars issued by the Exchange related to Co-location.

Members are requested to refer to the Exchange circulars issued and updated from time to time for detailed information on the subject. A non-comprehensive list of important circulars is shared below:

Date	Subject	Circular No.
April 05, 2024	Colocation - Revision in rack allotment procedure	NSE/MSD/61499
March 27, 2024	Colocation - Revision in rack allotment procedure	NSE/MSD/61358
January 30, 2024	Colocation Advisory - Update	NSE/MSD/60456
December 14, 2023	Colocation - Advisory	NSE/MSD/59764
October 05, 2023	Periodic submission of System Audit Report for Vendors providing Co-Location as a Service (CaaS) facility.	NSE/MSD/58749
September 21, 2023	Colocation - Digital Submission of additional pair of Uplink (handoff) and revised IP offering on a Colocation rack	NSE/MSD/58506
July 13, 2023	Change in URL for ENIT portal for Empaneled Vendors	NSE/MSD/57557
June 30, 2023	Co-Location - Consolidated Circular	NSE/MSD/57389
June 09, 2023	Colocation offering - Introduction of additional features/enhancements.	NSE/MSD/57039
April 21, 2023	Revision in Terms of Reference (TOR) & Timelines for submission of System Audit Report of Vendors providing Co-Location as a Service (CaaS) facility.	NSE/MSD/56416
January 31, 2023	Timelines for submission of System Audit Report for Co-Location as a Service (CAAS) Vendors	NSE/MSD/55438
September 02, 2022	System Audit of Vendors providing Co-Location as a Service (CaaS) facility	NSE/MSD/53515
January 28, 2022	Colocation - revision in rack charges and allotment procedure	NSE/MSD/51160
September 17, 2021	Colocation - Expansion	NSE/MSD/49632
July 15, 2021	Colocation - Initiatives	NSE/MSD/48949
December 21, 2020	Colocation - Physical access to Phase V	NSE/MSD/46734
December 03, 2020	Expansion of Colocation capacity - Phase V	NSE/MSD/46538
October 17, 2020	Colocation - Physical access to Phase V	NSE/MSD/46050
September 30, 2020	Expansion of Colocation capacity - Phase V	NSE/MSD/45884
August 10, 2020	Digital acceptance of change in mapping of colocation and ASP request	NSE/MSD/45291

National Stock Exchange of India Limited

July 02, 2020	Colocation - Colocation as a Service (CaaS)	NSE/MSD/44872
October 22, 2019	Colocation (CaaS) - Digital submission of requests	NSE/MSD/42473
October 22, 2019	New ENIT - Colocation modules	NSE/MSD/42471
July 19, 2019	Colocation: Digital acceptance of Point to Point Connectivity application	NSE/MSD/41651
August 06, 2018	Digital submission of 'Colocation as a Service'(CaaS) application	NSE/MSD/38528
May 07, 2018	Introduction of 'Colocation as a Service' (CaaS)	NSE/MSD/37707
April 10, 2018	Measures to strengthen Algorithmic Trading and Co-location / Proximity Hosting framework	NSE/MSD/37476
April 10, 2018	Measures to strengthen Algorithmic Trading and Co-location / Proximity Hosting framework	NSE/MSD/37476
December 02, 2016	Review of guidelines for Co-location / proximity hosting facility offered by stock exchanges	NSE/MEM /33737
November 27, 2014	Charges for TBT on multicast	NSE/FA/28181
June 05, 2014	Co-location Services at NSEIL Premises	NSE/MEM/26869
March 05, 2013	Co-location Services at NSEIL Premises	NSE/MEM/22872
November 12, 2012	Revision in charges for Co-location services offered by the Exchange	NSE/FA/22114
September 17, 2012	Revision in Annual recovery charges for A category (40 messages), S category (Connect2NSE) Leased Lines and VSAT	NSE/FA/21718
April 21, 2011	Co-location services at NSEIL premises	NSE/memb/17565
March 04, 2010	Co-location services at NSEIL premises	NSE/memb/14222
August 31, 2009	Co-location services at NSEIL premises.	NSE/memb/12985

This consolidated circular is a compilation of relevant circulars issued which are operational as on date of this circular. Efforts have been made to suitably incorporate and update the applicable provisions of existing circulars as per above table.