

National Stock Exchange of India Limited

Circular

| Department: CURRENCY DERIVATIVES | |
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| Download Ref No: NSE/CD/68955 | Date: July 04, 2025 |
| Circular Ref. No: 28/2025 | |

All Members,

New Encryption mechanism of Interactive Messages & Immediate Order acknowledgement

This is in reference to circular [NSE/MSD/59984](#) dated December 28, 2023, Exchange has implemented a software solution-based approach (a combination of TLS 1.3 security protocol and AES-256 bits-based symmetric encryption) for encryption of interactive message traffic between member applications and Exchange to enhance the security posture.

Exchange now proposes the following enhancements:

- **Encryption of the interactive messages using AES 256 bits GCM encryption with additional authentication and**
- **Provision of immediate acknowledgment for order-related messages** - This enhancement involves the introduction of new acknowledgment messages that shall be sent instantly upon receiving an order. This immediate acknowledgment confirms that the order has been successfully received by the Exchange.

Important instructions for implementation of the above:

1. An interim coexistence phase for accepting encrypted message traffic with new and existing encryption mechanism shall be provided by the Exchange, after which Exchange shall discontinue the existing encryption mechanism.
2. Details of coexistence and migration plan for Neat Adapter and Direct connection via NNF are as below:

| Functionality | Date |
|--|-------------------------------|
| Release of New Interactive parameters for new encryption mechanism for NEAT Adapter and Direct Connection via NNF | July 05, 2025 |
| Release of new NEAT Adapter with new encryption mechanism | July 05, 2025 |
| Discontinuation of existing version of NEAT Adapter with existing encryption mechanism | To be communicated separately |
| Discontinuation of existing encryption mechanism for Direct connection users | To be communicated separately |

3. Members are requested to refer the below parameters for interactive session for existing and new encrypted data flows for Currency Derivatives Segment:

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| Parameters | | Encrypted Flow | Applicable to | Remarks |
|---------------------------|------------|-----------------|--------------------|--|
| Gateway Router | IP Address | 172.19.18.85 | - | - |
| | Port | 10877 | NEAT, NNF Users | Existing encrypted mechanism |
| | | 10879 | NEAT, NNF Users | New encryption mechanism with MD5 checksum removal |
| | | 10881 | Only for NNF Users | New encryption mechanism & immediate acknowledgement of order related messages |
| Gateway IPs Subnet ranges | Network | 172.19.18.0 | | |
| | Mask | 255.255.255.128 | | |
| | Port | 10870 & 10871 | | |

- Members using via Direct connection via NNF API protocols shall note that they can continue using the existing CA certificate as mentioned in the circular [NSE/MSD/67695](#) dated April 25, 2025.
- For further details of implementation, members may refer the latest CD NNF API document (Version 6.1) detailing the new encryption and immediate order acknowledgement which is available on Exchange website under path: <https://www.nseindia.com/trade/platform-services-neat-trading-system-protocols>
- For members connecting via NEAT Adapter (NA) and NEAT application, please note that new version shall be released with relevant additional authentication of encrypted message flow.
- Details of the applicable Neat Adapter (NA) version shall be communicated vide separate circular.

For and on behalf of
National Stock Exchange of India Limited

Khushal Shah
Associate Vice President

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