



#### Circular

Department: MEMBER SERVICE DEPARTMENT			
Download Ref No: NSE/MSD/61183	Date: March 18, 2024		
Circular Ref. No: 22/2024			

All Members,

Market Data - Introduction of Additional Streams in Futures & Options Segment

This circular is in continuation to Exchange consolidated <u>NSE/MSD/55333</u> dated January 23, 2023 for Market data broadcast.

Members may kindly note that contracts available for trading are being redistributed across 18 streams in FO segment. Members may refer the following annexure for access details and setup required on their systems in order to receive the market data broadcast:

Sr. No.	Market Type Data	Change	Change Description
1	Price volume (5 depth 1 second refresh), other related data, master updates, market open/close status message broadcast etc. on streams broadcast available in FO segment	FO segment Broadcast Streams R and S are being introduced	Table B (additional streams in FO segment – 1 second frequency 5 depth data) of Annexure 1 of circular 55333
2	Tick by Tick order and trade data via Multicast (MTBT) on streams available in FO segment	Broadcast Streams 17 and 18 being introduced.	Section B - FO Multicast Tick-by-Tick broadcast parameters of Annexure 2 of circular 55333
3	Order Book Snapshot recovery	Additional 2 stream ID shall be made available i.e. 17 and 18	Queue names as mentioned in circular 55333

As mentioned in the consolidated circular, Members are required to refer the Master Files for MTBT in FO segment i.e. fo\_contract\_stream\_info.csv and fo\_spd\_contract\_stream\_info.csv for details regarding tokens broadcasted in the individual stream.



The changes shall be effective from mock of April 06, 2024 and will be available in the live environment with effect from April 08, 2024.

Below are the updated annexures for details regarding the parameters of the respective streams / Stream Id's and order snapshot recovery for MTBT.

For and on behalf of National Stock Exchange of India Limited

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Annexure 1 – Updated Table B

Price volume (5 depth 1 second refresh), other related data, master updates, market open/close status message broadcast etc. on additional streams in FO segment

Stream	stream Sec		Security / (Source 1)		(Source	2)	Approx. bandwidth	
Stream	ID	Contracts *	Multicast IP	Port	Multicast IP	Port	utilization	
FO Stream	1	As per master	239.50.51.21	15021	239.50.51.121	15121	0.1 Mbpc	
B	I	stream file	239.50.51.20	15020	239.50.51.20	15020	0.1 Mbps	
FO Stream	2	As per master	239.50.51.22	15022	239.50.51.122	15122	0.1 Mbpc	
C	Z	stream file	239.50.51.20	15020	239.50.51.20	15020	0.1 Mbps	
FO Stream	3	As per master	239.50.51.23	15023	239.50.51.123	15123	0.6 Mbpc	
D	3	stream file	239.50.51.20	15020	239.50.51.20	15020	0.6 Mbps	
FO Stream	4	As per master	239.50.51.24	15024	239.50.51.124	15124	0.0 Mbpc	
E		stream file	239.50.51.20	15020	239.50.51.20	15020	0.9 Mbps	
FO Stream			239.50.51.25	15025	239.50.51.125	15125	0.4 Mbps	
F			239.50.51.20	15020	239.50.51.20	15020	0.4 Mbps	
FO Stream	6	As per master	239.50.51.26	15026	239.50.51.126	15126	0.1 Mbps	
G	0	stream file	239.50.51.20	15020	239.50.51.20	15020		
FO Stream	7	As per master	239.50.51.27	15027	239.50.51.127	15127	0.1 Mbps	
H	7	stream file	239.50.51.20	15020	239.50.51.20	15020		
FO Stream	8	As per master	239.50.51.28	15028	239.50.51.128	15128	0.1 Mbps	
I	0	stream file	239.50.51.20	15020	239.50.51.20	15020		
FO Stream		0	As per	239.50.51.29	15029	239.50.51.129	15129	0.1 Mbpc
J	9 master stream file		239.50.51.20	15020	239.50.51.20	15020	0.1 Mbps	
FO Stream	10	As per	239.50.51.30	15030	239.50.51.130	15130	0414600	
K	10 master stream file		239.50.51.20	15020	239.50.51.20	15020	0.4 Mbps	



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FO Stream	As per 11 master	239.50.51.31	15031	239.50.51.131	15131	0.1 Mbps		
L		stream file	239.50.51.20	15020	239.50.51.20	15020		
FO Stream	12	As per master	239.50.51.32	15032	239.50.51.132	15132	0.1 Mbpc	
M	ΙZ	stream file	239.50.51.20	15020	239.50.51.20	15020	0.1 Mbps	
FO Stream	13	As per master	239.50.51.33	15033	239.50.51.133	15133		
N	13	stream file	239.50.51.20	15020	239.50.51.20	15020	3 Mbps	
FO Stream	14	As per master	239.50.51.34	15034	239.50.51.134	15134		
O		stream file	239.50.51.20	15020	239.50.51.20	15020	3 Mbps	
FO	15	As per master	239.50.51.35	15035	239.50.51.135	15135	2 Mbpc	
Stream P	10	stream file	239.50.51.20	15020	239.50.51.20	15020	3 Mbps	
FO	17	As per	239.50.51.36	15036	239.50.51.136	15136		
Stream Q	16	master stream file	239.50.51.20	15020	239.50.51.20	15020	3 Mbps	
FO	17	As per	239.50.51.37	15037	239.50.51.137	15137	2 Mbpc	
Stream R	n 17 master stream fi		239.50.51.20	15020	239.50.51.20	15020	3 Mbps	
FO	10	As per	239.50.51.38	15038	239.50.51.138	15138	2 Mbpc	
Stream S	18 master stream file		239.50.51.20	15020	239.50.51.20	15020	3 Mbps	

Note: Additional stream wise broadcast is not recommended for NEATplus application.

Annexure 2 – Updated Section B for FO segment

Tick by Tick order and trade data via Multicast (MTBT) Multicast IP address and port are as below

	FO							
Stroom		Source 1		Source 2		Approx. bandwidth		
Stream ID	Contents *			(Delayed Feed)				
		Multicast IP	Port	Multicast IP	Port	utilization		
1	As per master stream file	239.70.70.41	17741	239.70.70.31	10831	20 Mbps		
2	As per master stream file	239.70.70.42	17742	239.70.70.32	10832	6 Mbps		
3	As per master stream file	239.70.70.43	17743	239.70.70.33	10833	40 Mbps		



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4	As per master stream file	239.70.70.44	17744	239.70.70.34	10834	18 Mbps
5	As per master stream file	239.70.70.45	17745	239.70.70.35	10835	40 Mbps
6	As per master stream file	239.70.70.46	17746	239.70.70.36	10836	18 Mbps
7	As per master stream file	239.70.70.47	17747	239.70.70.37	10837	40 Mbps
8	As per master stream file	239.70.70.48	17748	239.70.70.38	10838	40 Mbps
9	As per master stream file	239.70.70.49	17749	239.70.70.39	10839	40 Mbps
10	As per master stream file	239.70.70.50	17750	239.70.70.40	10840	40 Mbps
11	As per master stream file	239.70.70.61	17761	239.70.70.71	10871	40 Mbps
12	As per master stream file	239.70.70.62	17762	239.70.70.72	10872	40 Mbps
13	As per master stream file	239.70.70.63	17763	239.70.70.73	10873	40 Mbps
14	As per master stream file	239.70.70.64	17764	239.70.70.74	10874	40 Mbps
15	As per master stream file	239.70.70.65	17765	239.70.70.75	10875	40 Mbps
16	As per master stream file	239.70.70.66	17766	239.70.70.76	10876	40 Mbps
17	As per master stream file	239.70.70.67	17767	239.70.70.77	10877	40 Mbps
18	As per master stream file	239.70.70.68	17768	239.70.70.78	10878	40 Mbps

Updated Queues to connect to the Order Book Snapshot recovery for additional Streams:

Parameters for connecting for Order Snapshot Recovery					
IP of Solace	172.28.124.40				
Port of Solace	10986				
User Name	member_fo_prod				
Password	YoEvx#9675				
Message VPN Name	od_fo_prod				



Segment	Stream ID	QUEUE NAMES
	1	lvq.nse.fo.od.1.orderbook
	2	lvq.nse.fo.od.2.orderbook
	3	lvq.nse.fo.od.3.orderbook
	4	lvq.nse.fo.od.4.orderbook
	5	lvq.nse.fo.od.5.orderbook
	6	lvq.nse.fo.od.6.orderbook
FO	7	lvq.nse.fo.od.7.orderbook
	8	lvq.nse.fo.od.8.orderbook
	9	lvq.nse.fo.od.9.orderbook
	10	lvq.nse.fo.od.10.orderbook
	11	lvq.nse.fo.od.11.orderbook
	12	lvq.nse.fo.od.12.orderbook
	13	lvq.nse.fo.od.13.orderbook
	14	lvq.nse.fo.od.14.orderbook
	15	lvq.nse.fo.od.15.orderbook
	16	lvq.nse.fo.od.16.orderbook
	17	lvq.nse.fo.od.17.orderbook
	18	lvq.nse.fo.od.18.orderbook

General Notes applicable for all types of market data broadcast:

- The size of broadcast indicated above is an estimated approximation and shall change depending upon the market activity. Thus, Market participants are strongly advised to monitor and adequately size their infrastructure and systems while subscribing to these feeds.
- With respect to using Exchange data, Members may kindly take note of Exchange circulars <u>NSE/COMP/56426</u> dated April 20, 2023 and <u>NSE/MEM/26958</u> dated June 19, 2014. Exchange data can be used by Member's clients who are registered for trading with the member on the Exchange in any segment.
- With respect to using Exchange data, Member's may also kindly take note of Exchange circular <u>NSE/MSD/54696</u> dated December 02, 2022 regarding Market Data Broadcasts Advisory and Member Guide.
- National Stock Exchange of India Limited ("NSEIL") strongly recommends its member to build resilience and redundancy in their subscription to market data broadcast provided by NSEIL, to ensure continuity of their business operations. NSEIL has made enabling provisions for members to implement redundancies by providing two sources of data and/or data recovery mechanisms. Members shall be solely responsible for implementing and maintaining redundancy for market data broadcast subscribed from NSEIL. NSEIL shall not be held liable in any manner whatsoever including but not limited to for any disconnection, excess bandwidth utilization, related latency issues' etc. which arises out of the member's decisions on market data broadcast configurations.