# API Documentation for Online Trade Inquiry Service

Version 1.5

January 2020



National Stock Exchange of India Ltd Exchange Plaza, Plot No. C/1, G Block, Bandra-Kurla Complex, Bandra (E) Mumbai - 400 051.



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Version	Date	Description
1.3	4 <sup>th</sup> June 2019	Added Usage Guidelines
1.4	17 <sup>th</sup> Jan 2020	Removed unused fields from
		Trade Response structure
1.5	21 <sup>st</sup> Jan 2020	Update NOTIS CM Document
		with Interop Changes



## 1 Background

Currently trading system transfers online trades data to NSEIL Online Trade Inquiry System (NOTIS) server.

NOTIS client application residing at the members end sends periodical request to pull the data from the server. Maximum 'N' number of records (parameterized at server) are sent to the client application for each request. Currently trade data available on the NOTIS server is accessible only to the NOTIS client application.

It is proposed to expose APIs to our esteemed empanelled members for trade & actions (any modifications performed on trade) inquiry for CM segment.

This document covers the technical specifications for various operations involved at both NSEIL as well as member's end.

#### 1.1 Following operations aspects are covered in this document:

Sr. No.	Operation	Endpoints	Purpose
1	Login [ Handshake ]	/token	To authenticate the client
2	Trade Inquiry	/notis-cm/trades- inquiry	To disseminate trades information data
3	Trade Actions Inquiry	/ notis-cm /actions- inquiry	Client Code Modifications/CP Modification

- 1.2 Technical Specifications
- 1.3 Log-in Work flow
- 1.4 Message Structures



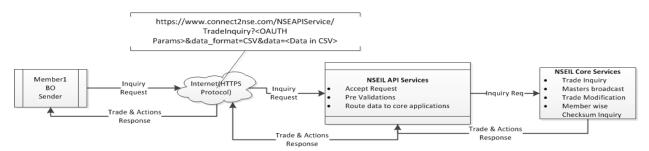
## 2 Data Flow Diagram

## → API Registration

- 1) For API registration, user need to request <a href="msm@nse.co.in">msm@nse.co.in</a> to add entry for them in database with relevant details such as below:
  - Member Code
  - Member Name
  - Contact Person Email Address, Name and Mobile Number
  - Segment for which access is required
  - Static IP which will be used to access the API
  - UAT or LIVE
- 2) The entry for user will be added from backend manually and no frontend will be provided for this purpose.
- 3) Once entry is added the user will be provided with Consumer Key and Consumer Secret to access the token API in order to get token.
- 4) Once token is obtained user can access the Trade Inquiry API using below mentioned diagram.

#### → API Call Work Flow

Member -> NSEIL





## 3 Technology Specification

- 1) Communication Protocol: HTTPS over internet/Leased Line
- 2) Request/Response Exchange Format: JSON (JavaScript Object Notation).
- 3) Data Format: CSV (Comma Separated Values).
- 4) Security Framework: Security Framework should support OAuth 2.0 specifications.

## 4 API Registration

- 1) Members need to register by contacting MSD (Member Service Department) for creating the user account details in the database.
- 2) Member will need to provide information as described below:
  - Member Code
  - Member Name
  - Contact Person Email Address, Name and Mobile Number
  - Segment for which access is required
  - Static IP which will be used to access the API
  - UAT or LIVE
- 3) Once this information is provided, admin at NSEIL will verify and generate the Consumer Key and Consumer Secret. These values will be emailed to MEMBER using registered email Id.
- 4) Once MEMBER receives Consumer Key and Consumer Secret, they can start using API.



# 5 Log-In Workflow

- Login Handshake (MEMBER → NSEIL)
- Requesting a "Token"

A consumer application needs to send a HTTPS POST request to the below URLs:

**UAT:** <a href="https://www.devconnect2nse.com/token">https://www.devconnect2nse.com/token</a>

Production/LIVE: https://www.connect2nse.com/token

→ Sample Request POST /token HTTP/1.1

Host: www.connect2nse.com

Content-Type: application/x-www-form-urlencoded Authorization: Basic aGRmYzpoZGZjc2VjcmV0 nonce: MjAwMTIwMTcxNjEyMjE1OTE6ODk0MjY3

grant\_type=client\_credentials

## → Request Structure

	API AUTHENTICATION REQUEST STRUCTURE (GET TOKEN)						
Sr.	Parameter	Data					
No.	Name	Type	Description	Sample Value			
			Will be of format:	Basic aGRmYzpoZGZjc2VjcmV0			
			Basic <member_credentials></member_credentials>				
			Where, member_credentials is a base64				
			encoding of the following data:				
1	Authorization	String	cons_key:cons_secret				
			An N-once value, that uniquely identifies				
			each request sent to server. Has to be a				
			base64 encoding of the following data:				
			ddMMyyyyHHmmssSSS:<6-digit random				
2	nonce	String	number>	MjAwMTIwMTcxNjEyMjE1OTE6			
3	grant_type	String	Value MUST be set to "client_credentials".	client_credentials			



# → Sample Response

```
HTTP/1.1 200 OK

Content-Type: application/json

Pragma: no-cache{
    "access_token": "ee1073de-45d0-4040-b9c2-eddfa80280c0",
    "token_type": "bearer",
    "expires_in": "3600",
    "scope": "api_scope"
}
```

# → Response Structure

	API AUTHENTICATION RESPONSE STRUCTURE (GET TOKEN)					
Sr.	Parameter	Data				
No.	Name	Туре	Description	Sample Value		
			The access token issued by the	ee1073de-45d0-4040-b9c2-		
1	access_token	String	authorization server.	eddfa80280c0		
2	token_type	String	The type of the token issued	bearer		
			The lifetime in seconds of the access			
			token. From the first generation, the			
			token is valid for 12000 seconds			
			(approx. 3.5 hours) For example, the			
			value "3600" denotes that the access			
			token will expire in one hour from the			
3	expires_in	int	time the response was generated.	3600		
			If identical to the scope requested by			
4	scope	String	the client otherwise, REQUIRED.	api_scope		

#### Note:

- A. The Access token is to be reused to access the NSE API Data till it expires.
- B. An access token expires after 'X' minutes of inactivity.



## 6 Accessing the NSE Data using the API

## 6.1 Trade Inquiry (ALL Trades)

UAT: https://www.devconnect2nse.com/notis-cm/trades-inquiry

Production/LIVE: https://www.connect2nse.com/notis-cm/trades-inquiry

# → Sample Request

```
POST /notis-cm/trades-inquiry HTTP/1.1
Host: www. connect2nse.com
Authorization: Bearer 3f64e567-04f9-43b8-9d24-e99856b24151
nonce: MjAwMTlwMTcxNjEyMjE1OTE6ODk0MjY3

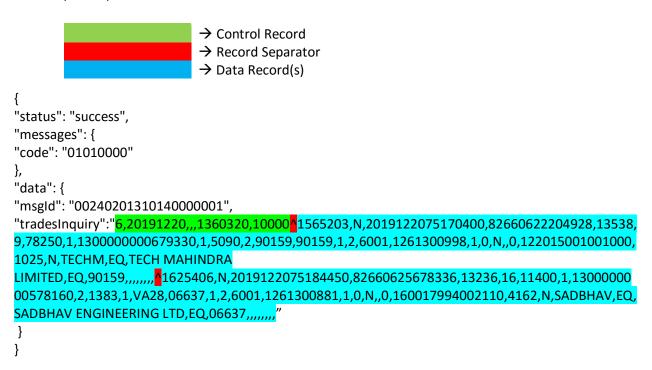
{
          "version": "1.0",
          "data": {
          "msgld": "00240201310140000001",
          "dataFormat": "CSV:CSV",
          "tradesInquiry": "0,ALL,,"
          }
}
```

	Request Data Payload (JSON)					
Sr. No.	Parameter Name	Data Type	Description	Sample Value		
1	version	String	API version	1.0		
2	data.msgld	String	Unique request number for the each request <code><yyyymmdd><nnnnnnn>  MEMBERCODE — Member code (Length:5)  YYYYMMDD — Date format  nnnnnnn — Sequence no. starting from one i.e. For first request of the day, it should be (0000001).</nnnnnnn></yyyymmdd></code>	00240201310140000001		
2	data.dataformat	String	Request data format : Response data format	CSV:CSV		
3	data.tradesInquiry	CSV	Data Structure specified below	0,ALL,,		



Trade Inquiry Request Packet Structure							
Field Name	Description	Data Type	Size (in bytes)	Sample			
	Trade Sequence number till where server had already sent data information In the previous request.  For first download request of the day, it						
seqNo	should be 0.	long	8	0			
srchFilter	Search Filter	String	50	ALL - All Trades			
fill1	Filler	String	10				
fill2	Filler	String	10				

#### → Sample Response



# → Response Structure

	Response Data Payload (JSON)					
Sr. No.	Parameter Name	Data Type	Description	Sample Value		
1	status	String	Response status	success/error		



2	messages.code	String	Refer Section "Message based response code".	01010000
3	data.msgld	String	Unique request number sent in request.	00240201310140000001
4	data.tradesInquiry	CSV	Data Structure specified below	Refer Sample Response.

Trade Inquiry Response Packet Structure							
Field Name	Description	Data Type	Size (in	Remarks			
			bytes)				
	Control Record						
		System	Size of				
		Info	(System Info	Structure			
		Response	Response	details give			
sysinfoResData	System Info Response Structure	Structure	Structure)	below			
			Size of				
		Response	Response	Structure			
		Data	Data	details give			
trdResData	Trades Response Data Structure	Structure	Structure	below			

# → System Info Response Structure

System Info Response Structure								
Field Name	Description	Data Type	Size (in bytes)	Sample				
	Market Status							
	Refer Section "Transcodes".							
mktSts		Short	2	6				
currTrdDate	Current Trade Date (YYYYMMDD)	long	8	20191220				
sfill1	Filler	String	10					
sfill2	Filler	String	10					

# → Trade Response Data Structure

# **Trades Response Data Structure**



Field Name	71.		Size (in bytes)	Sample/Remarks
	Max sequence number sent in			
maxSeqNo	response	long	8	1360320
noOfRec	Count of trades sent in the response	int	4	10000
	Data Reco	rds		
			Size of	
		Array Of	(Array Of	
		Trade	Trade	Structure details
tradesOutput	Array Of Trade Structure	Structure	Structure)	given below

	Array Of Trade S	tructure			
Sr No.	Field Name	Description	Data Type	Size (in bytes)	Sample
1	seqNo	Unique Sequence Number	long	8	1565203
2	mkt	Market Type. Refer Section "Transcodes"	String	1	N
3	trdNo	Trade Number	long	8	2019122075170400
4	trdTm	Trade Time in Jiffy Format	long	8	82660622204928
5	tkn	Token	int	4	13538
6	trdQty	Trade Quantity	int	4	9
7	trdPrc	Trade Price in paise	int	4	78250
8	bsFlg	Buy Sell Flag. Refer Section "Transcodes"	String	1	1
9	ordNo	Order Number	double	8	130000000679330
10	brnCd	Branch Code	int	4	1
11	usrId	User Id	int	4	5090
12	proCli	Client Type. Refer Section "Transcodes"	short	2	2
13	cliActNo	Client account number	String	20	90159
14	cpCd	Custodial participant Id	String	12	90159
15	remarks	Remarks	String	25	1
16	actTyp	Activity Type. Refer Section "Transcodes"	short	2	2
17	TCd	Transaction Code. Refer Section "Transcodes"	short	2	6001
18	ordTm	Order Time in milliseconds from 1980	long	8	1261300998
19	mktTyp	Market Book Type. Refer Section "Transcodes"	short	2	1
20	aucNo	Auction Number	short	2	0



21	stpTyp	Trade Settlement Type	String	1	N
22	oppBrokerCd	Opposite Broker Code (Blank value since	String	1	
		members should not be able to view this value)			
23	trdTrigPrc	Trade Trigger Price	String	8	0
24	ctclld	CTCL code	<b>String</b>	<mark>20</mark>	122015001001000
25	ordInst	Order Institution	short	2	1025
26	secIdentifier	Trade Secondary Identifier	String	1	N
<mark>27</mark>	<mark>sym</mark>	<mark>Symbol</mark>	<b>String</b>	<mark>10</mark>	TECHM
<mark>28</mark>	<mark>ser</mark>	<mark>Series</mark>	<b>String</b>	<mark>2</mark>	EQ
<mark>29</mark>	<mark>secName</mark>	Security Name	<b>String</b>	<mark>40</mark>	TECH MAHINDRA LIMITED
<mark>30</mark>	<mark>Intrument Type</mark>	Instrument Type	<b>String</b>	<mark>2</mark>	EQ
<mark>31</mark>	TMCode TMCode	Trading Member Code	<b>String</b>	<mark>10</mark>	<mark>90159</mark>
32	fill1	Filler	String	10	
33	fill2	Filler	String	10	
34	fill3	Filler	String	10	
35	fill4	Filler	String	10	
36	fill5	Filler	String	10	
37	fill6	Filler	String	10	
38	fill7	Filler	String	10	
39	fill8	Filler	String	10	

**Note:** Client modifications (Transaction Code: 5445) will be shown as part of the trade inquiry response.

# 6.2 Action Inquiry (CP Modification/Client Code Modification)

UAT: https://www.devconnect2nse.com/notis-cm/actions-inquiry

Production/LIVE: https://www.connect2nse.com/notis-cm/actions-inquiry

# → Sample request call

POST /api/notis-cm/actions-inquiry HTTP/1.1

Host: www.connect2nse.com

Authorization: Bearer 3f64e567-04f9-43b8-9d24-e99856b24151

nonce: MjAwMTlwMTcxNjEyMjE1OTE6ODk0MjY3



```
{
    "version": "1.0",
    "data": {
        "msgld": "00240201310140000001",
        "dataFormat": "CSV:CSV",
        "actionsInquiry": "0,ALL,, "
    }
}
```

# → Request Structure

			Request Data Payload (JSON)	
Sr. No.	Parameter Name	Data Type	Description	Sample Value
<mark>1</mark>	<mark>version</mark>	String	API version	<mark>1.0</mark>
2	data.msgld	String	Unique request number for the each request <code><yyyymmdd><nnnnnn>  • MEMBERCODE – Member code (Length: 5)  • YYYYMMDD – Date format  • nnnnnnn – Sequence no. starting from one i.e. For first request of the day, it should be (0000001).</nnnnnn></yyyymmdd></code>	00240201310140000001
3	data.dataformat	String	Request data format : Response data format	CSV:CSV
<mark>4</mark>	data.actionsInquiry	CSV	Data Structure specified below	Refer "Sample Request"

Actions Download Request Packet Structure					
Field Name	Description	Data Type	Size (in bytes)	Remarks	
		Турс	bytesj		
	Action Sequence number till where server had already sent data information In the				
	previous request.				
	For first download request of the day, it				
<mark>seqNo</mark>	should be 0.	long	8	0	



srchFilter	Search Filter All (Default)	String	<mark>50</mark>	ALL
fill1	Filler Filler	String	<mark>10</mark>	
fill2	Filler Filler	String	<mark>10</mark>	

## → Sample Response



```
{
    "status": "success",
    "messages": {
        "code": "01010000"
    },
    "data": {
        "msgld": "00240201310140000001",
        "actionsInquiry":
    "6,20191220,,,4,4,0,1,2019122000049880,1264161916,1138539,107,5,10000000000260960,12798,1279
8,HDFC000000008,J62169,J62169,0,HDFC,12798,APAPT1463P,APAPT1463P,S,0,0,0,2,2019122000202160,
1264161916,2144877,107,5,10000000000823820,12798,12798,HDFC000000008,V92694,V92694,0,HDFC,
12798,CBVPK6610A,CBVPK6610A,B,0"
    }
}
```

# → Response Structure

	Response Data Payload (JSON)				
Sr. No.	Parameter Name	<mark>Data</mark> Type	Description	Sample Value	
1	<mark>status</mark>	<b>String</b>	Response status	success/error	
2	messages.code	String	Refer Section "Message based response code".	01010000	
3	data.msgld	String	Unique request number sent in request.	00240201310140000001	
4	data.actionsInquiry	CSV	Data Structure specified below	Refer Sample Response	



	Actions Download Response Packet Structure				
Field Name	<b>Description</b>	Data Type	Size (in	Remarks	
			bytes)		
	Control Red	<mark>cord</mark>			
			Size of		
			(System		
		System Info	<mark>Info</mark>		
		Response	Response	Structure details give	
sysinfoResData	System Info Response Structure	Structure Structure	Structure)	<mark>below</mark>	
			Size of		
		Response	<b>Response</b>		
		<mark>Data</mark>	<mark>Data</mark>	Structure details give	
actResData	Actions Response Data Structure	<u>Structure</u>	<b>Structure</b>	<mark>below</mark>	

# → System Info Response Structure

System Info Response Structure				
Field Name	<b>Description</b>	Data Type	Size (in bytes)	Sample
mktSts	Market Status Refer Section "Transcodes".	Short	2	<mark>6</mark>
<mark>currTrdDate</mark>	Current Trade Date (YYYYMMDD)	long	8	<mark>20191220</mark>
sfill1	Filler	String	<mark>10</mark>	
sfill2	Filler Filler	String	<mark>10</mark>	

# → Action Response Data Structure

	Actions Response Data Structure					
Field Name	<b>Description</b>	<mark>Data</mark>	<mark>Size (in</mark>	Sample Sample		
		<b>Type</b>	bytes)			
maxSeqNo	Max sequence number sent in response	<mark>long</mark>	8	<mark>4</mark>		
<mark>noOfRec</mark>	Count of actions sent in response	int	<mark>4</mark>	<mark>4</mark>		
	Data Records					
			Size of			
		Array Of	(Array Of			
	Array Of Client Modification/CP	<b>Actions</b>	<b>Actions</b>	Structure details give		
actionsOutput	Modification Structure	Structure	Structure)	<mark>below</mark>		



	CP Modification Data Structure				
Field Name	Description	Data Type	Size (in bytes)	Sample	
errCd	Action Response error code	short	2	Refer Section "Async Response codes".	
<mark>seqNo</mark>	Trade Sequence number	int	4	Sequence number of the trade for which action is received  1	
actTrdNo	Trade Number	long	8	2019122000049880	
actDtTm	Action Date Time	int	4	Date time in milliseconds from 1980 1264161916	
actType	Activity Type	Int	4	5	
ordNo	Order Number	String	10	100000000260960	
tmCd	Trading Member Code	String	10	12798	
<mark>oldCpCd</mark>	Old Custodial Participant Code	String	10	12798	
newCpCd	New Custodial Participant Code	String	10	HDFC00000008	
oldTrdAcc	Old Client Code/Account Number	String	10	J62169	
newTrdAcc	New Client Code/Account Number	String	10	J62169	
oldCus	Old Custodian	String	<mark>10</mark>	0	
newCus	New Custodian	String	10	HDFC	
actBy	Action By	String	10	12798	
oldPAN	Old Pan Number	String	10	APAPT1463P	
newPAN	New Pan Number	String	10	APAPT1463P	



bsFlag	Buy/Sell Flag	String	10	S
actErrCd	Action Error Code	int	4	0

#### 7 Workflow

- 1) Trade download works on sequence number basis present in individual trade/action response packet (*seqNo*).
- 2) The sequence number signifies the sequence of events for a single trade/action lifecycle. Thus every event occurred with respect to a particular trade/action will have a new sequence No.
- 3) On trades/actions download request, maximum trades/actions sequence no available should be sent. If there are no trades/actions present, it has to send the sequence as 0. API shall interpret the request, and will fetch "n" (Configurable) number of trades/actions, whose trades/actions sequence number is greater than that sent by client. The fetched trades will be sent back to client in response.
- 4) The trades/actions received by client in response packet are to be stored at client end. On subsequent trades/actions download request, client has to again send the maximum trades/actions sequence no available with him.

#### 8 Transcodes

#### 8.1 Market Type

1	Normal
2	Odd Lot
3	Spot
4	Auction
5	Call Auction 1
6	Call Auction 2

#### 8.2 Market Status

1	Preopen shutdown
2	Normal Market Preopen ended
3	Open Msg
4	Close Msg



5	Closing Start
6	Closing End

# 8.3 Transaction Code

6001	Original Trade
5525	Trade Modification Approval
5565	Control Trade Modification
5520	Trade Cancellation Approval
5560	Control Trade Cancellation
5530	Trade Cancellation Rejection
<mark>5445</mark>	Trade modification (Client Modification)
5440	Trade Cancellation

# 8.4 Activity Type

2	Original Trade
7	Trade Cancellation
<mark>5</mark>	Client Modification Pre-Image
<mark>27</mark>	Client Modification Post-Image
101	Buy Participant modification
102	Sell Participant modification
103	Buy & Sell Participant modification
104	Quantity modification
105	Buy Account No. modification
106	Sell Account No. modification
107	Buy & Sell Account No. modification
109	Buy Trade Cancellation due to modification
110	Sell Participant Cancellation due to modification
111	Buy & Sell Trade Cancellation due to modification

# 8.5 Book Type

1	Regular Lot
2	Special Terms
3	Stop Loss / MIT
4	Negotiated Trade
5	Odd Lot
6	Spot
7	Auction
11	Call Auction 1



12 Call Auction 2	
-------------------	--

# 8.6 Client Type

1	Cli
2	Pro

# 8.7 Buy Sell Flag

1	BUY
2	SELL

# 8.8 Trade Status

Р	Pending
R	Reject
Α	Approve

# 8.9 Option Type

CA	Call American
PA	Put American
CE	Call European
PE	Put European

# 8.10 Is Approval Flag

1	Approve
0	Reject

# 8.11 Instrument Type

	•
EQ	<b>Equities</b>
MI	Miscellaneous Programme Programme Miscellaneous Programme Programme Programme Programme Programme Programme Programme Programm
PR	Preference Shares
DE	<b>Debentures</b>
WA	Warrants



# 9 Response Codes

There can be two types of response codes

- 1) HTTP response codes
- 2) Message based response codes
- 3) Async response codes

## 9.1 HTTP response code

- 1) HTTP responses shall be generated during login with success or failure status
- 2) HTTP response shall also be generated in case of any authentication/input validation failure of the message
- 3) HTTP response codes are as follows:



	Н	TTP Response Codes	
Sr. No.	Reason		
			Response Codes
1	SUCCESS	Request was handled successfully	200
2	UNKNOWN_ERROR	Internal Server Error: Internal server error has occurred in our platform.	500
3	SVC_UNAVAILABLE	The server is currently unable to handle the request due to a temporary overloading or maintenance of the server.	503
4	METHOD_NOT_ALLOWED	Unsupported HTTP Method: A request was made for a resource using a request method not supported by that resource (e.g. using POST instead of GET).	405
5	BAD REQUEST	PARAMETER_ABSENT - There's a required parameter which is not present in the request.	400
6	BAD REQUEST	DATA_INVALID - The data is not in correct format and not recognized by our system.	400
7	BAD REQUEST	DATA_FORMAT_REJECTED - Unsupported Data format parameter value	400
8	UNAUTHORIZED: Failed to authenticate the request	CONSUMER_KEY_UNKNOWN - The provided Consumer Key (API key) is not registered in our system or service is not registered.	401
9	UNAUTHORIZED: Failed to authenticate the request	TOKEN_INVALID - The provided token is not registered in our system	401
10	UNAUTHORIZED: Failed to authenticate the request	UNAUTHORIZED:  * Unauthorized requestor IP address.  * API access disabled	401
11	TOKEN_EXPIRED	The TEMPORARY access token generated by the platform has expired and can no longer be used.	572
12	PERMISSION_DENIED	Subscriber has temporarily disallowed access to his private data.	403
13	REQUEST_NOT_FOUND	Registration request not found	570

# 9.2 Message based response code



- 1) Message based response code shall be populated in the field "code" of the JSON response message
- 2) It shall be of below format:
  - i. First four characters (Field Identifier): refers to specific field or the entire message
  - ii. Next characters (Validation code): refers to specific validation failure or success. Success code shall be populated only on successful acceptance of the message.

#### 9.3 Field Identifier codes

Sr.	Module	Field Name	Field
No.	iviodule	rieid Name	Identifier
1	Entire Message	NA	0101
2	Input Data Parameter	msgld	0102
3	Input Data Parameter	msgPrepDt	0105
4	Input Data Parameter	msgPrepTm	0106
5	Input Data Parameter	isApproval	0109
6	Input Data Parameter	seqNo	0107
7	Input Data Parameter	srchFilter	0108
8	Input Data Parameter	noOfRec	0110

#### 9.4 Validation codes

Sr. No.	Validation	Validation Type	Validation Code	Validation performed on Field
1	Submitted to server successfully	Message Level	0000	Entire Message
2	All HTTP status codes	HTTP error codes	HTTP Response codes. Refer section "HTTP Response Code".	Entire Message
3	Mismatch in control and data record	Message Level	0200	Entire Message
4	Minimum Required Length	Generic	0201	msgld
5	Maximum Required Length	Generic	0202	msgld
6	Mandatory field	Generic	0204	msgld, isApproval, noOfRec, seqNo, srchFilter, trdDate



Sr. No.	Validation	Validation Type	Validation Code	Validation performed on Field
7	Data Format like Msg Id / Date Format	Generic	0206	msgld, trdDate
8	Minimum allowed value	Generic	0207	seqNo, noOfRec
9	Maximum allowed value	Generic	0208	noOfRec
10	Invalid Value	Generic	0209	seqNo, isApproval, srchFilter, trdDate
11	System Error	Generic	0241	NA
12	Service Unavailable	Generic	0242	NA
13	Request Parsing Error : Invalid Request Structure	Generic	0243	NA

# 9.5 Example for success or failure code

#### 9.5.1 Example for Generic Error Code

Let's assume that msgld field holds value ABCD201340402132165, which turns out to be an error "Invalid Data Format". Error Code that will be generated is as shown below:

Field Identifier: 0102 Validation Code: 0206

code = combination of "Field Identifier" and "Validation Code" = 01020206

# 9.5.2 Example for Field Error Code

Let's assume that seqNo field holds value -1, which turns out to be an error "Minimum allowed value". Error Code that will be generated is as shown below:

Field Identifier: 0107 Validation Code: 0207

code = combination of "Field Identifier" and "Validation Code" =01070207

#### 9.5.3 Example for Success code (Submitted to server successfully)

Let's assume that message for approval/rejection is successful, success code that will be generated is as shown below:

Field Identifier: 0101 (which is the identifier of the entire message)

Validation Code: 0000

code = combination of "Field Identifier" and "Validation Code" =01010000



# 9.5.4 Example for HTTP error code

Let's assume that the invalid request scenario due to BAD Request, error code that will be generated is as shown below:

Field Identifier: 0101 (which is the identifier of the entire message)

Validation Code: 400

code = combination of "Field Identifier" and "Validation Code" =0101400

# 9.6 Async response code

- 1) Async response code shall be populated in the field "errCd" of the message
- 2) Below are the list of codes:

Error	Error Code
Success	0
System in wrong state	1
Invalid Contract	2
Invalid Participant	3
Trade not found	4
Trade already cancelled	5
System Error	6
Trade already approved	7
Trade already rejected	8
Outstanding alert	9
Invalid user	10
Invalid data	11
Clearing Member is in VC mode. Trade Approval/Rejection not allowed.	12
Clearing Member is Disabled. Trade Approval/Rejection not allowed.	13
Not Latest Trade	-12
Approve All request rejected-Invalid market status	-19
Invalid Seq No	-20



Invalid Clearing Member	-21
Invalid CP code	-22
Invalid buy/sell flag	-23
Invalid instrument	-24
Invalid symbol	-25
Invalid strike price	-26
Invalid expiry date	-27
Invalid option type	-28
Invalid trade quantity	-29
Invalid trade price	-30
Invalid order number	-31
Invalid trade number	-32
Invalid broker id	-33
Already submitted	-50
Already approved	-51
Already rejected	-52

# 10 Contingency

In case of any failure such as network, application, high bandwidth utilization at NSE or the MEMBER end, login workflow has to be re-initiated.

# 11 Usage Guidelines

- a) Members should limit requests to 30 seconds between each request.
- b) Members should send requests to the API between 8am 8pm.
- c) Failure to adhere to the above guidelines will result in removal of IP from whitelist which means that member will not be able to access the API until IP is re-added to the whitelist.