

Protocol for Non-NEAT Front End (NNF)

Mutual Funds Service System

Version 2.25

JAN 2020



National Stock Exchange of India Ltd
Exchange Plaza, Plot No. C/1, G Block,
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| Version 2.24 DEC 2018 | |
|--------------------------|---|
| Pages Changed | Description |
| 54, 77 | For facilitating DPC transactions, use of existing Reserve field. Need to Pass Y or blank value |
| 76,87 | New field ByPassMinRedemptionCheck added to Order Structure |
| 94 | Added “Change in Market Status” message in Chapter 7 – Unsolicited Messages. Trans codes: (BC_CLOSE_MSG (6521) / BC_OPEN_MSG (6511)) corresponding to market close and market open will now be sent through Interactive Channel. |
| 95 | Added “General Message Broadcast” message in Chapter 7 – Unsolicited Messages. Trans codes: BCAST_JRNL_VCT_MSG(6501). |

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|--------------------------|---|
| Pages Changed | Description |
| 23,25,27 | Password length changes in Logon Request & Response structures. |

Preface

Purpose

This document describes the protocol to be used for Non-NEAT Front end (NNF) to communicate with the Mutual Fund Service System and thus serves as a development guide for the NNF users.

Target Audience

This document is written for system designers and programmers of user organizations and third party software developers who are responsible for the development of software to interact with NSE's Mutual Fund Service System.

Organization of This Document

This document is organized as follows:

| Chapters | Description |
|-----------|---|
| Chapter 1 | Provides a brief introduction to Non-NEAT Front end (NNF). It also details the NNF Terminal requirements and Communication Network. |
| Chapter 2 | Describes the general guidelines for the designers and programmers who develop NNF. It details the data types used and also covers the Message Header that is prefaced with all the structures. |
| Chapter 3 | Connection Layer (CL). Describes the protocol and message flow required to be implemented for communication through connection layer (CL). |
| Chapter 4 | Describes how a trader logs on to the trading system. It also discusses the download of the updated information on the schemes, categories, SIP's and the status of the markets, and describes the log on request and the system responses. It also describes the On Demand SIP Details Download. |
| Chapter 5 | Describes entering SIP registrations, modifying existing SIP registrations, canceling SIP registrations and Historical SIP registration on demand download and cancellations. It also describes SIP Order cancellation. |
| Chapter 6 | Describes entering fresh orders, modifying an existing order, and canceling outstanding orders. |

| | |
|-----------|--|
| Chapter 7 | Covers the messages that are received on the interactive connection. These messages are received by users not in response to any request. |
| Chapter 8 | Describes the various Broadcast messages and the Compression and Decompression algorithm of Broadcast data. |
| Appendix | Lists the error, transaction and reason codes and also covers the various market statuses, market types and book types. Also covers security.txt, category.txt and sip.txt structures. |

Abbreviations and Acronyms Used

The abbreviations and acronyms used in this document are:

| | |
|----------|---|
| AGM | Annual General Meeting |
| AMC | Asset Management Company |
| BCID | Broadcast Circuit ID |
| BM | Branch Manager |
| CM | Corporate Manager |
| DL | Dealer |
| EGM | Extraordinary General Meeting |
| NEAT | National Exchange for Automated Trading |
| NNF | Non Neat Front End |
| NSE | National Stock Exchange |
| RTA | Registrar and Transfer Agent |
| SIP | Systematic Investment Plan |
| TAP | Trading Access Point |
| CL | Connection Layer |
| TM | Trading Member |
| TWS | Trader Workstation |
| VCID | Virtual Circuit ID |
| VSAT | Very Small Aperture Terminal |
| VV.RR.SS | Version. Release. Sub-release |
| EUIN | Employee Unique Identification Number |

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Chapter 1 Introduction

The National Stock Exchange of India Ltd (NSEIL) provides a fully automated screen based trading system, enabling trading members spread across the length and breadth of India to trade directly from their offices through an extensive telecommunication network. The system is known as 'National Exchange for Automated Trading' (NEAT) system. It adopts the principles of an order driven market, based on price-time priority. The trading members can use NEAT Front end or Non-NEAT Front end (NNF) to establish a network connection with the host system of National Stock Exchange (NSE) for trading. NNF is a front end which is developed and maintained by vendors other than NSE. NSE provides the NNF users with the general guideline document of the front end whereas they are supported by their respective vendors and NSE is not responsible for the performance of the NNF.

Communication Network

Connectivity to the Exchange is through WAN protocol on TCP/IP. There are two types of connectivity;

- a) Interactive connectivity – On TCP/IP for user specific messages to and from the Exchange.
- b) Market data – The market data is sent as broadcast based on UDP connection

Broadcast circuit ID (BCID) follows a unidirectional path which is from the host end to the TWS. All the broadcast data are transmitted through this broadcast circuit from the host end for all the traders. Since this is a one way connection, the data flow is always from the exchange (host end) to the trader terminal

Chapter 2 General Guidelines

Introduction

This chapter provides general guidelines for the designers and programmers who develop NNF. It also provides information on data types and their size which can help in understanding various structures.

Message Structure Details

The message structure consists of two parts namely message header and message data. The message header consists of the fields of the header which is prefaced with all the structures.

The message data consists of the actual data that is sent across to the host or received from the host.

Transaction code, an important field of the message header, is a unique numeric identifier which is sent to or received from the trading system. This is used to identify the transaction between the TWS and the host end.

Guidelines for Designers

1. The order of the log-on messages should strictly be maintained as given in the following section (Chapter 3) of the document. Otherwise, the user cannot log on to the trading system.
2. All time fields are number of seconds from midnight January 1 1980.
3. No host-end inquiries are permitted for NNF users.
4. All price fields must be multiplied by 100 before sending to the host end and divided by 100 while receiving from the host end as the host system processes prices in paise.
5. The buy NAV price and sell NAV price must be divided by 10000 while receiving from the host end.

6. The minimum redemption value limit is sent to FE in terms of paise. The value has to be divided by 100 while receiving from the host end.
7. The minimum physical redemption quantity limit must be divided by 100 while receiving from the host end.
8. All the other quantity limits can be considered as the exact value setup for the scheme.
9. The SIP Period values has to be interpreted as months.

Guidelines for Programmers

1. If your system uses little-endian order, the data types such as UINT, SHORT, LONG and DOUBLE contained in a packet, which occupy more than one byte should be twiddled (byte reversed). Twiddling involves reversing a given number of bytes such that the byte in 'n' position comes to the first position; the byte in (n-1) position comes to the second position and so on. For example, if the value to be sent is 1A2B (hexadecimal), reverse the bytes to 2B1A. The same applies while receiving messages. So if the value received is 02BC, the actual value is BC02. So twiddle such data types before sending and after receiving to ensure that correct data is sent and received.

Note:

Twiddling is required because of the variety in endian order—big and little. A big-endian representation has a multibyte integer written with its most significant byte on the left. A little-endian representation, on the other hand, places the most significant byte on the right. The trading system host end uses big-endian order.

2. All alphabetical data, excluding password, must be converted to upper case before sending to the host. No NULL terminated strings should be sent to the host end. Instead, fill it with **blanks** before sending. The strings received from the host end are padded with blanks and are not NULL terminated.
3. All the structures should be defined in the following manner:

- Items of type char or unsigned char, or arrays containing items of these types, are byte aligned.
 - Structures are word aligned.
 - All other types of structure members are word aligned.
4. All numeric data must be set to zero (0) before sending to the host, unless a value is assigned to it.
 5. All reserved fields mentioned, should be mapped to CHAR buffer and initialized to NULL.

Note:

- The values of all the constants and transaction codes given in the document are listed in Appendix.
- The suffix IN in the transaction codes implies that the request is sent from the TWS to the host end whereas OUT implies that the message is sent from the host end to TWS

Data Types Used

| Data Type | Size in Bytes | Signed/ Unsigned |
|-----------|---------------|---------------------------|
| CHAR | 1 | Signed |
| UINT | 2 | Unsigned |
| SHORT | 2 | Signed |
| LONG | 4 | Signed |
| DOUBLE | 8 | Signed and Floating Point |
| BIT | 1 bit | NA |

Message Header

Each structure is prefaced with a MESSAGE_HEADER which is an interactive header. Some data in the header are fixed whereas some data are variable and set differently for each transaction code. The structure of the Message Header is as follows:

Table 1 MESSAGE HEADER

| Structure Name | MESSAGE HEADER | | |
|-----------------|----------------|--------------|--------|
| Packet Length | 38 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| Reserved | CHAR | 2 | 0 |
| LogTime | LONG | 4 | 2 |
| AlphaChar [2] | CHAR | 2 | 6 |
| TransactionCode | SHORT | 2 | 8 |
| ErrorCode | SHORT | 2 | 10 |
| TimeStamp [8] | CHAR | 8 | 12 |
| TimeStamp1 [8] | CHAR | 8 | 20 |
| TimeStamp2 [8] | CHAR | 8 | 28 |
| MessageLength | SHORT | 2 | 36 |

The fields of Message Header are described below.

| Field Name | Description |
|-----------------|--|
| LogTime | This field should be set to zero while sending messages. |
| AlphaChar | This field should be set to the first two characters of Symbol if the structure contains Symbol and Series; otherwise it should be set to blank. |
| TransactionCode | Transaction message number. This describes the type of message received or sent. |
| ErrorCode | This field should be set to zero while sending messages to the host. In the messages coming from the host, this field describes the type of error. Refer to List of Error Codes in Appendix |
| TimeStamp | This field should be set to numeric zero while sending to the host. This is used in host end. |
| TimeStamp1 | This field should be set to numeric zero while sending. This is the time the message arrives at the trading system host. In TimeStamp1, time is sent in jiffies from host end. This 8 byte data needs to be typecasted as first four byte into double variable and typecast the other four byte into another double variable. These values need to be used while requesting message area download in the same order |

| Field Name | Description |
|---------------|---|
| TimeStamp2 | This field should be set to numeric zero while sending to the host. For messages coming from the host, this field contains the value 0. |
| MessageLength | This field should be set to the length of the entire message, including the length of message header while sending to host. |

Broadcast Process Header

The broadcast messages like market open, market close, market in pre-open are prefaced with BCAST_HEADER. Some fields in the header are fixed. The remaining fields are variable and set differently for each transaction code. The structure of the BCAST_HEADER is as follows:

Table 2 BCAST_HEADER

| Structure Name | BCAST_HEADER | | |
|-----------------|--------------|--------------|--------|
| Packet Length | 38 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| Reserved | CHAR | 2 | 0 |
| LogTime | LONG | 4 | 2 |
| AlphaChar [2] | CHAR | 2 | 6 |
| TransactionCode | SHORT | 2 | 8 |
| ErrorCode | SHORT | 2 | 10 |
| BCSeqNo | LONG | 4 | 12 |
| Reserved | CHAR | 4 | 16 |
| TimeStamp2 [8] | CHAR | 8 | 20 |
| Reserved3 [8] | CHAR | 8 | 28 |
| MessageLength | SHORT | 2 | 36 |

| Field Name | Description |
|------------|---|
| LogTime | This field should be set to zero while sending to host end. For messages sent from host end this field contains the time when the message was generated by the trading system host. |
| AlphaChar | This field is set to the first two characters of Symbol if the structure contains Symbol and Series; otherwise it is set to blank. |

| Field Name | Description |
|-----------------|--|
| TransactionCode | This field contains the transaction message number. This describes the type of message received or sent. |
| ErrorCode | This field contains the error number which describes the type of error. Refer to List of Error Codes in Appendix. |
| BCSeqNo | This field contains BCAST Sequence number for Ericsson switch. |
| TimeStamp2 | This field contains the time when message is sent from the host. |
| MessageLength | This field is set to the length of the entire message, including the length of the message header. |

Note: BCAST_HEADER is prefaced with a system header which is of eight bytes.

Error Message

When the Error Code in the Message Header is not zero, ERROR RESPONSE is sent. The Error Message will describe the error received. The structure is as follows:

Table 3 ERROR_RESPONSE

| Structure Name | ERROR_RESPONSE | | |
|---|----------------|--------------|--------|
| Packet Length | 178 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE_HEADER (Refer Table 1) | STRUCT | 38 | 0 |
| SEC_INFO(Refer Table 3.1) | STRUCT | 12 | 38 |
| Error message[128] | CHAR | 128 | 50 |

Table 3.1 SEC_INFO

| Structure Name | SEC_INFO | | |
|----------------|-----------|--------------|--------|
| Packet Length | 12 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| Symbol | CHAR | 10 | 0 |
| Series | CHAR | 2 | 10 |

| Field Name | Description |
|------------|---|
| Symbol | This field should contain the symbol of a scheme. |
| Series | This field should contain the series of a scheme. |

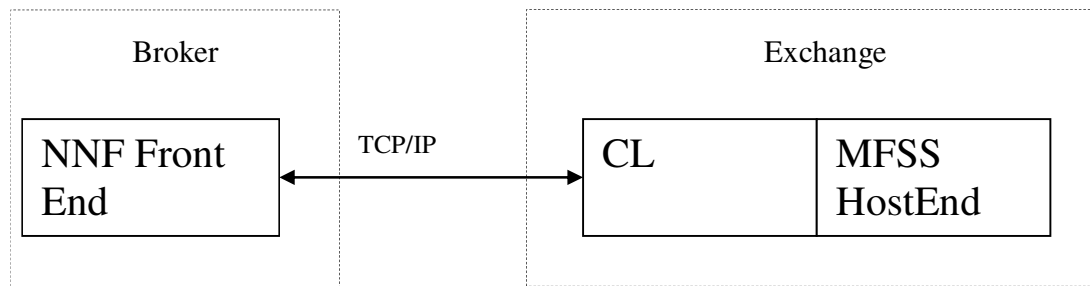
| Field Name | Description |
|--------------|---|
| Symbol | This field should contain the symbol of a scheme. |
| Series | This field should contain the series of a scheme. |
| ErrorMessage | Stores the error message. Refer to List of Error Codes in Appendix. |

Chapter 3 Connection Layer (CL)

Introduction

The current TAP layer to which the member applications used to connect is being discontinued. NNF applications need not connect to the TAP service running in their environment. Instead the member NNF applications will have to connect to the new connection layer of MFSS host end application directly using TCP/IP. There will be no change in the packet structure and message flow using invitation messages. The protocol and message flow required to be implemented for communication through CL is explained in detail in following sections.

Diagrammatic Representation



Interactive Channel for IP Implementation

TCP/IP communication protocol shall be used between NNF and CL.

CL Protocol Details

TCP/IP Connectivity between NNF system and CL

Guidelines for TCP/IP connectivity (Windows based) between NNF and CL are as follows

1. Type of the socket to be used is SOCK_STREAM
2. Address family for the socket is PF_INET
3. Front-End establishes socket connection to CL.
4. CL accepts front-end socket connection
5. Revc () function will be called to receive data packets from CL.
6. Send () function will be called to send data packets to CL.

7. Pragma pack (2) to be used for all structures flowing between Front-End and CL.
8. It is recommended to disable Nagle's algorithm.

Specification for TCP/IP Connectivity between NNF and CL

```

SET socket type = SOCK_STREAM
SET socket address family = PF_INET
CREATE socket using above options
SET no. of bytes to be received and no. of bytes to be sent at SOL_SOCKET      level
SET socket option to TCP_NODELAY at IPPROTO_TCP
SET remote address of host in AF_INET address family
SET remote port id for connection with CL
WAIT for events of the type FD_READ or FD_CLOSE
IF the event is FD_CLOSE then
    CONNECTION is lost
ELSEIF the event is FD_READ then
    RECEIVE the packet and process it
    WAIT for invitation packet

```

For non Windows based systems, use equivalent parameters in the above steps.

Setting TCP Keep-alive parameters

In order to detect abrupt network disconnection between CL and NNF, it is required to enable TCP Keep-alive option in NNF application. This can be done using following

Steps:

1. After TCP socket is created, NNF application has to set SO_KEEPAIVE option of the socket at SOL_SOCKET level.
2. Also, following Keep-alive parameters should be set in the Operating System on which NNF is installed
 - a. Keep Alive Time: 20 seconds
 - b. Number of Keep Alive Retries: 5
 - c. Keep Alive Interval: 2 seconds

Packet structure for communication between CTCL and CL

This structure is applicable to all messages that flow between NNF and Host through CL.

Packet Format

| | | | | |
|---------------------|---------------------------------|---|---------|-----------------------------------|
| Length (2 bytes) | Sequence number (4 bytes) | Checksum(MD5) for data (16 bytes) | Message | Message Data (Variable length) |
|---------------------|---------------------------------|---|---------|-----------------------------------|

- Max length will be the predefined value of 1304 bytes.
Length = size of length field (2 bytes) +
 size of sequence number field (4 bytes) +
 size of the checksum field (16 bytes) +
 size of Message data (variable number of bytes as per the transcode).
- Sequence number will start from 1 and will be incremented for every packet.
- Message data will be of variable length and comprises of 38 bytes of header + variable sized data buffer as per transcode being sent.
- The checksum algorithm used will be MD5. Checksum is applied only on the Message data field and not on the entire packet.
- For more details on MD5 refer: [RFC 1321 \(rfc1321\) - The MD5 Message-Digest Algorithm](http://www.faqs.org/rfcs/rfc1321.html) (<http://www.faqs.org/rfcs/rfc1321.html>)

Packet Validation

Validation will be done for all requests flowing between CL and Front-End.

Validation will be done through the combination of Checksum, Sequence Number and length field.

Request Processing by CL

Before sending the request to CL, Front-End will have to generate a sequence number and checksum value. All the requests being sent from Front-End will be sent in the format described above.

If validation of sequence number, checksum value & length will fail at CL end, CL will disconnect the socket connection.

Response Processing by NNF software

On receiving the response from CL, NNF software is expected to validate sequence number, checksum value & length field.

Sequence number must be in sequential order. For any fresh connection the number should start from 1. On reaching the maximum limit of the data type of the sequence number, the numbers should be reset to 1. Checksum field and the checksum recalculated on the data field must match. Length field must be less than or equal to 1024.

If any one of these validations fails, the Front-End needs to drop the connection and reestablish a fresh connection.

Message flow between NNF and CL

Flow Control Mechanism

Packet flow between CL and Front-End will be controlled using Flow Control Mechanism. CL will send an '**Invitation Packet**' to Front-End on establishing a fresh connection.

Number of requests specified in Invitation Packet will be the maximum limit for requests which will be allowed to be sent to CL from Front-End.

After the front-end has utilized the invitation count fully, the CL will send the next invitation packet. Only on receiving the next invitation, the front-end is expected to send subsequent requests.

Invitation Packet Structure

Table 4 INVITATION MESSAGE

| | | | |
|---|----------------------------|---------------------|---------------|
| Structure Name | INVITATION_MESSAGE | | |
| Packet Length | 40 bytes | | |
| Transaction Code | INVITATION_MESSAGE (15000) | | |
| Field Name | Data Type | Size in Byte | Offset |
| Message Header (Refer to Table1 in Chapter 2) | STRUCT | 38 | 0 |
| InvitationCount | SHORT | 2 | 38 |

| Field Name | Description |
|------------------|--|
| TransactionCode | The transaction code is INVITATION_MESSAGE (15000). |
| Invitation Count | Maximum number of requests which will be allowed to be sent to CL from Front-End. This is an output field from the CL. |

Note:

In the invitation packet, the following fields are to be used

1. Transaction Code field
2. Message length field
3. Invitation Count Field

Other of the fields of this packet is reserved and are to be ignored while processing.

Exception handling for invitation packet

In case of any exception while processing the 'invitation packet' the connection should be dropped. A new connection needs to be established by the front end

Chapter 4 Logon Process

Introduction

This section describes how a trader logs on to the trading system. It covers the log-on request and the system responses. This section also describes the download of the updated information on

the schemes, categories and the status of the markets. It covers the structures and field descriptions of System Information Download, Local Database Download and Message Download.

The process by which a trader logs on to the trading system is called Logon Process. The trader, after issuing a sign-on request, waits for the system response. The response could be a successful logon or an error message.

Order of Events to Be Followed During Logon and Logoff

The following sequence explains the order in which transaction codes are sent and received during log-on process.

| Sequence No | Transaction Code | Sent By | Received By |
|-------------|-------------------------------|----------|-------------|
| 1 | SIGN_ON_REQUEST_IN (2300) | TWS | Host End |
| 2 | SIGN_ON_REQUEST_OUT (2301) | Host End | TWS |
| 3 | SYSTEM_INFORMATION_IN (1600) | TWS | Host End |
| 4 | SYSTEM_INFORMATION_OUT (1601) | Host End | TWS |
| 5 | UPDATE_LOCALDB_IN (7300) | TWS | Host End |
| 6 | UPDATE_LOCALDB_HEADER (7307) | Host End | TWS |
| 7 | UPDATE_LOCALDB_DATA (7304) | Host End | TWS |
| 8 | UPDATE_LOCALDB_TRAILER (7308) | Host End | TWS |
| Sequence No | Transaction Code | Sent By | Received By |
| 9 | DOWNLOAD_REQUEST (7000) | TWS | Host End |
| 10 | HEADER_RECORD (7011) | Host End | TWS |
| 11 | MESSAGE_RECORD (7021) | Host End | TWS |
| 12 | TRAILER_RECORD (7031) | Host End | TWS |

The following sequence explains the order in which the transaction codes are sent and received during log-off process.

| Sequence No | Transaction Code | Sent By | Received By |
|-------------|-----------------------------|----------|-------------|
| 1 | SIGN_OFF_REQUEST_IN (2320) | TWS | Host End |
| 2 | SIGN_OFF_REQUEST_OUT (2321) | Host End | TWS |

Logon Request

When the user wants to establish an interactive circuit with the host, he sends this request. The structure for this request is as follows:

Table 5 SIGNON REQUEST

| Structure Name | SIGNON REQUEST | | |
|--|---------------------------|--------------|--------|
| Transaction code | SIGN_ON_REQUEST_IN (2300) | | |
| Packet Length | 216 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE_HEADER(Refer Table 1) | STRUCT | 38 | 0 |
| UserId | SHORT | 2 | 38 |
| Password [25] | CHAR | 25 | 40 |
| NewPassword [25] | CHAR | 25 | 65 |
| TraderName [26] | CHAR | 26 | 90 |
| LastPasswordChangeDate | LONG | 4 | 116 |
| BrokerId [5] | CHAR | 5 | 120 |
| Reserved1 | CHAR | 1 | 125 |
| BranchId | SHORT | 2 | 126 |
| VersionNumber | LONG | 4 | 128 |
| Batch2StartTime | LONG | 4 | 132 |
| HostSwitchContext | CHAR | 1 | 136 |
| Colour [50] | CHAR | 50 | 137 |
| Reserved2 | CHAR | 1 | 187 |
| UserType | SHORT | 2 | 188 |
| SequenceNumber | DOUBLE | 8 | 190 |
| WsClassName [14] | CHAR | 14 | 198 |
| BrokerStatus | CHAR | 1 | 212 |
| Reserved3 | CHAR | 1 | 213 |
| BROKER_ELIGIBILITY_PER_MKT (Refer to Table 5.1 & Table 5.2) | STRUCT | 2 | 214 |

For Small Endian Machines:

Table 5.1 BrokerEligibilityPerMarket

| Structure Name | BROKER_ELIGIBILITY_PER_MKT | | |
|----------------|----------------------------|------|--------|
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size | Offset |
| Reserved | BIT | 4 | 0 |
| Reserved | BIT | 1 | 0 |
| Spot market | BIT | 1 | |
| Reserved | BIT | 1 | 0 |
| Reserved | BIT | 1 | 0 |
| Reserved | BIT | 8 | 1 |

For Big Endian Machines:

Table 5.2 BrokerEligibilityPerMarket

| Structure Name | BROKER_ELIGIBILITY_PER_MKT | | |
|----------------|----------------------------|------|--------|
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size | Offset |
| Reserved | BIT | 1 | 0 |
| Reserved | BIT | 1 | 0 |
| Spot market | BIT | 1 | 0 |
| Reserved | BIT | 1 | 0 |
| Reserved | BIT | 4 | 0 |
| Reserved | BIT | 8 | 1 |

| Field Name | Description |
|-----------------|---|
| TransactionCode | The transaction code is SIGN_ON_REQUEST_IN (2300). |
| UserId | This field should contain User ID of user/broker. This field accepts numbers only. |
| Password | This field should contain the password entered by the user. A combination of alphabet, numbers and special characters are allowed in the password. The user should enter the password for a successful Logon. When the user logs on for the first time the default password provided by NSE must be entered and the |

| Field Name | Description |
|-----------------------------|--|
| | password should be changed by entering a new password. |
| NewPassword | <p>This field should contain the new password entered by the user. This field should be entered only when the user wishes to change the password or the password has expired. Otherwise this field should be blank. The New Password should be entered along with the old password in the Password field. While logging on the system for the first time, the default password provided by NSE must be changed. the new password entered will undergo following new validations :</p> <ul style="list-style-type: none"> • The length of password should be of minimum 12 characters. • The password should contain atleast 1 upper case letter, 1 lower case letter, 1 numeral and 1 special characters from the list (\$,_,#,@,&^,%,*). • New password must be different from previous 5 passwords. • User shall be compulsorily required to change password after the lapse of 365 days. • User Id shall be locked after 5 invalid login attempts. • User shall not be allowed to set the default password as new password. |
| TraderName | <p>This field when received from the host contains the user's name.</p> <p>This field should be sent to host as blanks.</p> |
| LastPassword ChangeDateTime | This field should be set to numerical zero while log on. |
| BrokerId | This field should contain the trading member ID. |
| BranchId | This field should contain the Branch ID to which the broker belongs. |

| Field Name | Description |
|-----------------------------|---|
| VersionNumber | This field should contain the version number of the trading system. It must be in the following format: VERSION.RELEASE.SUB_RELEASE (For example, 01.00.01) |
| Batch2StartTime | This field should be set to numerical zero. |
| HostSwitchContext | This field should be set to blank. |
| Colour | This field should be set to blank. |
| UserType | This field indicates the type of user. It can take one of the following values when it is sent from the host: ‘0’ denotes Dealer ‘4’ denotes Corporate Manager ‘5’ denotes Branch Manager This field should be set to ‘0’ while sending to the host. |
| SequenceNumber | This field should be set to numerical zero while sending the request to host. |
| WorkstationNumber | The network ID of the workstation should be provided. This is a seven digit number. The first five digits are fixed by the Exchange and represent the various ports / switch locations. The last two digits denote the user’s PC - ID. It must be any number other than ‘00’. |
| BrokerStatus | This field should be set to blank. |
| BrokerEligibilityPer Market | This field should be set to numerical zero. |

Logon Response

The response will either be **Confirmation** or **Logon Error**.

Logon Confirmation Response

A successful logon results in the Logon Confirmation Response. The following structure is sent back:

Table 6 SIGNON REQUEST

| Structure name | SIGNON_REQUEST | | |
|--|---------------------------|--------------|--------|
| Transaction code | SIGN_ON_REQUEST_OUT(2301) | | |
| Packet Length | 182 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE_HEADER (Refer Table 1) | STRUCT | 38 | 0 |
| UserId | SHORT | 2 | 38 |
| Password [25] | CHAR | 25 | 40 |
| NewPassword [25] | CHAR | 25 | 65 |
| TraderName [26] | CHAR | 26 | 90 |
| LastPasswordChangeDate | LONG | 4 | 116 |
| BrokerId [5] | CHAR | 5 | 120 |
| Reserved1 | CHAR | 1 | 125 |
| BranchId | SHORT | 2 | 126 |
| VersionNumber | LONG | 4 | 128 |
| End Time | LONG | 4 | 132 |
| Reserved2 [52] | CHAR | 52 | 136 |
| UserType | SHORT | 2 | 188 |
| SequenceNumber | DOUBLE | 8 | 190 |
| Reserved3 | CHAR | 14 | 198 |
| BrokerStatus | CHAR | 1 | 212 |
| Reserved4 | CHAR | 1 | 213 |
| BrokerEligibilityPerMarket (Refer Table 6.1 for Small Endian machines and Table 6.2 below for Big Endian machines) | STRUCT | 2 | 214 |

For Small Endian Machines:

Table 6.1 BrokerEligibilityPerMarket

| Structure Name | BROKER_ELIGIBILITY_PER_MKT | | |
|----------------|----------------------------|------|--------|
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size | Offset |
| Reserved | BIT | 4 | 0 |
| Reserved | BIT | 1 | 0 |
| Spot market | BIT | 1 | |
| Reserved | BIT | 1 | 0 |
| Reserved | BIT | 1 | 0 |
| Reserved | BIT | 8 | 1 |

For Big Endian Machines:

Table 6.2 BrokerEligibilityPerMarket

| Structure Name | BROKER_ELIGIBILITY_PER_MKT | | |
|----------------|----------------------------|------|--------|
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size | Offset |
| Reserved | BIT | 1 | 0 |
| Reserved | BIT | 1 | 0 |
| Spot market | BIT | 1 | 0 |
| Reserved | BIT | 1 | 0 |
| Reserved | BIT | 4 | 0 |
| Reserved | BIT | 8 | 1 |

| Field Name | Description |
|----------------------------|---|
| TransactionCode | The transaction code is SIGN_ON_REQUEST_OUT (2301). |
| LogTime | The current time at the trading system is sent back as number of seconds since midnight of January 1, 1980. |
| UserId | This field contains the ID of the user. |
| TraderName | This field contains the user name. |
| LastPassword ChangeDate | This field contains the last date time when the password was changed. |
| BrokerId | This field contains the Trading Member ID. |
| BranchId | This field contains the branch ID of the particular user. |

| | |
|--------------------------------|--|
| Version No | This field contains the version number of the trading system |
| EndTime | This field contains the time the markets last closed and is sent as the number of seconds since midnight of January 1, 1980. If this time is different from the time sent in an earlier log on, all orders, trades and messages for this trader must be deleted from the Local Database. |
| UserType | This field contains the type of user who is logging on: <ul style="list-style-type: none"> • '0' – Dealer • '4' – Corporate Manager • '5' – Branch Manager |
| SequenceNumber | This field contains the time when the markets closed the previous trading day. |
| BrokerStatus | This field contains the current status of the broker: <ul style="list-style-type: none"> • 'S' for Suspended • 'A' for Active • 'D' for Deactivated |
| BrokerEligibility PerMarket | This structure specifies the markets that are allowed for the trading member. The trading member is eligible to enter orders in the markets that are set to 1. |

Logon Error

In case of any error, the structure returned is:

ERROR RESPONSE (Refer to [Error Message](#) in Chapter 2)

| Field Name | Description |
|-----------------|--|
| TransactionCode | The transaction code is SIGN_ON_REQUEST_OUT (2301). |
| ErrorCode | <p>This contains the error number. If the version number is not the same as at the host end, the version number at the host can be extracted from Error_Message in ERROR_RESPONSE (8 bytes from location 95 in the string). The format of it will be VV.RR.SS.</p> <p>The version number at the front end should be set to VVRRSS. Refer to List of Error Codes in Appendix.</p> |

System Information Download

The current status of the markets and the values of global variables are downloaded to the trader in response to *system information* request.

System Information Request

This request can be sent only if the user has logged on successfully. The format of the request is as follows:

Table 7 SYSTEM_INFO_REQ

| Structure name | SYSTEM_INFO_REQ | | |
|---|------------------------------|--------------|--------|
| Transaction code | SYSTEM_INFORMATION_IN (1600) | | |
| Packet Length | 38 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE_HEADER (Refer Table 1) | STRUCT | 38 | 0 |

| Field Name | Description |
|-----------------|---|
| TransactionCode | The transaction code is SYSTEM_INFORMATION_IN (1600). |

System Information Response

The following structure is returned as a response to the system information request:

Table 8 SYSTEM_INFO_DATA

| Structure Name | SYSTEM_INFO_DATA | | |
|---|-------------------------------|--------------|--------|
| Transaction code | SYSTEM_INFORMATION_OUT (1601) | | |
| Packet Length | 84 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE HEADER,(Refer Table 1) | STRUCT | 38 | 0 |
| MARKET_STATUS,(Refer Table 8.1 below) | STRUCT | 8 | 38 |
| Reserved9 | LONG | 4 | 46 |
| Reserved4 | SHORT | 2 | 50 |
| Reserved5 | SHORT | 2 | 52 |
| Reserved6 | SHORT | 2 | 54 |
| Reserved7 | SHORT | 2 | 56 |
| Reserved8 | SHORT | 2 | 58 |

| | | | |
|---|--------|---|----|
| Reserved9 | SHORT | 2 | 60 |
| Reserved10 | SHORT | 2 | 62 |
| Reserved11 | SHORT | 2 | 64 |
| TerminalIdleTime | SHORT | 2 | 66 |
| Reserved12 | LONG | 4 | 68 |
| Reserved13 | LONG | 4 | 72 |
| Reserved14 | SHORT | 2 | 76 |
| STOCK_ELIGIBLE_INDICATORS,(Refer Table 8.2 & Table 8.3 below) | STRUCT | 2 | 78 |
| Reserved15 | SHORT | 2 | 80 |
| InqTimer | SHORT | 2 | 82 |

Table 8.1**MARKET STATUS**

| | | | |
|----------------|---------------|--------------|--------|
| Structure Name | MARKET_STATUS | | |
| Packet Length | 8 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| Reserved1 | SHORT | 2 | 0 |
| Reserved2 | SHORT | 2 | 2 |
| SPOT | SHORT | 2 | 4 |
| Reserved3 | SHORT | 2 | 6 |

For Small Endian Machines:

Table 8.2 STOCK ELIGIBLE INDICATORS

| | | | |
|----------------|--------------------------|------|--------|
| Structure Name | STOCK_ELIGIBLE_INDICATOR | | |
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size | Offset |
| Reserved | BIT | 5 | 0 |
| Reserved | BIT | 1 | 0 |
| Reserved | BIT | 1 | 0 |
| Reserved | BIT | 1 | 0 |
| Reserved | BIT | 8 | 1 |

For Big Endian Machines:

Table 8.3 STOCK ELIGIBLE INDICATORS

| | | | |
|----------------|--------------------------|------|--------|
| Structure Name | STOCK_ELIGIBLE_INDICATOR | | |
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size | Offset |
| Reserved | BIT | 1 | 0 |
| Reserved | BIT | 1 | 0 |
| Reserved | BIT | 1 | 0 |
| Reserved | BIT | 5 | 0 |
| Reserved | BIT | 8 | 1 |

| Field Name | Description |
|------------------|--|
| TransactionCode | The transaction code is SYSTEM_INFORMATION_OUT (1601). |
| MarketStatus | This field contains a value assigned for market status are: <ul style="list-style-type: none"> • '0' if it is Preopen • '1' if it is Open • '2' if it is Closed • '3' if it is Preopen Ended |
| TerminalIdleTime | This field contains the idle time of the TWS terminal. |
| InqTimer | This field contains the inquiry time of the terminal. |

Update Local Database Download

The list of updated schemes and categories are downloaded in response to *update local database* request.

Update Local Database Request

This message is sent to request the host end to update the local database at the front end. The structure sent is as follows:

Table 9 UPDATE_LOCAL_DATABASE

| Structure Name | UPDATE_LOCAL_DATABASE | | |
|--|---------------------------|--------------|--------|
| Transaction code | UPDATE_LOCAL_DB_IN (7300) | | |
| Packet Length | 98 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE_HEADER(Refer Table 1) | STRUCT | 38 | 0 |
| LastUpdateSecurityTime | LONG | 4 | 38 |
| LastUpdateCategoryTime | LONG | 4 | 42 |
| LastUpdateSIPTIME | LONG | 4 | 46 |
| Reserved1 | CHAR | 1 | 50 |
| Reserved2 | CHAR | 1 | 51 |

| | | | |
|---|--------|----|----|
| MARKET_STATUS(Refer Table 8.1) | STRUCT | 8 | 52 |
| Reserved[10] | CHAR | 10 | 60 |
| Reserved[2] | CHAR | 2 | 70 |
| Reserved3[12] | CHAR | 12 | 72 |
| Reserved4 | DOUBLE | 8 | 84 |
| Reserved5 | LONG | 4 | 92 |
| Reserved6 | SHORT | 2 | 96 |

| Field Name | Description |
|------------------------|---|
| TransactionCode | The transaction code is UPDATE_LOCALDB_IN (7300). |
| LastUpdateSecurityTime | This field should contain the time when the scheme information was last updated. This field is for each scheme for which information is downloaded. Further download requests can use the latest time to get updated information on the securities. Setting this time to zero results in complete download. |
| LastUpdateCategoryTime | This field should contain the time when the category information was updated. This field is set for each category for which information is downloaded. Further download requests can use the latest time to get updated information on the categories. Setting this time to zero results in complete download. |
| LastUpdateSIPTime | This field should contain the time when the SIP master information was updated. This field is set for each SIP master details for which information is downloaded. Further download requests can use the latest time to get updated information on the SIP details. Setting this time to zero results in complete download. |
| MarketStatus | This should be the market status received in the previous response. The market status fields are accepted as input to verify if the user has the latest system information. If the user has the latest market status information, the update of the information on the schemes and the categories from the specified time are downloaded. If the status information specified is not the latest, the user is updated on the market status alone. Upon receiving the updated market information, the user can request for the updated scheme status, scheme, and category information. |

Update Local Database Response

The response will be either the database download, or a partial system information download. The latter will occur if the trader does not have the latest market status.

Partial System Information Response

This is returned if the market status sent in the previous message is not the same at the host end or the markets are opening. In this case the market status at the host end is sent back in the MARKET STATUS as 'wait till markets are open'. The following structure is returned:

SYSTEM INFORMATION DATA (Refer to [System Information Response](#) in Chapter 4)

| Field Name | Description |
|-----------------|--|
| TransactionCode | The transaction code is PARTIAL_SYSTEM_INFORMATION (7321). |
| MarketStatus | This contains the latest market status. |

Update Local Database Download

The download comprises of a header, data and the trailer. Each updated scheme information, security status, and category information will be sent as a separate message.

Update Local Database Header

This is sent only to indicate that a signon download is going to commence. There is no additional data sent. The header is sent in the following format:

Table 10 UPDATE_LDB_HEADER

| Structure Name | UPDATE_LDB_HEADER | | |
|--|------------------------------|--------------|--------|
| Transaction code | UPDATE_LOCALDB_HEADER (7307) | | |
| Packet Length | 40 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE_HEADER(Refer Table 1) | STRUCT | 38 | 0 |
| Reserved | CHAR | 2 | 38 |

| Field Name | Description |
|-----------------|---|
| TransactionCode | The transaction code is UPDATE_LOCALDB_HEADER (7307). |

Update Local Database Data

The actual data is sent wrapped in another header. The outer header indicates that this message is part of the Update Local Database Data. The inner header indicates the type of data received.

The structure is as follows:

Table 11 MESSAGE HEADER

| Structure Name | MESSAGE HEADER | | |
|---|------------------|--------------|--------|
| Packet Length | 72 to 1024 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE_HEADER(Refer Table 1)InnerHeader | STRUCT | 38 | 0 |
| Data[948] | CHAR | 948 | 38 |

| Field Name | Description |
|----------------------|---|
| TransactionCode | The transaction code is UPDATE_LOCALDB_DATA (7304). |
| InnerTransactionCode | <p>The transaction codes sent are</p> <ul style="list-style-type: none"> • BCAST_SECURITY_MSTR_CHG (7305). It is determined by NSE-Control whether to send this or not. (Refer to Change in Security Master in Chapter 7) • BCAST_SECURITY_STATUS_CHG (7320). This transaction code is sent when the status of the stock is different from the expected status at the host end (Refer to Change of Security Status in Chapter 7) • BCAST_CAT_MSTR_CHG (7309). If there is any change in the category master after the time specified by the Last Update Category Time, it is downloaded.(Refer to Category Master Download in Chapter 4) • BCAST_SIP_MSTR_CHG (7209). If there is any change in the SIP master after the time specified by the Last Update SIP Time, it is downloaded.(Refer to SIP Master Download in Chapter 4) |

Category Master Download

Category master information is downloaded to TWS based on the Last Update Category Time received in Update Local database request. The structure is as follows:

Table 12 CATEGORY_UPDATE_INFORMATION

| Structure Name | CATEGORY_UPDATE_INFORMATION | | |
|---|-----------------------------|--------------|--------|
| Transaction code | BCAST_CAT_MSTR_CHG (7309) | | |
| Packet Length | 72 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE_HEADER (Refer Table 1) | STRUCT | 38 | 0 |
| CategoryCode[5] | CHAR | 5 | 38 |
| CategoryName[25] | CHAR | 25 | 43 |
| LocalUpdateDateTime | LONG | 4 | 68 |

| Field Name | Description |
|---------------------|--|
| TransactionCode | The transaction code is BCAST_CAT_MSTR_CHG (7309). |
| CategoryCode | This field contains the unique Category Code for each category. |
| CategoryName | This field contains the name of the category. |
| LocalUpdateDateTime | This field contains the time when the category information was changed. It is in number of seconds from January 1, 1980. |

SIP Master Download

SIP master information is downloaded to TWS based on the Last Update SIP Time received in Update Local database request. The structure is as follows:

Table 13 SIP_UPDATE_INFORMATION

| Structure Name | SIP_UPDATE_INFORMATION | | |
|---|---------------------------|--------------|--------|
| Transaction code | BCAST_SIP_MSTR_CHG (7209) | | |
| Packet Length | 106 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE_HEADER(Refer Table 1) | STRUCT | 38 | 0 |
| Token | SHORT | 2 | 38 |
| SECURITY_INFORMATION(Refer Table 13.1) | STRUCT | 12 | 40 |
| FrequencyNumber | SHORT | 2 | 52 |
| SIP PARAMETERS(Refer Table 13.2) | STRUCT | 22 | 54 |
| SIPFrequencyMultiple | SHORT | 2 | 76 |
| SIPMinimumAmount | LONG | 4 | 78 |
| SIPMaximumAmount | DOUBLE | 8 | 82 |
| SIPMultiple | SHORT | 2 | 90 |
| SIPMinimumTotal Amount | DOUBLE | 8 | 92 |
| LocalUpdateDateTime | LONG | 4 | 100 |
| FrequencyEligibility | CHAR | 1 | 104 |
| DeleteFlag | CHAR | 1 | 105 |

Table 13.1 SECURITY_INFORMATION

| Structure Name | SECURITY_INFORMATION | | |
|----------------|----------------------|--------------|--------|
| Packet Length | 12 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| Symbol[10] | CHAR | 10 | 0 |
| Series[2] | CHAR | 2 | 10 |

Table 13.2 SIP_PARAMETERS

| Structure Name | SIP PARAMETERS | | |
|--|----------------|--------------|--------|
| Packet Length | 22 bytes | | |
| Field Name | Data Type | Size in Bits | Offset |
| Periods8 | BIT | 1 | 0 |
| Periods7 | BIT | 1 | 0 |
| Periods6 | BIT | 1 | 0 |
| Periods5 | BIT | 1 | 0 |
| Periods4 | BIT | 1 | 0 |
| Periods3 | BIT | 1 | 0 |
| Periods2 | BIT | 1 | 0 |
| Periods1 | BIT | 1 | 0 |
| Periods16 | BIT | 1 | 1 |
| Periods15 | BIT | 1 | 1 |
| Periods14 | BIT | 1 | 1 |
| Periods13 | BIT | 1 | 1 |
| Periods12 | BIT | 1 | 1 |
| Periods11 | BIT | 1 | 1 |
| Periods10 | BIT | 1 | 1 |
| Periods9 | BIT | 1 | 1 |
| *The remaining periods (13 bytes) from periods 17 to periods 120 has to be interpreted in the same way as mentioned above. | | | |
| Months8 | BIT | 1 | 15 |
| Months7 | BIT | 1 | 15 |
| Months6 | BIT | 1 | 15 |
| Months5 | BIT | 1 | 15 |
| Months4 | BIT | 1 | 15 |
| Months3 | BIT | 1 | 15 |
| Months2 | BIT | 1 | 15 |
| Months1 | BIT | 1 | 15 |
| Reserved1 | BIT | 1 | 16 |
| Reserved2 | BIT | 1 | 16 |
| Reserved3 | BIT | 1 | 16 |
| Reserved4 | BIT | 1 | 16 |
| Months12 | BIT | 1 | 16 |
| Months11 | BIT | 1 | 16 |
| Months10 | BIT | 1 | 16 |
| Months9 | BIT | 1 | 16 |
| Days or dates8 | BIT | 1 | 17 |

| Field Name | Data Type | Size in Bits | Offset |
|-----------------|-----------|--------------|--------|
| Days or dates7 | BIT | 1 | 17 |
| Days or dates6 | BIT | 1 | 17 |
| Days or dates5 | BIT | 1 | 17 |
| Days or dates4 | BIT | 1 | 17 |
| Days or dates3 | BIT | 1 | 17 |
| Days or dates2 | BIT | 1 | 17 |
| Days or dates1 | BIT | 1 | 17 |
| Days or dates16 | BIT | 1 | 18 |
| Days or dates15 | BIT | 1 | 18 |
| Days or dates14 | BIT | 1 | 18 |
| Days or dates13 | BIT | 1 | 18 |
| Days or dates12 | BIT | 1 | 18 |
| Days or dates11 | BIT | 1 | 18 |
| Days or dates10 | BIT | 1 | 18 |
| Days or dates9 | BIT | 1 | 18 |
| Days or dates24 | BIT | 1 | 19 |
| Days or dates23 | BIT | 1 | 19 |
| Days or dates22 | BIT | 1 | 19 |
| Days or dates21 | BIT | 1 | 19 |
| Days or dates20 | BIT | 1 | 19 |
| Days or dates19 | BIT | 1 | 19 |
| Days or dates18 | BIT | 1 | 19 |
| Days or dates17 | BIT | 1 | 19 |
| Reserved5 | BIT | 1 | 20 |
| Days or dates31 | BIT | 1 | 20 |
| Days or dates30 | BIT | 1 | 20 |
| Days or dates29 | BIT | 1 | 20 |
| Days or dates28 | BIT | 1 | 20 |
| Days or dates27 | BIT | 1 | 20 |
| Days or dates26 | BIT | 1 | 20 |
| Days or dates25 | BIT | 1 | 20 |
| Reserved6 | CHAR | 8 | 21 |

| Field Name | Description |
|---------------------|--|
| TransactionCode | The transaction code is BCAST_SIP_MSTR_CHG (7209). |
| Token | This field contains the token number of the scheme SIP being updated. This is unique for a particular symbol-series combination. |
| SecurityInformation | This field contains the Symbol and Series of the scheme SIP. |
| FrequencyNumber | This field contains the frequency of the SIP. The values are: 1 - Weekly 2 - Monthly 3 - Quarterly 4 - Semi Anually 5 - Anually |
| Periods | The various Durations in months available for the SIP. The multiple selections of bits indicate that the SIP is allowed in all those durations. E; g; If the bit of Period4 is set, it means that the SIP is available for period of 4 Months. |
| Months | The Various month combinations in the case of Quarterly and SemiAnually frequencies or various months available in the case of Anually frequency for the SIP. For Quarterly Months Combination: Months1- J-A-J-O Months2 - F-M-A-N Months3- M-J-S-D For Semi Anually Months Combination: Months1 - J-J Months2 - F-A Months3 - M-S Months4 - A-O Months5 - M-N Months6 - J-D For Anually Months: Months1 - Jan Months2 - Feb Months3 - Mar Months4 - Apr Months5 – May |

| | |
|------------------------|---|
| | Etc upto Months12 - Dec |
| DaysOrDates | The Various Days available in the Weekly frequency or the various dates available in the case of other frequencies. For Weekly: DaysOrDates1 - Mon DaysOrDates2 - Tue etc upto... DaysOrDates5 - Fri For Other Frequencies: DaysOrDates1- 1st DaysOrDates2- 2nd etc upto... DaysOrDates31- 31st |
| SIPFrequencyMultiple | This factor indicates the multiple of SIP frequency. |
| SIPMinimumAmount | The minimum registration amount applicable for the SIP for the corresponding frequency |
| SIPMaximumAmount | The maximum registration amount applicable for the SIP for the corresponding frequency |
| SIPMultiple | The SIP Amount multiple applicable for the SIP for the corresponding frequency |
| SIPMinimumTotal Amount | The minimum total registration amount inclusive of all the transactions on the SIP |
| LocalUpdateDateTime | This field contains the time when the category information was changed. It is in number of seconds from January 1, 1980. |
| FrequencyEligibility | This field indicates whether the SIP is eligible in that particular frequency or not. Flag Value: Y - Eligible N - Ineligible |
| DeleteFlag | This field indicates that corresponding SIP frequency details are deleted in the system |

Update Local Database Trailer

This indicates that the download is complete. This is sent in the following format:

Table 14 UPDATE_LDB_ TRAILER

| Structure Name | UPDATE_LDB_ TRAILER | | |
|---|------------------------------|--------------|--------|
| Transaction code | UPDATE_LOCALDB_TRAILER(7308) | | |
| Packet Length | 40 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE HEADER (Refer Table 1) | STRUCT | 38 | 0 |
| Reserved | CHAR | 2 | 38 |

| Field Name | Description |
|-----------------|--|
| TransactionCode | The transaction code is UPDATE_LOCALDB_TRAILER (7308). |

Message Download

This request is used to download the messages intended for the trader from the trading system. When the trader makes a request for message download, all the transactions of the trader and other important broadcasts are downloaded. The response consists of Header and Trailer to indicate the beginning and end of download and is similar to Update Local Database Download.

Message Download Request

This message is sent for requesting message download. The structure sent to the trading system is:

Table 15 MESSAGE DOWNLOAD

| Structure Name | MESSAGE DOWNLOAD | | |
|---|-------------------------|--------------|--------|
| Transaction code | DOWNLOAD_REQUEST (7000) | | |
| Packet Length | 46 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE HEADER (Refer Table 1) | STRUCT | 38 | 0 |
| SequenceNumber | DOUBLE | 8 | 38 |

| Field Name | Description |
|-----------------|--|
| TransactionCode | The transaction code is DOWNLOAD_REQUEST (7000). |
| SequenceNumber | This contains the time last message was received by the workstation. This can be obtained from the Time Stamp1 of the MESSAGE_HEADER. To retrieve the messages from the beginning of the trading day, this field should be set to '0' or the Sequence Number received in the logon response message. |

Message Download Response

The download comprises of a header, data and the trailer. Each trader specific and broadcast message will be sent as a separate message.

Message Download Header

This is only to indicate that a message download is going to commence. There is no additional data sent. The header is sent in the following format:

MESSAGE HEADER (Refer to *Message Header Table 1*)

| Field Name | Description |
|-----------------|---|
| TransactionCode | The transaction code is HEADER_RECORD (7011). |

Message Download Data

The messages are similar to Update Local Database Data. The actual data is sent wrapped in another structure. The outer header indicates that this message is part of the Message Download Data. The inner header indicates the type of data received. The structure is shown below.

Table 16 MESSAGE HEADER

| Structure Name | MESSAGE HEADER | | |
|---|-----------------------|--------------|--------|
| Transaction code | MESSAGE_RECORD (7021) | | |
| Packet Length | 76 to 1090 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE HEADER (Refer Table 1) InnerHeader | STRUCT | 38 | 0 |
| Data[1052] | CHAR | 1052 | 38 |

| Field Name | Description |
|-----------------|---|
| TransactionCode | The transaction code is MESSAGE_RECORD (7021). |
| InnerData | <p>Set of transaction codes are received. They include</p> <p>Trader Specific Messages</p> <ul style="list-style-type: none"> Logon / Logoff response. Refer to Logon Process, Chapter 4. Interactive message sent to the user from the NSE-Control. Refer to Unsolicited Messages, Chapter 6. Order entry, Modification, Cancellation responses. Refer to Order Management, Chapter 5. SIP Entry / Modification, cancellation of same day and Historical SIP Cancellation. Refer to SIP Registration Management, Chapter 4. <p>Broadcast Messages</p> <ul style="list-style-type: none"> Market Open, Market Close, Broadcast Message String, Broadcast message sent from NSE-Control. Refer to Broadcast, Chapter 7. |

Message Download Trailer

This indicates that message download is complete. The format is as follows:

MESSAGE HEADER (Refer to [Table1](#) in Chapter 2)

| Field Name | Description |
|-----------------|--|
| TransactionCode | The transaction code is TRAILER_RECORD (7031). |

Logoff Request

The process by which a trader quits or signs off from the trading system is called Logoff Process.

MESSAGE HEADER (Refer to [Table1](#) in Chapter 2).

| Field Name | Description |
|------------|-------------|
|------------|-------------|

| | |
|-----------------|---|
| TransactionCode | The transaction code is SIGN_OFF_REQUEST_IN (2320). |
|-----------------|---|

Logoff Confirmation Response

When the user logs on again, the user receives a packet giving the details of when he/she logged off. The structure sent is:

MESSAGE HEADER (Refer to [Message Header](#) in Chapter 2)

Note: MS_SIGNOFF message is sent in the Message Header itself. The length of the packet is 38 bytes.

| Field Name | Description |
|-----------------|---|
| TransactionCode | The transaction code is SIGN_OFF_REQUEST_OUT (2321). |
| LogTime | This field contains the current time at the trading system is sent back as number of seconds since midnight of January 1, 1980. The time at the workstation must be synchronized with this. |

On Demand SIP Registrations Download

The details of SIP registered in the MFSS TS are downloaded in response to SIP Registration Details Download Request

SIP Registration Details Download Request

This message is sent to request the host end to update the SIP registration details in the local database at the front end. The structure sent is as follows:

Table 17 SIP REGISTRATION DETAILS DOWNLOAD

| Structure Name | SIP REGISTRATION DETAILS DOWNLOAD | | |
|---|-----------------------------------|--------------|--------|
| Transaction code | SIP INQUIRY REQUEST (1762) | | |
| Packet Length | 104 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE HEADER (Refer to Table1 in Chapter 2) | STRUCT | 38 | 0 |
| SECURITY_INFORMATION(Refer Table 17.1) | STRUCT | 12 | 38 |
| SIPRegistrationNumber[15] | CHAR | 15 | 50 |
| Reserved | CHAR | 1 | 65 |

| | | | |
|----------------|--------|----|-----|
| UserType | SHORT | 2 | 66 |
| TraderId | SHORT | 2 | 68 |
| BranchId | SHORT | 2 | 70 |
| BrokerId[5] | CHAR | 5 | 72 |
| ClientCode[10] | CHAR | 10 | 77 |
| NNFUserInfo | DOUBLE | 8 | 87 |
| Reserved1 | DOUBLE | 8 | 95 |
| Reserved2 | CHAR | 1 | 103 |

Table 17.1 SECURITY_INFORMATION

| | | | |
|----------------|----------------------|--------------|--------|
| Structure Name | SECURITY_INFORMATION | | |
| Packet Length | 12 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| Symbol[10] | CHAR | 10 | 0 |
| Series[2] | CHAR | 2 | 10 |

| Field Name | Description |
|------------------------|--|
| TransactionCode | The transaction code is SIP INQUIRY REQUEST (1762). |
| SecurityInformation | This field contains the Symbol and Series of the scheme SIP. |
| SIPRegistration Number | This field contains the registration number assigned to the SIP. Optional (If populated, used as a filter key) |
| UserType | The type of the user. |
| TraderId | This field should contain the ID of the user. This field accepts only numbers. Mandatory field and it should be equal to MESSAGE_HEADER.trader_id (Trader_id consists in Reserved field of MESSAGE HEADER). |
| BranchId | This field should contain the ID of the branch of the particular broker. |
| BrokerId | This field should contain the trading member ID. |
| ClientCode | The unique code of the client under that dealer. Optional (If populated, used as a filter key) |
| NNFUserInfo | The user info of CTCL member. Optional (If populated, used as a filter key) |

SIP Registration Details Download Header

This is sent only to indicate that a SIP registration details download is going to commence. There is no additional data sent. The header is sent in the following format:

Table 18 SIP REGISTRATION DETAILS DOWNLOAD_HEADER

| Structure Name | SIP REGISTRATION DETAILS DOWNLOAD_HEADER | | |
|---|--|--------------|--------|
| Transaction code | SIP INQUIRY RESPONSE HEADER (1764) | | |
| Packet Length | 40 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE HEADER (Refer to Table1 in Chapter 2) | STRUCT | 38 | 0 |
| Reserved | CHAR | 2 | 38 |

| Field Name | Description |
|-----------------|---|
| TransactionCode | The transaction code is SIP INQUIRY RESPONSE HEADER (1764). |

Note: Header is sent without any validations on the request packet. However, if the request is invalid due to any condition, the data and trailer are not sent. It is to be noted that header is always sent even though the request is invalid.

SIP Registration Details Download Data

The SIP Registration Details Download is sent as data download.

The structure is as follows:

Table 19 SIP REGISTRATION DETAILS DOWNLOAD DATA

| Structure Name | SIP REGISTRATION DETAILS DOWNLOAD DATA | | |
|---|--|--------------|--------|
| Transaction code | SIP INQUIRY DATA RESPONSE (1763) | | |
| Packet Length | 1032 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE HEADER (Refer to Table1 in Chapter 2) | STRUCT | 38 | 0 |
| SECURITY_INFORMATION(Refer Table 19.1) | STRUCT | 12 | 38 |
| CategoryCode[5] | CHAR | 5 | 50 |
| CancelFlag | CHAR | 1 | 55 |
| ApplNumber [10] | CHAR | 10 | 56 |
| BuySell | SHORT | 2 | 66 |
| PurchaseType | SHORT | 2 | 68 |

| Field Name | Data Type | Size in Byte | Offset |
|--|-----------|--------------|--------|
| Amount | DOUBLE | 8 | 70 |
| Quantity | DOUBLE | 8 | 78 |
| DepositorySettlement | CHAR | 1 | 86 |
| DepositoryID[8] | CHAR | 8 | 87 |
| DepositoryClientID[16] | CHAR | 16 | 95 |
| DepositoryCode[8] | CHAR | 8 | 111 |
| FolioNumber[16] | CHAR | 16 | 119 |
| CLIENT INFO (Refer Table 19.2) | STRUCT | 761 | 135 |
| BranchId | SHORT | 2 | 896 |
| TraderId | SHORT | 2 | 898 |
| BrokerId[5] | CHAR | 5 | 900 |
| SIPRegistrationNumber[15] | CHAR | 15 | 905 |
| SIPRegisteredDate | LONG | 4 | 920 |
| SIPSameDayFlag | CHAR | 1 | 924 |
| Reserved | CHAR | 1 | 925 |
| SIPTrancheNumber | LONG | 4 | 926 |
| SIPFrequency | SHORT | 2 | 930 |
| SIPPeriod | SHORT | 2 | 932 |
| SIPMonth | SHORT | 2 | 934 |
| SIPDay_Date | SHORT | 2 | 936 |
| SIPNextInstallmentDate | LONG | 4 | 938 |
| SIPEndDate | LONG | 4 | 942 |
| SIPCancelledDate | LONG | 4 | 946 |
| SIPLastUpdateDateTime | LONG | 4 | 950 |
| NnfUserInfo | DOUBLE | 8 | 954 |
| OrderNumber | DOUBLE | 8 | 962 |
| BookType | SHORT | 2 | 970 |
| EntryDateTime | LONG | 4 | 972 |
| LastModified | LONG | 4 | 976 |
| ST_ORDER_FLAGS(Refer Table 19.3 & Table 19.4) | STRUCT | 2 | 980 |
| Suspended | CHAR | 1 | 982 |
| AMCCode[3] | CHAR | 3 | 983 |
| AMCSchemeCode[10] | CHAR | 10 | 986 |
| RTAgentCode[10] | CHAR | 10 | 996 |
| RTSchemeCode[5] | CHAR | 5 | 1006 |
| TotalRedemption | CHAR | 1 | 1011 |
| DividendMechanism | CHAR | 1 | 1012 |
| EchoBack[4] | CHAR | 4 | 1013 |
| SubBrokerCode [15] | CHAR | 15 | 1017 |

Table 19.1 SECURITY_INFORMATION

| Structure Name | SECURITY_INFORMATION | | |
|----------------|----------------------|--------------|--------|
| Packet Length | 12 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| Symbol[10] | CHAR | 10 | 0 |
| Series[2] | CHAR | 2 | 10 |

Table 19.2 CLIENT INFO

| Structure Name | CLIENT INFO | | |
|----------------------------|-------------|--------------|--------|
| Packet Length | bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| ModeOfHolding [2] | CHAR | 2 | 0 |
| ClientCode[3][10] | CHAR | 30 | 2 |
| ClientName1[70] | CHAR | 70 | 32 |
| ClientName2[35] | CHAR | 35 | 102 |
| ClientName3[35] | CHAR | 35 | 137 |
| PanNumber[3][10] | CHAR | 30 | 172 |
| KYCCompliant[3] | CHAR | 3 | 202 |
| Occupation | SHORT | 2 | 205 |
| TaxStatus | SHORT | 2 | 207 |
| AddressLine[3][40] | CHAR | 120 | 209 |
| City[35] | CHAR | 35 | 329 |
| State[2] | CHAR | 2 | 364 |
| Gender | CHAR | 1 | 366 |
| PINCode | LONG | 4 | 367 |
| PhoneOffice[8] | CHAR | 8 | 371 |
| PhoneResidence[8] | CHAR | 8 | 379 |
| MobileNumber[10] | CHAR | 10 | 387 |
| EmailAddress[50] | CHAR | 50 | 397 |
| BankName[40] | CHAR | 40 | 447 |
| BankBranch[40] | CHAR | 40 | 487 |
| BankCity[35] | CHAR | 35 | 527 |
| AccountNo[40] | CHAR | 40 | 562 |
| NEFTCode[11] | CHAR | 11 | 602 |
| BankAccountType[10] | CHAR | 10 | 613 |
| StatementCommunicationMode | CHAR | 1 | 623 |
| RESERVED | CHAR | 1 | 624 |
| PayoutMech | SHORT | 2 | 625 |
| DateOfBirth[8] | CHAR | 8 | 627 |
| GuardianName[35] | CHAR | 35 | 635 |

| | | | |
|---------------------|------|----|-----|
| GuardianPANno[10] | CHAR | 10 | 670 |
| NomineeName[40] | CHAR | 40 | 680 |
| NomineeRelation[40] | CHAR | 40 | 720 |
| Reserved | CHAR | 1 | 760 |

For Small Endian Machines:

Table 19.3 ST_ORDER_FLAGS

| Structure Name | ST_ORDER_FLAGS | | |
|----------------|----------------|--------------|--------|
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size in Bits | Offset |
| Reserved | CHAR | 8 | 0 |
| Reserved1 | BIT | 5 | 1 |
| Modified | BIT | 1 | 1 |
| Reserved2 | BIT | 2 | 1 |

For Big Endian Machines:

Table 19.4 ST_ORDER_FLAGS

| Structure Name | ST_ORDER_FLAGS | | |
|----------------|----------------|--------------|--------|
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size in Bits | Offset |
| Reserved | CHAR | 8 | 0 |
| Reserved1 | BIT | 2 | 1 |
| Modified | BIT | 1 | 1 |
| Reserved2 | BIT | 5 | 1 |

| Field Name | Description |
|----------------------|--|
| TransactionCode | The transaction code is SIP INQUIRY DATA RESPONSE (1763). |
| Security Information | <ul style="list-style-type: none"> ▪ This structure contains the following fields: <ul style="list-style-type: none"> • Symbol • Series. |

| | |
|----------------------|--|
| | <ul style="list-style-type: none"> ▪ The Symbol field should contain the name of the scheme. ▪ The series field identifies the type of the scheme. |
| CategoryCode | <ul style="list-style-type: none"> ▪ The category to which the scheme belongs to. The category code should be populated with the corresponding code present in scheme master download, while sending order entry request. |
| CancelFlag | <p>The flag will be set for the cancelled orders.</p> <ul style="list-style-type: none"> • 'C' – Cancelled SIP • 'H' – Historical SIP Cancellation |
| ApplNumber | The application number of that order. It is optional. |
| BuySell | <p>This field should specify whether the order is a buy or sell. It should take one of the following values.</p> <ul style="list-style-type: none"> • '1' for Buy order • '2' for Sell order |
| PurchaseType | Always shows '3'. |
| Amount | The field specifies the amount for a subscription or redemption order. |
| Quantity | For a subscription order quantity should be zero. For a redemption order the field specifies the quantity of that order. |
| DepositorySettlement | <p>For a scheme:</p> <ul style="list-style-type: none"> • If the depository settl flag (SecAllowDep) is set and the mandatory depository flag (SecDepMandatory) is not set, then this field can be set to either Y or N. • If the depository settl flag is not set and the mandatory depository flag is set, then this field can be set to Y. • If the depository settl flag is not set and the mandatory depository flag is not set, then this field should be set to N. |
| DepositoryID | <ul style="list-style-type: none"> • If Depository settlement is Y, This field should contain the depository id. • If Depository settlement is N, This field should be blank. • For NSDL: The Depository ID should be of length 8 digits. |

| | |
|--------------------|--|
| | <ul style="list-style-type: none"> For CDSL: The field should be blank. |
| DepositoryClientID | <ul style="list-style-type: none"> If Depository settlement is Y, This field should contain the depository client id. If Depository settlement is N, This field should be blank. For NSDL: The Depository Client ID should be of length 8 digits. For CDSL: The Depository Client ID should be of length 16 digits. |
| DepositoryCode | <ul style="list-style-type: none"> The field should be set as NSDL or CDSL for depository purchase and redemption of the scheme based upon the scheme depository code. For orders of non depository scheme, the field should be blank |
| FolioNumber | <ul style="list-style-type: none"> If Depository settlement is Y, This field should be blank. If Depository settlement is N, This field should be blank for fresh purchase and field should contain the folio number for additional purchase. The folio number length should not be greater than the folio number length applicable for the scheme. |
| ModeOfHolding | <p>The field specifies the mode of holding. It should take one of the following values.</p> <ul style="list-style-type: none"> SI for single JO for Joint AS for Anyone/Survivor |
| ClientCode | <p>The field should contain the Client Code.</p> <p>For Physical purchase:</p> <ul style="list-style-type: none"> For SI mode of holding, Client Code 1 should be sent. For JO/AS mode of holding, Client code 1,2 and 3 (if entered) has to be sent The client code 1, 2 and 3 should not be same. <p>For Depository purchase:</p> |

| | |
|--------------|--|
| | <ul style="list-style-type: none"> For SI mode of holding, the CD code is sent in client code 1. Client code 2 and 3 should be sent as blank. For JO/AS mode of holding, the CD code is sent in client code 1 and client code 2 and 3 should be sent as blank. The client code 2 and 3 should be null. |
| ClientName | <ul style="list-style-type: none"> The field should contain the Client name. For SI mode of holding, Client Name 1 should be sent. For JO/AS mode of holding, Client Name 1,2 and 3 (if entered) has to be sent |
| KYCCompliant | <p>The field should contain the KYC compliant.</p> <p>For Physical:</p> <ul style="list-style-type: none"> For SI mode of holding, KYC compliant 1 should be sent. For JO/AS mode of holding, KYC compliant 1,2 and 3 (if entered) has to be sent <p>For Depository:</p> <ul style="list-style-type: none"> For SI mode of holding, KYC compliant 1 should be sent as Y. For JO/AS mode of holding, KYC compliant 1,2 and 3 (if entered) has to be sent as Y |
| Occupation | <p>The field specifies the occupation code. It should take one of the following values.</p> <ul style="list-style-type: none"> 1 BUSINESS 2 SERVICE 3 PROFESSIONAL 4 AGRICULTURE 5 RETIRED 6 HOUSE WIFE 7 STUDENT 8 OTHERS |
| TaxStatus | <p>The field specifies the tax status code. It should take one of the following values.</p> <ul style="list-style-type: none"> 1- Individual 2 - On Behalf Of Minor 3 - HUF |

| | |
|-------------|---|
| | <ul style="list-style-type: none"> • 4 - Corporate • 5 - NRE • 6 – NRO |
| AddressLine | This field specifies the Address of the client. |
| City | This field specifies the City of the client. |
| State | <p>This field specifies the state of the client. It should take one of the following values.</p> <ul style="list-style-type: none"> • UC-Uttranchal • MP-Madhya Pradesh • GOA-Goa • UP-Uttar Pradesh • AP-Andhra Pradesh • TN-Tamil Nadu • SI-Sikkim • AS-Assam • WB-West Bengal • GU-Gujarat • MA-Maharashtra • HP-Himachal Pradesh • MN-Manipur • OR-Orissa • PO-Pondichery • ME-Meghalaya • RA-Rajasthan • PU-Punjab • MI-Mizoram • AN-Andaman & Nicobar • NA-Nagaland • TR-Tripura • AR-Arunachal Pradesh • BH-Bihar • CH-Chandigarh • HA-Haryana • ND-New Delhi • CG-Chattisgarh |

| | |
|-----------------|---|
| | <ul style="list-style-type: none"> • JK-Jharkhand • KA-Karnataka • KE-Kerala • DL-DELHI • JM-JAMMU & KASHMIR |
| Gender | Gender of client: <ul style="list-style-type: none"> • M - Male • F – Female • Should be blank; if the tax status is 4 (Corporate) |
| PINCode | This field specifies the Pincode of the client. |
| PhoneOffice | This field specifies the Office phone number of the client. |
| PhoneResidence | This field specifies the residence phone number of the client. |
| MobileNumber | This field specifies the mobile phone number of the client. |
| EmailAddress | This field specifies the email address of the client. |
| BankName | This field specifies the name of the bank on which the client holds the account. |
| BankCity | This field specifies the city of the bank on which the client holds the account. |
| AccountNo | This field specifies the client's bank account number |
| EchoBack | This field specifies the echo back |
| NEFTCode | This field specifies the client's bank code based on payout mechanism |
| BankAccountType | This field specifies account type This can contain 'SB'/'CB' for tax status <ul style="list-style-type: none"> • 1 Individual • 2 On Behalf Of Minor • 3 HUF • 4 Corporate This field will contain 'NE' for tax_status 'NRE'(5) and 'NO' for tax_status 'NRO'(6) (This field contains value only for Physical orders) |

| | |
|----------------------------|---|
| StatementCommunicationMode | This field specifies the statement communication mode. This shall contain values as ' P ' or ' E '. P stands for 'Physical' and 'E' stands for 'E-mail'. |
| PayoutMech | This field specifies the preferred Dividend/ redemption Payment mechanism. It should take one of the following values. 1 - cheque 2 - direct credit 3 - ECS 4 - NEFT 5 - RTGS |
| DateOfBirth | This field specifies the client's date of birth, if the age is less than 18years. |
| GuardianName | This field specifies the client's guardian name. It is mandatory if the date of birth is entered |
| GuardianPANno | This field specifies the client's guardian PAN number. It is mandatory if the date of birth is entered |
| NomineeName | The field specifies the name of the nominee |
| NomineeRelation | The field specifies the relationship with the nominee |
| BranchId | This field should contain the ID of the branch of the particular broker. |
| TraderId | This field should contain the ID of the user. This field accepts only numbers. |
| BrokerId | This field should contain the trading member ID. |
| SIPRegistrationNumber | SIP Registration Number is a unique identification for a SIP Registration. <ul style="list-style-type: none">• During SIP Registration entry this field should be zero.• For normal orders this number will be zero.• Format is YYYYMMDDXXXXXXX.• Applicable only for SIP Orders. |
| SIPRegistrationDate | This field contains the time when the SIP Registration was done. It is the time in seconds from midnight of January 1 1980, |

| | |
|------------------------|--|
| SIPSameDayFlag | <p>This field indicates whether the SIP is registered on that day.</p> <p>‘Y’ – Same Day SIP Registered</p> <p>‘N’ – Historical SIP Registered.</p> |
| SIPTrancheNumber | <ul style="list-style-type: none"> For normal orders this field will be zero. This field contains the Transaction number. During SIP Registration, the value will be assigned to 1 in the Host End. During Subsequent Order Entries, the value indicates the current transaction number. |
| SIPFrequency | <p>The Frequency for which the SIP is registered.</p> <p>For normal orders this field will be zero.</p> |
| SIPPeriod | <p>The duration in months for which the SIP is registered.</p> <p>For normal orders this field will be zero.</p> |
| SIPMonth | <p>The Month or Month combination applicable as per the frequency for the SIP registration.</p> <p>For normal orders this field will be zero.</p> |
| SIPDay_Date | <p>The Day_Date or Day_Date combination applicable as per the frequency for the SIP Registration.</p> <p>For normal orders this field will be zero.</p> |
| SIPNextInstallmentDate | <p>For the SIP registered, this field contains the next installment date. It is the time in seconds from midnight of January 1 1980,</p> |
| SIPEndDate | <p>For the SIP registered, this field contains the SIP registration end date. It is the time in seconds from midnight of January 1 1980,</p> |
| SIPCancelled Date | <p>If the SIP Registration has been cancelled, this field contains the time when the SIP Registration was cancelled. It is the time in seconds from midnight of January 1 1980.</p> |
| SIPLastupdtDateTime | <p>This field contains the SIP last update date time. It is the time in seconds from midnight of January 1 1980.</p> |
| NnfUserInfo | <p>This field should contain information of the NNF users.</p> <ul style="list-style-type: none"> First 6 digits will contain the pin code of the dealer. Next 3 digits will contain the Branch Number |

| | |
|---------------|--|
| | <ul style="list-style-type: none"> • Next 3 digits will contain the terminal number. • These should match with the details provided by the member to The Exchange. For internet trading the entire above mentioned 12-digits are to be populated as "111111111111" • The 13th digit will bear a code to identify program "0" for automated trading and "1" for non-automated trading. • The 14th digit will bear a code to identify the vendor. For members developing inhouse software it has to be populated with "0" • The 15th digit is reserved for the use of Exchange and is to be populated as "0". |
| OrderNumber | <p>Order Number is a unique identification for an Order.</p> <ul style="list-style-type: none"> • During order entry this field should be zero. • The order number is assigned to the order in the order requested response packet. |
| BookType | Only Spot Book is allowed in MFSS. This field should contain 6. |
| EntryDateTime | This field should be set to zero while sending the order entry request. |
| LastModified | <ul style="list-style-type: none"> • If the order has been modified, this field contains the time when the order was last modified. It is the time in seconds from midnight of January 1 1980, • This field should be set to zero for the order entry request (it is same as Entry Date Time.) |
| Order_Flags | <p>This structure specifies the attributes of an order. They are:</p> <ul style="list-style-type: none"> • Modified if set to 1, represents the order is modified. • If an attribute is not to be set, it should be set to 0. |
| Suspended | This field specifies whether the security is suspended or not. It should be set to 'N' while sending order entry request. |
| AMCCode | The AMC code to which the scheme belongs to. The amc code should be populated with the corresponding |

| | |
|-------------------|---|
| | code present in scheme master download, while sending order entry request. |
| AMCSchemeCode | The scheme code provided by AMC. The amc scheme code should be populated with the corresponding code present in scheme master download, while sending order entry request. |
| RTAgentCode | The RT Agent code to which the scheme belongs to. The rt agent code should be populated with the corresponding code present in scheme master download, while sending order entry request. |
| RTSchemeCode | The scheme code provided by RT agent. The rt scheme code should be populated with the corresponding code present in scheme master download, while sending order entry request. |
| TotalRedemption | The field should be set as blank for both the subscription and redemption order |
| DividendMechanism | <p>The field contains dividend mechanism for a dividend scheme and null for a non dividend scheme.</p> <p>For Dividend schemes</p> <ul style="list-style-type: none"> • P- Payout; when series is DP • R- Reinvestment; when series is DR • Null - for Non dividend schemes. |
| EchoBack | This field specifies the echo back |
| SubBrokerCode | <p>This field contains the sub broker code entered during SIP Registration entry.</p> <p>When it is blank, the Primary ARN of the broker will be populated. When the ARN number is sent, it will be validated against the secondary ARN master.</p> |

SIP Registration Details Download Trailer

This indicates that the SIP Registration Details Download is complete. This is sent in the following format:

Table 20 SIP REGISTRATION DETAILS DOWNLOAD TRAILER

| | | | |
|---|---|--------------|--------|
| Structure Name | SIP REGISTRATION DETAILS DOWNLOAD TRAILER | | |
| Transaction code | SIP INQUIRY RESPONSE TRAILER (1765) | | |
| Packet Length | 42 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE HEADER (Refer to Table1 in Chapter 2) | STRUCT | 38 | 0 |
| NumberOfRecords | LONG | 4 | 38 |

| Field Name | Description |
|-----------------|--|
| TransactionCode | The transaction code is SIP INQUIRY RESPONSE TRAILER (1765). |
| NumberOfRecords | This field specifies the number of SIP details downloaded to FE. |

Chapter 5 SIP Registration Management

Introduction

This section describes about new SIP Registrations, modifying existing current day SIP Registrations, canceling existing current day SIP Registrations and canceling historical SIP Registrations. The trader can begin entering the SIP Registrations once the trader has logged on to the trading system and the market is in open state. The trader will receive the SIP Registered response with corresponding first investment order response.

SIP Registrations Entry

SIP Registration entry allows the trader to place SIP Registrations in the market. The system accepts the SIP Registrations from the users and the SIP Registrations confirmation is sent to the corresponding users. The first orders are placed in the order book with the time stamp.

Rules of SIP Registrations Entry

SIP Registrations entry is not allowed in the following conditions:

- Market is closed.
- Scheme is suspended.
- Scheme is not eligible in the spot market.
- Scheme does not exist in the system.
- Category does not exist in the system.
- AMC Code does not exist in the system.
- AMC Scheme Code does not exist in the system.
- RTAgent Code does not exist in the system.
- RTScheme Code does not exist in the system.
- Book type is other than Spot Book.

- For Investment, if the Amount is 0.
- Broker is suspended.
- Broker does not exist in trading system.
- Broker is deactivated.
- User's branch order limit has exceeded.
- User is disabled.
- User is an inquiry user.
- User does not exist in trading system.
- Quantity more than the corresponding limit, applicable for the various SIP Registrations.

SIP Registration Entry Request

The format of the SIP Registration entry request is as follows:

The SIP Registration request is sent to Host End with the SPOT IN transcode in the Order ENTRY REQUEST Structure. The SIP Registration transaction will be sent to the HE with the SIP details and the order details. The SIP and the order details will be validated and confirmed in the host end. The Confirmed SIP Registration will have the unique SIP Registration number. The first order of the confirmed SIP will have the unique order number.

Table 21 ORDER_ENTRY_ REQUEST

| | | | |
|---|----------------------|--------------|--------|
| Structure Name | ORDER_ENTRY_ REQUEST | | |
| Transaction code | SPOT_IN (2002) | | |
| Packet Length | 1052 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| Refer to the Order Entry Request Structure in Chapter 6 | | | |

SIP Registration Entry Response

The response to the SIP Registration and the corresponding order confirmation will be Order confirmation, Order error or one of the general error responses. Once the Order confirmation is received, it indicates that the SIP is registered in the Host end and the Corresponding first order is confirmed. The order error response is given when the entered SIP registration details or the order related detail is rejected by the host. The reason for the rejection is given in the error code and/or reason code.

SIP Registration and Order Confirmation Response

Successful SIP Registration entry results in Order Confirmation Response. The confirmed order is returned to the user. Once the confirmed order response is sent, it indicates the SIP is successfully registered in the HE.

The message sent is as follows:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|------------------------|---|
| TransactionCode | The transaction code is ORDER_CONFIRMATION (2073). |
| OrderNumber | This field contains the order number assigned to the order. |
| EntryDateTime | This field contains the time at which order confirmed. |
| SIPRegistration Number | This field contains the registration number assigned to the SIP. |
| SIPTrancheNumber | This field contains the current transaction of the SIP. For the first order after the successful SIP registration, the value will be 1. |

SIP Registration Error Response

The SIP Registration or the corresponding order error response is sent when the entered SIP and its order is rejected by the trading system. The reason for the rejection is given by the reason code and the reason string. The message sent is:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-----------------|--|
| TransactionCode | The transaction code is ORDER_ERROR (2231). |
| ErrorCode | This field contains the error number. Refer to List of Error Codes in Appendix. |

SIP Subsequent Order Entry Response

The subsequent orders transactions for the registered SIP will be carried out in the MFSS TS with the orders being received from the Back office. The Order transactions will be loaded in the MFSS TS and the corresponding order response will be sent back to the users.

The response can be Order confirmation, Order error or one of the general error responses. The order error response is given when the entered order is rejected by the host. The reason for the rejection is given in the error code and/or reason code.

Subsequent Order Confirmation Response

Successful subsequent order entry results in Order Confirmation Response. The confirmed order is returned to the user. The message sent is as follows:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|------------------------|--|
| TransactionCode | The transaction code is ORDER_CONFIRMATION (2073). |
| OrderNumber | This field contains the order number assigned to the order. |
| Order_Flags | (Refer to Order Entry Request in Chapter 6) |
| EntryDateTime | This field contains the time at which order confirmed. |
| SIPRegistration Number | This field contains the registration number assigned to the SIP. |
| SIPTrancheNumber | This field contains the current transaction of the SIP. For the first order after the successful SIP registration, tranche number will be 1 and for the subsequent order the tranche number will be considered as 2. |

Subsequent Order Error Response

The subsequent order error response is sent when the subsequent order is rejected by the trading system. The reason for the rejection is given by the reason code and the reason string. The message sent is:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-----------------|---|
| TransactionCode | The transaction code is ORDER_ERROR (2231). |
| ErrorCode | This field contains the error number. Refer to List of Error Codes in Appendix. |
| Suspended | This field contains 'C' if the broker is in Closeout. |

Current Day SIP Registration Modification

SIP Registration Modification enables the trader to modify confirmed SIP registrations.

Rules of SIP Registration Modification

The following modifications are not allowed:

- Investment to Withdraw or vice versa.
- Modifying Symbol and Series.
- BM modifying CM's SIP Registrations.
- DL modifying BM's SIP Registrations.
- DL modifying CM's SIP Registrations.
- Modifying non existing SIP Registrations.
- Inquiry user trying to modify SIP Registrations.
- Modifying SIP Registrations in such a way that it results in a branch order value to be exceeded.
- Modifying deactivated broker's SIP Registrations.
- If the 'SIP Tranche Number' received from Modification packet does not match with the order entry response 'SIP Tranche Number', In that case SIP registration will not modify.

SIP Registration Modification Request

The trader can modify the SIP Parameters, Amount of investment and attributes of an order by specifying the SIP Registration number to be modified and the order number of the confirmed order. The message sent is:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-------------------|---|
| TransactionCode | The transaction code is ORDER_MOD_IN (2040). |
| OrderNumber | This should contain order number which is the identity of the order to be modified. |
| Last ModifiedTime | This should contain time of last activity done on that order. Last activity could be order entry, order |

| | |
|--|---|
| | modification or last trade time of that order. It is in number of seconds from midnight of January 1, 1980. |
| SIPRegistration Number | This field contains the registration number assigned to the SIP. |
| Note: The other fields of order modification request are same as the fields of order entry request. | |

SIP Registration Modification Response

This response is sent back when a SIP Registration modification is requested. This does not imply that the SIP Registration modification is confirmed. The response can be Order Modification Confirmation, Order Modification Error or one of the general error responses. The order modification error response is given when the modified SIP Registration is rejected by the trading system. The reason for the rejection is given by the reason code and the reason string. The message sent is of the following format:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-----------------|---|
| TransactionCode | The transaction code is ORDER_MOD_OUT (2041). |

SIP Registration Modification Confirmation Response

Successful modification of the SIP Registration results in SIP Modification and the corresponding first Order Modification Confirmation. When the SIP Registration modification is confirmed, the order-modified time is filled and sent back. The structure sent is as follows:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-------------------|---|
| TransactionCode | The transaction code is ORDER_MOD_CONFIRMATION (2074). |
| Last ModifiedTime | This field contains the time when the order was last modified. It is in number of seconds from midnight of January 1, 1980. |
| EntryDateTime | This field contains the time at which last modified by user. It is in number of seconds from midnight of January 1, 1980. |

SIP Registration Modification Error Response

The reason for rejection is given by the Error Code in the header. The message sent is as follows:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-----------------|--|
| TransactionCode | The transaction code is ORDER_MOD_REJECT (2042). |

Current Day SIP Registration Cancellation

The trader can cancel a SIP Registration by specifying the SIP Registration number and the order number.

Rules of SIP Registration Cancellation

- CM can cancel BM's and DL's SIP Registration, but BM and DL cannot cancel CM's SIP Registration.
- BM can cancel DL's SIP Registration, but DL cannot cancel BM's SIP Registration.
- Deactivated broker cannot cancel his/her SIP Registration.
- If the 'SIP Tranche Number' received from cancellation packet does not match with the order entry response 'SIP Tranche Number', in that case SIP registration will not cancel.

SIP Registration Cancellation Request

The format of the message is as follows:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|------------------------|---|
| TransactionCode | The transaction code is ORDER_CANCEL_IN (2070). |
| OrderNumber | This field should contain the order number which is the identity of the order to be cancelled. |
| Last ModifiedTime | This should contain time of last activity done on that order. Last activity could be order entry, order modification or last trade time of that order. It is in number of seconds from midnight of January 1, 1980. |
| SIPRegistration Number | This field contains the registration number assigned to the SIP. |

SIP Registration Cancellation Response

The response can be SIP Registration Cancellation Confirmation, SIP Registration Cancellation Error or one of the general error responses.

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-----------------|--|
| TransactionCode | The transaction code is ORDER_CANCEL_OUT (2071). |

SIP Registration Cancellation Confirmation Response

Successful cancellation of SIP Registration results in SIP Registration cancellation and its corresponding first Order Cancellation Confirmation Response. The message sent is as follows:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-----------------|---|
| TransactionCode | The transaction code is ORDER_CANCEL_CONFIRMATION (2075). |

SIP Registration Cancellation Error Response

The order cancellation error is sent when the cancellation request is rejected by the system. The reason for rejection is given by the Error Code in the header. The message sent is as follows:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-----------------|---|
| TransactionCode | The transaction code is ORDER_CANCEL_REJECT (2072). |

Historical SIP Registration Cancellation

The trader can cancel a historical SIP Registered by specifying the SIP Registration number.

Rules of Historical SIP Registration Cancellation

- CM can cancel BM's and DL's historical SIP Registration, but BM and DL cannot cancel CM's historical SIP Registration.
- BM can cancel DL's historical SIP Registration, but DL cannot cancel BM's historical SIP Registration.
- Deactivated broker cannot cancel his/her historical SIP Registration.

Historical SIP Registration Cancellation Request

The format of the message is as follows:

Table22 HIST SIP REGISTRATION CXL REQUEST

| Structure Name | HIST SIP REGISTRATION CXL REQUEST | | |
|---|-----------------------------------|--------------|--------|
| Transaction code | SIP_HIST_CXL_IN (2082) | | |
| Packet Length | 72 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE HEADER (Refer Table 1) | STRUCT | 38 | 0 |
| UserType | SHORT | 2 | 38 |
| SIPRegistrationNumber[15] | CHAR | 15 | 40 |
| BrokerID[5] | CHAR | 5 | 55 |
| BranchID | SHORT | 2 | 60 |
| TraderID | SHORT | 2 | 62 |
| NNFUserInfo | DOUBLE | 8 | 64 |

| Field Name | Description |
|------------------------|--|
| TransactionCode | The transaction code is SIP_HIST_CXL_IN (2082). |
| UserType | The type of the user. |
| SIPRegistration Number | This field contains the registration number assigned to the SIP. |
| BrokerId | This field should contain the trading member ID. |
| BranchId | This field should contain the ID of the branch of the particular broker. |
| TraderId | This field should contain the ID of the user. This field accepts only numbers. |
| NNFUserInfo | The user info of CTCL member |

Historical SIP Registration Cancellation Responses

The response to Historical SIP Registration cancellation request can be Historical SIP Registration cancellation response message or Historical SIP Registration cancellation confirmation. The Historical SIP Registration cancellation error response is given as SIP Registration cancellation response message, when the entered Historical SIP Registration cancellation is rejected by the

host. The reason for the rejection is given in the error code and/or reason code in the cancellation response message.

Historical SIP Registration Cancellation Response

This response is sent back when a Historical SIP Registration cancellation requested is rejected. This does not imply that the Historical SIP Registration cancellation has been confirmed. However, it implies that the Historical SIP Registration cancellation has reached the trading system and rejected due to some validation failure. The message sent will be of the following format:

Table23 HIST SIP REGISTRATION CXL RESPONSE

| Structure Name | HIST SIP REGISTRATION CXL RESPONSE | | |
|---|------------------------------------|--------------|--------|
| Transaction code | SIP_HIST_CXL_OUT (2083) | | |
| Packet Length | 72 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE HEADER (Refer Table 1) | STRUCT | 38 | 0 |
| UserType | SHORT | 2 | 38 |
| SIPRegistrationNumber[15] | CHAR | 15 | 40 |
| BrokerID[5] | CHAR | 5 | 55 |
| BranchID | SHORT | 2 | 60 |
| TraderID | SHORT | 2 | 62 |
| NNFUserInfo | DOUBLE | 8 | 64 |

Historical SIP Registration Cancellation Confirmation Response

Successful cancellation of historical SIP Registration results in historical SIP Registration cancellation. The message sent is as follows:

Table 24 HIST SIP REGISTRATION CXL CONFIRM

| Structure Name | HIST SIP REGISTRATION CXL CONFIRM | | |
|---|-----------------------------------|--------------|--------|
| Transaction code | SIP_HIST_CXL_CONFIRM (2084) | | |
| Packet Length | 98 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE HEADER(Refer Table 1) | STRUCT | 38 | 0 |
| SECURITY_INFORMATION(Refer Table 24.1) | STRUCT | 12 | 38 |
| SIPRegistrationNumber[15] | CHAR | 15 | 50 |

| | | | |
|---------------------|--------|---|----|
| BrokerID[5] | CHAR | 5 | 65 |
| BranchID | SHORT | 2 | 70 |
| TraderID | SHORT | 2 | 72 |
| SIPCancelledDate | LONG | 4 | 74 |
| SIPRegistrationDate | LONG | 4 | 78 |
| SIPFrequency | SHORT | 2 | 82 |
| SIPPeriod | SHORT | 2 | 84 |
| SIPMonth | SHORT | 2 | 86 |
| SIPDay_Date | SHORT | 2 | 88 |
| NNFUserInfo | DOUBLE | 8 | 90 |

Table 24.1 SECURITY_INFORMATION

| | | | |
|----------------|----------------------|--------------|--------|
| Structure Name | SECURITY_INFORMATION | | |
| Packet Length | 12 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| SYMBOL[10] | CHAR | 10 | 0 |
| SERIES[2] | CHAR | 2 | 10 |

| Field Name | Description |
|------------------------|--|
| TransactionCode | The transaction code is SIP_HIST_CXL_CONFIRM (2084). |
| Security Information | <p>This structure contains the following fields:</p> <ul style="list-style-type: none"> • Symbol • Series. <p>The Symbol field should contain the name of the scheme.</p> <p>The series field identifies the type of the scheme.</p> |
| SIPRegistration Number | This field contains the registration number assigned to the SIP. |
| BrokerId | This field should contain the trading member ID. |
| BranchId | This field should contain the ID of the branch of the particular broker. |
| TraderId | This field should contain the ID of the user. This field accepts only numbers. |
| SIPCancelled Date | If the SIP Registration has been cancelled, this field contains the time when the SIP Registration was cancelled. It is the time in seconds from midnight of January 1 1980. |

| | |
|---------------------|---|
| SIPRegistrationDate | This field contains the time when the SIP Registration was done. It is the time in seconds from midnight of January1, 1980. |
| SIPFrequency | The Frequency for which the SIP is registered. |
| SIPPeriod | The duration in months for which the SIP is registered. |
| SIPMonth | The Month or Month combination applicable as per the frequency for the SIP registration. |
| SIPDay_Date | The Day_Date or Day_Date combination applicable as per the frequency for the SIP Registration. |
| NNFUserInfo | The user info of CTCL member |

Cancellation of SIP Orders

A Trader can cancel the SIP Tranche orders by providing the order number.

Rules of SIP Order Cancellation

1. The First tranche order should not be allowed to cancel.
2. If the 'SIP Tranche Number' received from cancellation packet does not match with the order entry 'SIP Tranche Number', in that case SIP order will not cancel.
3. If a Tranche is cancelled, the corresponding registration will not be cancelled. Subsequent tranches will be generated irrespective of cancellation of tranche. For eg. If 3rd tranche is cancelled in the system the next tranche will come to the system as 4th tranche.
4. Modification of the tranches will not be allowed.
5. CM can cancel BM's and DL's SIP Orders, but BM and DL cannot cancel CM's SIP Orders. BM can cancel DL's SIP Orders, but DL cannot cancel BM's SIP.
6. Orders. Deactivated broker cannot cancel his/her SIP Orders.

SIP Order Cancellation Request

The format of the message is as follows:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-------------------|---|
| TransactionCode | The transaction code is ORDER_CANCEL_IN (2070). |
| OrderNumber | This field should contain the order number which is the identity of the order to be cancelled. |
| Last ModifiedTime | This should contain time of last activity done on that order. Last activity could be order entry, or last trade |

| | |
|-------------------------|--|
| | time of that order. It is in number of seconds from midnight of January 1, 1980, |
| SIPRegistration Number | This field contains the registration number assigned to the SIP. |
| SIPTransactionIndicator | This field must contain 'T' for SIP Order Cancellation. |
| SIPTrancheNumber | This field contains the current transaction of that SIP. |

SIP Order Cancellation Confirmation Response

Successful cancellation of SIP Order results in SIP Tranche order cancellation. The message sent is as follows:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-------------------------|--|
| TransactionCode | The transaction code is ORDER_CANCEL_CONFIRMATION (2075). |
| SIPTransactionIndicator | This field will contain 'T' in SIP Order Cancellation Confirmation Response. |

SIP Order Cancellation Error Response

The order cancellation error is sent when the cancellation request is rejected by the system. The reason for rejection is given by the Error Code in the header. The message sent is as follows:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-------------------------|---|
| TransactionCode | The transaction code is ORDER_CANCEL_REJECT (2072). |
| SIPTransactionIndicator | This field will contain 'T' in SIP Order Cancellation Error Response. |

Chapter 6 Order Management

Introduction

This section describes about entering new orders, modifying existing orders, and canceling outstanding orders. The trader can begin entering the orders once the trader has logged on to the trading system and the market is in open state.

Order Entry

Order entry allows the trader to place orders in the market. The system accepts the orders from the users and the confirmation is sent to the corresponding users. The orders are placed in the order book with the time stamp.

Order Types

Spot Orders

The only book type used in MFSS is Spot Book. All orders are spot orders.

Rules of Order Entry

Order entry is not allowed in the following conditions:

- Market is closed.
- Scheme is suspended.
- Scheme is not eligible in the spot market.
- Scheme does not exist in the system.
- Category does not exist in the system.
- AMC Code does not exist in the system.
- AMC Scheme Code does not exist in the system.
- RTAgent Code does not exist in the system.
- RTScheme Code does not exist in the system.
- Book type is other than Spot Book.
- For buy order, Amount is 0.

- Broker is suspended.
- Broker does not exist in trading system.
- Broker is deactivated.
- User's branch order limit has exceeded.
- User is disabled.
- User is an inquiry user.
- User does not exist in trading system.
- Quantity / Amount more than the corresponding limit, applicable only for the physical redemption orders.
- For Subscription and Redemption orders, the amount should be less than the corresponding limits specified in the scheme master.
- For LIQUID fund schemes with category code LIQUID, the amount greater than the corresponding limits specified in the scheme master.

Order Entry Request

The format of the order entry request is as follows:

Table 25 ORDER_ENTRY_REQUEST

| Structure Name | ORDER_ENTRY_REQUEST | | |
|---|---------------------|--------------|--------|
| Transaction code | SPOT_IN (2002) | | |
| Packet Length | 1052 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE HEADER(Refer Table 1) | STRUCT | 38 | 0 |
| ModCxlBy | CHAR | 1 | 38 |
| SIPTransactionIndicator | CHAR | 1 | 39 |
| ReasonCode | SHORT | 2 | 40 |
| StartAlpha[2] | CHAR | 2 | 42 |
| EndAlpha[2] | CHAR | 2 | 44 |
| SIPFrequency | SHORT | 2 | 46 |
| SIPPeriod | SHORT | 2 | 48 |
| SIPMonth | SHORT | 2 | 50 |
| SIPDay_Date | SHORT | 2 | 52 |
| SECURITY_INFORMATION(Refer Table 25.1) | STRUCT | 12 | 54 |
| Reserved | CHAR | 1 | 66 |
| CategoryCode[5] | CHAR | 5 | 67 |
| AMCCode[3] | CHAR | 3 | 72 |
| AMCSchemeCode[10] | CHAR | 10 | 75 |

| | | | |
|---|--------|-----|------|
| RTAgentCode[10] | CHAR | 10 | 85 |
| RTSchemeCode[5] | CHAR | 5 | 95 |
| OrderNumber | DOUBLE | 8 | 100 |
| ApplNumber [10] | CHAR | 10 | 108 |
| BookType | SHORT | 2 | 118 |
| BuySell | SHORT | 2 | 120 |
| PurchaseType | SHORT | 2 | 122 |
| Amount | DOUBLE | 8 | 124 |
| Quantity | DOUBLE | 8 | 132 |
| TotalRedemption | CHAR | 1 | 140 |
| DividendMechanism | CHAR | 1 | 141 |
| EntryDateTime | LONG | 4 | 142 |
| LastModified | LONG | 4 | 146 |
| ST_ORDER_FLAGS(Refer Table 25.2) | STRUCT | 2 | 150 |
| DepositorySettlement | CHAR | 1 | 152 |
| DepositoryID[8] | CHAR | 8 | 153 |
| DepositoryClientID [16] | CHAR | 16 | 161 |
| DepositoryCode [8] | CHAR | 8 | 177 |
| FolioNumber [16] | CHAR | 16 | 185 |
| CLIENT INFO(Refer Table 25.3) | STRUCT | 775 | 201 |
| NnfUserInfo | DOUBLE | 8 | 976 |
| BranchId | SHORT | 2 | 984 |
| TraderId | SHORT | 2 | 986 |
| BrokerId [5] | CHAR | 5 | 988 |
| SubBrokerCode [15] | CHAR | 15 | 993 |
| SIPRegistrationNumber [15] | CHAR | 15 | 1008 |
| SIPFlag | CHAR | 1 | 1023 |
| SIPTrancheNumber | LONG | 4 | 1024 |
| EUIN | CHAR | 10 | 1028 |
| SIPGenerateOrder | CHAR | 1 | 1038 |
| BypassMinRedemptionCheck | CHAR | 1 | 1039 |
| DPC | CHAR | 12 | 1040 |

Table 25.1 SECURITY_INFORMATION

| | | | |
|----------------|----------------------|--------------|--------|
| Structure Name | SECURITY_INFORMATION | | |
| Packet Length | 12 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| SYMBOL[10] | CHAR | 10 | 0 |
| SERIES[2] | CHAR | 2 | 10 |

Table 25.2 ST_ORDER_FLAGS

| Structure Name | ST_ORDER_FLAGS | | |
|----------------|----------------|--------------|--------|
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size in Bits | Offset |
| Reserved | CHAR | 8 | 0 |
| Reserved1 | BIT | 5 | 1 |
| Modified | BIT | 1 | 1 |
| Reserved2 | BIT | 2 | 1 |

Table 25.3 CLIENT INFO

| Structure Name | CLIENT INFO | | |
|----------------------------|-------------|--------------|--------|
| Packet Length | 775 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| ModeOfHolding [2] | CHAR | 2 | 0 |
| ClientCode[3][10] | CHAR | 30 | 2 |
| ClientName1[70] | CHAR | 70 | 32 |
| ClientName2[35] | CHAR | 35 | 102 |
| ClientName3[35] | CHAR | 35 | 137 |
| PanNumber[3][10] | CHAR | 30 | 172 |
| KYCCompliant[3] | CHAR | 3 | 202 |
| Occupation | SHORT | 2 | 205 |
| TaxStatus | SHORT | 2 | 207 |
| AddressLine[3][40] | CHAR | 120 | 209 |
| City[35] | CHAR | 35 | 329 |
| State[2] | CHAR | 2 | 364 |
| Gender | CHAR | 1 | 366 |
| PINCode | LONG | 4 | 367 |
| PhoneOffice[8] | CHAR | 8 | 371 |
| PhoneResidence[8] | CHAR | 8 | 379 |
| MobileNumber[10] | CHAR | 10 | 387 |
| EmailAddress[50] | CHAR | 50 | 397 |
| BankName[40] | CHAR | 40 | 447 |
| BankBranch[40] | CHAR | 40 | 487 |
| BankCity[35] | CHAR | 35 | 527 |
| AccountNo[40] | CHAR | 40 | 562 |
| EchoBack[4] | CHAR | 4 | 602 |
| NEFTCode[11] | CHAR | 11 | 606 |
| BankAccountType[10] | CHAR | 10 | 617 |
| StatementCommunicationMode | CHAR | 1 | 627 |

| | | | |
|---------------------|-------|----|-----|
| RESERVED | CHAR | 5 | 628 |
| PayoutMech | SHORT | 2 | 633 |
| DateOfBirth[8] | CHAR | 8 | 635 |
| GuardianName[35] | CHAR | 35 | 643 |
| GuardianPANno[10] | CHAR | 10 | 678 |
| NomineeName[40] | CHAR | 40 | 688 |
| NomineeRelation[40] | CHAR | 40 | 728 |
| Reserved | CHAR | 7 | 768 |

The description and values of the fields are given below.

| Field Name | Description |
|-------------------------|---|
| TransactionCode | The transaction code is SPOT_IN (2002). |
| ModCxlBy | This field denotes which person has modified or cancelled a particular order. It should contain one of the following values: <ul style="list-style-type: none"> • 'T' for Trader • 'B' for Branch Manager • 'M' for Corporate Manager • 'C' for Control |
| SIPTransactionIndicator | 'S' – SIP Transactions '' – Normal Orders (Should be blank for normal orders as existing) 'T' – SIP Tranche Order Cancellation |
| ReasonCode | This field contains the reason code for a particular order request rejection. This has the details regarding the error along with the error code. This field should be set to zero while sending the request to the host. Refer to Reason Codes in Appendix |
| StartAlpha | This field should be blank. |
| EndAlpha | This field should be blank. |
| SIPFrequency | The Frequency for which the SIP is registered. For normal orders this field will be zero. |
| SIPPeriod | The duration in months for which the SIP is registered. For normal orders this field will be zero. |
| SIPMonth | The Month or Month combination applicable as per the frequency for the SIP registration. For normal orders this field will be zero. |

| | |
|----------------------|---|
| SIPDay_Date | The Day_Date or Day_Date combination applicable as per the frequency for the SIP Registration. For normal orders this field will be zero. |
| Security Information | This structure contains the following fields: <ul style="list-style-type: none"> • Symbol • Series. <ul style="list-style-type: none"> ▪ The Symbol field should contain the name of the scheme. ▪ The series field identifies the type of the scheme. |
| Suspended | This field specifies whether the security is suspended or not. It should be set to 'N' while sending order entry request. |
| CategoryCode | The category to which the scheme belongs to. The category code should be populated with the corresponding code present in scheme master download, while sending order entry request. |
| AMCCode | The AMC code to which the scheme belongs to. The amc code should be populated with the corresponding code present in scheme master download, while sending order entry request. |
| AMCSchemeCode | The scheme code provided by AMC. The amc scheme code should be populated with the corresponding code present in scheme master download, while sending order entry request. |
| RTAgentCode | The RT Agent code to which the scheme belongs to. The rt agent code should be populated with the corresponding code present in scheme master download, while sending order entry request. |
| RTSchemeCode | The scheme code provided by RT agent. The rt scheme code should be populated with the corresponding code present in scheme master download, while sending order entry request. |
| OrderNumber | Order Number is a unique identification for an Order. During order entry this field should be zero. |
| ApplNumber | The application number of that order. It is optional. |
| BookType | Only Spot Book is allowed in MFSS. This field should contain 6. |

| | |
|-------------------|---|
| BuySell | <p>This field should specify whether the order is a buy or sell. It should take one of the following values.</p> <ul style="list-style-type: none"> • '1' for Buy order • '2' for Sell order |
| PurchaseType | <p>The field specifies the purchase type. It should take one of the following values.</p> <p>For Physical Purchase:</p> <ul style="list-style-type: none"> • '1' for Fresh purchase • '2' for Additional purchase <p>For Depository purchase</p> <ul style="list-style-type: none"> • '1' for Fresh purchase • '2' for Additional purchase <p>For both physical and depository subscription:</p> <ul style="list-style-type: none"> • '3' For SIP purchase |
| Amount | The field specifies the amount for a subscription or redemption order. |
| Quantity | For a subscription order quantity should be zero. For a redemption order the field specifies the quantity of that order. |
| TotalRedemption | The field should be set as blank for both the subscription and redemption order |
| DividendMechanism | <p>The field contains dividend mechanism for a dividend scheme and null for a non dividend scheme.</p> <p>For Dividend schemes</p> <ul style="list-style-type: none"> • P- Payout; when series is DP • R- Reinvestment; when series is DR • Null - for Non dividend schemes. |
| EntryDateTime | This field should be set to zero while sending the order entry request. |
| LastModified | <p>If the order has been modified, this field contains the time when the order was last modified. It is the time in seconds from midnight of January 1 1980,</p> <p>This field should be set to zero for the order entry request (it is same as Entry Date Time.)</p> |

| | |
|----------------------|---|
| Order_Flags | <p>This structure specifies the attributes of an order. They are:</p> <p>Modified if set to 1, represents the order is modified.</p> <p>If an attribute is not to be set, it should be set to 0.</p> |
| DepositorySettlement | <p>For a scheme</p> <ul style="list-style-type: none"> • If the depository settl flag (SecAllowDep) is set and the mandatory depository flag (SecDepMandatory) is not set, then this field can be set to either Y or N. • If the depository settl flag is not set and the mandatory depository flag is set, then this field can be set to Y. • If the depository settl flag is not set and the mandatory depository flag is not set, then this field should be set to N. |
| DepositoryID | <ul style="list-style-type: none"> • If Depository settlement is Y, This field should contain the depository id. • If Depository settlement is N, This field should be blank. • For NSDL: The Depository ID should be of length 8 digits. • For CDSL: The field should be blank. |
| DepositoryClientID | <ul style="list-style-type: none"> • If Depository settlement is Y, This field should contain the depository client id. • If Depository settlement is N, This field should be blank. • For NSDL: The Depository Client ID should be of length 8 digits. • For CDSL: The Depository Client ID should be of length 16 digits. |
| DepositoryCode | <p>The field should be set as NSDL or CDSL for depository purchase and redemption of the scheme based upon the scheme depository code. For orders of non depository scheme, the field should be blank</p> |
| FolioNumber | <ul style="list-style-type: none"> • If Depository settlement is Y, This field should be blank. • If Depository settlement is N, This field should be blank for fresh purchase and field should |

| | |
|---------------|--|
| | <p>contain the folio number for additional purchase.</p> <ul style="list-style-type: none"> The folio number length should not be greater than the folio number length applicable for the scheme. |
| ModeOfHolding | <p>The field specifies the mode of holding. It should take one of the following values.</p> <ul style="list-style-type: none"> SI for single JO for Joint AS for Anyone/Survivor |
| ClientCode | <p>The field should contain the Client Code.</p> <p>For Physical purchase:</p> <ul style="list-style-type: none"> For SI mode of holding, Client Code 1 should be sent. For JO/AS mode of holding, Client code 1,2 and 3 (if entered) has to be sent The client code 1, 2 and 3 should not be same. <p>For Depository purchase:</p> <ul style="list-style-type: none"> For SI mode of holding, the CD code is sent in client code 1. Client code 2 and 3 should be sent as blank. For JO/AS mode of holding, the CD code is sent in client code 1 and client code 2 and 3 should be sent as blank. The client code 2 and 3 should be null. |
| ClientName | <p>The field should contain the Client name.</p> <ul style="list-style-type: none"> For SI mode of holding, Client Name 1 should be sent. For JO/AS mode of holding, Client Name 1,2 and 3 (if entered) has to be sent |
| KYCCompliant | <p>The field should contain the KYC compliant.</p> <p>For Physical:</p> <ul style="list-style-type: none"> For SI mode of holding, KYC compliant 1 should be sent. For JO/AS mode of holding, KYC compliant 1,2 and 3 (if entered) has to be sent <p>For Depository:</p> |

| | |
|-------------|---|
| | <ul style="list-style-type: none"> For SI mode of holding, KYC compliant 1 should be sent as Y. For JO/AS mode of holding, KYC compliant 1,2 and 3 (if entered) has to be sent as Y |
| Occupation | <p>The field specifies the occupation code. It should take one of the following values.</p> <ul style="list-style-type: none"> 1 BUSINESS 2 SERVICE 3 PROFESSIONAL 4 AGRICULTURE 5 RETIRED 6 HOUSE WIFE 7 STUDENT 8 OTHERS |
| TaxStatus | <p>The field specifies the tax status code. It should take one of the following values.</p> <ul style="list-style-type: none"> 1 Individual 2 On Behalf Of Minor 3 HUF 4 Corporate 5 NRE 6 NRO |
| AddressLine | This field specifies the Address of the client. |
| City | This field specifies the City of the client. |
| State | <p>This field specifies the state of the client. It should take one of the following values.</p> <ul style="list-style-type: none"> UC-Uttranchal MP-Madhya Pradesh GOA-Goa UP-Uttar Pradesh AP-Andhra Pradesh TN-Tamil Nadu SI-Sikkim AS-Assam WB-West Bengal GU-Gujarat |

| | |
|----------------|---|
| | <ul style="list-style-type: none"> • MA-Maharashtra • HP-Himachal Pradesh • MN-Manipur • OR-Orissa • PO-Pondichery • ME-Meghalaya • RA-Rajasthan • PU-Punjab • MI-Mizoram • AN-Andaman & Nicobar • NA-Nagaland • TR-Tripura • AR-Arunachal Pradesh • BH-Bihar • CH-Chandigarh • HA-Haryana • ND-New Delhi • CG-Chattisgarh • JK-Jharkhand • KA-Karnataka • KE-Kerala • DL-DELHI • JM-JAMMU & KASHMIR |
| Gender | Gender of client M - Male F – Female Should be blank; if the tax status is 4 (Corporate) |
| PINCode | This field specifies the Pincode of the client. |
| PhoneOffice | This field specifies the Office phone number of the client. |
| PhoneResidence | This field specifies the residence phone number of the client. |
| MobileNumber | This field specifies the mobile phone number of the client. |
| EmailAddress | This field specifies the email address of the client. |

| | |
|----------------------------|---|
| BankName | This field specifies the name of the bank on which the client holds the account. |
| BankCity | This field specifies the city of the bank on which the client holds the account. |
| AccountNo | This field specifies the client's bank account number |
| EchoBack | This field specifies the echo back |
| NEFTCode | This field specifies the client's bank code based on payout mechanism |
| BankAccountType | <p>This field specifies account type. This can contain 'SB'/'CB' for tax status</p> <ul style="list-style-type: none"> • 1 Individual • 2 On Behalf Of Minor • 3 HUF <p>4 - Corporate This field will contain 'NE' for tax_status 'NRE'(5) and 'NO' for tax_status 'NRO'(6) (This field contains value only for Physical orders)</p> |
| StatementCommunicationMode | This field specifies the statement communication mode. This shall contain values as ' P ' or ' E '. P stands for 'Physical' and 'E' stands for 'E-mail'. |
| PayoutMech | <p>This field specifies the preferred Divident/ redemption Payment mechanism. It should take one of the following values.</p> <p>1 - cheque 2 - direct credit 3 - ECS 4 - NEFT 5 - RTGS</p> |
| DateOfBirth | This field specifies the client's date of birth, if the age is less than 18years. |
| GuardianName | This field specifies the client's guardian name. It is mandatory if the date of birth is entered |
| GuardianPANno | This field specifies the client's guardian PAN number. It is mandatory if the date of birth is entered |
| NomineeName | The field specifies the name of the nominee |
| NomineeRelation | The field specifies the relationship with the nominee |
| NnfUserInfo | This field should contain information of the NNF users |

| | |
|-----------------------|---|
| | <ul style="list-style-type: none"> • First 6 digits will contain the pin code of the dealer. • Next 3 digits will contain the Branch Number • Next 3 digits will contain the terminal number. • These should match with the details provided by the member to The Exchange. For internet trading the entire above mentioned 12-digits are to be populated as "111111111111" • The 13th digit will bear a code to identify program "0" for automated trading and "1" for non-automated trading. • The 14th digit will bear a code to identify the vendor. For members developing inhouse software it has to be populated with "0" • The 15th digit is reserved for the use of Exchange and is to be populated as "0". |
| BranchId | This field should contain the ID of the branch of the particular broker. |
| TraderId | This field should contain the ID of the user. This field accepts only numbers. |
| BrokerId | This field should contain the trading member ID. |
| SubBrokerCode | During order entry, it can be blank or the ARN number has to be entered. When it is blank, the Primary ARN of the broker will be populated. When the ARN number is sent, it will be validated against the secondary ARN master. |
| SIPRegistrationNumber | <p>SIP Registration Number is a unique identification for a SIP Registration.</p> <ul style="list-style-type: none"> • During SIP Registration entry this field should be zero. • For normal orders this number will be zero. • Format is YYYYMMDDXXXXXX. • Applicable only for SIP Orders. |
| SIPFlag | <p>The flag indicates S for a SIP Order. And N for a normal order.</p> <p>'S' – SIP Order</p> <p>'N' – Normal Order</p> |

| | |
|--------------------------|--|
| SIPTrancheNumber | <p>For normal orders this field will be zero.</p> <ul style="list-style-type: none"> • This field contains the Transaction number. • During SIP Registration, the value will be assigned to 1 in the Host End. • During Subsequent Order Entries, the value indicates the current transaction number. |
| EUIN | This field contains the Employee Unique Identification Number. It should be left blank. |
| SIPGenerateOrder | <p>For normal orders this field should be blank as sent currently</p> <p>For SIP Registrations this field should have following values :</p> <ul style="list-style-type: none"> • Blank (as sent currently)- if 1st tranche order is to be generated on the date of SIP registration • N- if 1st tranche order is to be generated on the SIP date and not on the date of SIP registration <p>This field is not modifiable.</p> |
| BypassMinRedemptionCheck | <p>Valid in case of normal redemption orders only.</p> <p>It should have following values :</p> <ul style="list-style-type: none"> • Blank (as sent currently) – Minimum redemption quantity check is to be performed • Y – If minimum redemption quantity check is to be bypassed <p>For other orders (non-redemption orders) this field will be ignored.</p> |

Order Entry Response

The primary response to order entry is Order Requested message. The secondary response can be Order confirmation, Order error or one of the general error responses. The order error response is given when the entered order is rejected by the host. The reason for the rejection is given in the error code and/or reason code.

Order Requested Response - This response is discontinued from the HE.

This response is sent back when an order is requested. This does not imply that the order has been confirmed. However, it implies that the order has reached the trading system. The message sent will be of the following format:

Table 26 ORDER_ENTRY_REQUEST

| | |
|------------------|---------------------|
| Structure Name | ORDER_ENTRY_REQUEST |
| Transaction code | SPOT_OUT (2003) |
| Packet Length | 1000 bytes |

(For details on ORDER_ENTRY_REQUEST, refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-----------------|--|
| TransactionCode | The transaction code is SPOT_OUT (2003). |
| OrderNumber | This field contains the order number assigned to the order. |
| EntryDateTime | This field contains the date and time when the order entered the system. |

Order Confirmation Response

Successful order entry results in Order Confirmation Response. The confirmed order is returned to the user. The message sent is as follows:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-----------------|---|
| TransactionCode | The transaction code is ORDER_CONFIRMATION (2073). |
| OrderNumber | This field contains the order number assigned to the order. |
| Order_Flags | (Refer to Order Entry Request in Chapter 6) |
| EntryDateTime | This field contains the time at which order confirmed. |

Order Error Response

The order error response is sent when the entered order is rejected by the trading system. The reason for the rejection is given by the reason code and the reason string. The message sent is:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-----------------|---|
| TransactionCode | The transaction code is ORDER_ERROR (2231). |
| ErrorCode | This field contains the error number. Refer to List of Error Codes in Appendix |
| Suspended | This field contains 'C' if the broker is in Closeout. |

Order Modification

Order Modification enables the trader to modify confirmed orders.

Rules of Order Modification

The following modifications are not allowed:

- Buy to Sell or vice versa.

- Modifying Symbol and Series.
- BM modifying CM's orders.
- DL modifying BM's orders.
- DL modifying CM's orders.
- Modifying non existing order.
- Inquiry user trying to modify.
- Modifying an order in such a way that it results in a branch order value to be exceeded.
- Modifying deactivated broker's orders.

Order Modification Request

The trader can modify the quantity, price and attributes of an order by specifying the order number of the order to be modified. The message sent is:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-------------------|---|
| TransactionCode | The transaction code is ORDER_MOD_IN (2040). |
| OrderNumber | This should contain order number which is the identity of the order to be modified. |
| Last ModifiedTime | This should contain time of last activity done on that order. Last activity could be order entry, order modification or last trade time of that order. It is in number of seconds from midnight of January 1, 1980, |

Order Modification Response

This response is sent back when an order modification is requested. This does not imply that the order modification is confirmed. The response can be Order Modification Confirmation, Order Modification Error or one of the general error responses. The order modification error response is given when the modified order is rejected by the trading system. The reason for the rejection is given by the reason code and the reason string. The message sent is of the following format:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-----------------|--|
| TransactionCode | The transaction code is ORDER_MOD_OUT (2041). This response is discontinued from the HE. |

Order Modification Confirmation Response

Successful modification of the order results in Order Modification Confirmation. When the order modification is confirmed, the order-modified time is filled and sent back. The structure sent is as follows:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-------------------|---|
| TransactionCode | The transaction code is ORDER_MOD_CONFIRMATION (2074). |
| Last ModifiedTime | This field contains the time when the order was last modified. It is in number of seconds from midnight of January 1, 1980. |
| EntryDateTime | This field contains the time at which last modified by user. It is in number of seconds from midnight of January 1, 1980. |

Order Modification Error Response

The reason for rejection is given by the Error Code in the header. The message sent is as follows:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-----------------|--|
| TransactionCode | The transaction code is ORDER_MOD_REJECT (2042). |

Order Cancellation

The trader can cancel an order by specifying the order number.

Rules of Order Cancellation

- CM can cancel BM's and DL's order, but BM and DL cannot cancel CM's order.
- BM can cancel DL's order, but DL cannot cancel BM's order.
- Deactivated broker cannot cancel his/her order.

Order Cancellation Request

The format of the message is as follows:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-------------------|---|
| TransactionCode | The transaction code is ORDER_CANCEL_IN (2070). |
| OrderNumber | This field should contain the order number which is the identity of the order to be cancelled. |
| Last ModifiedTime | This should contain time of last activity done on that order. Last activity could be order entry, order modification or last trade time of that order. It is in number of seconds from midnight of January 1, 1980. |

Order Cancellation Response

The response can be Order Cancellation Confirmation, Order Cancellation Error or one of the general error responses.

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-----------------|---|
| TransactionCode | The transaction code is ORDER_CANCEL_OUT (2071). This response is discontinued from the HE. |

Order Cancellation Confirmation Response

Successful cancellation of order results in Order Cancellation Confirmation Response. The message sent is as follows:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|-----------------|---|
| TransactionCode | The transaction code is ORDER_CANCEL_CONFIRMATION (2075). |

Order Cancellation Error Response

The order cancellation error is sent when the cancellation request is rejected by the system. The reason for rejection is given by the Error Code in the header. The message sent is as follows:

ORDER ENTRY REQUEST (Refer to [Order Entry Request](#) in Chapter 6)

| Field Name | Description |
|------------|-------------|
|------------|-------------|

| | |
|-----------------|---|
| TransactionCode | The transaction code is ORDER_CANCEL_REJECT (2072). |
|-----------------|---|

Chapter 7 Unsolicited Messages

Introduction

This section details the unsolicited messages that are received on the interactive connection. These messages are not received by the users in response to any request.

Interactive/Broadcast Messages Sent from Control

A message can be sent to the trader(s) from the NSE-Control Work Station. If it is sent to all the traders, it comes as a broadcast in the structure BROADCAST_MESSAGE. (Refer to [General Message Broadcast](#) in Chapter 7)

When the message is sent to a particular user, it comes as an interactive message in the following structure:

Table 27 MS_TRADER_INT_MSG

| Structure Name | MS_TRADER_INT_MSG | | |
|--|---------------------------|--------------|--------|
| Transaction code | CTRL_MSG_TO_TRADER (5295) | | |
| Packet Length | 285 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE HEADER(Refer Table 1) | STRUCT | 38 | 0 |
| TraderId | CHAR | 2 | 38 |
| ActionCode[3] | CHAR | 3 | 40 |
| Reserved | CHAR | 1 | 43 |
| MsgLength | SHORT | 2 | 44 |
| Msg | CHAR | 239 | 46 |

| Field Name | Description |
|-----------------|---|
| TransactionCode | The transaction codes are: <ul style="list-style-type: none"> CTRL_MSG_TO_TRADER (5295) for interactive messages |
| ActionCode | This field contains the action code to indicate the action taken. 'SYS' - System |

Change of Market Status

Whenever the status of the market changes, the following structure is sent:

Table 37 BCAST_VCT_MESSAGES

| Structure Name | BCAST_VCT_MESSAGES | | |
|---|--|--------------|--------|
| Transaction code | BC_CLOSE_MSG (6521) / BC_OPEN_MSG (6511) | | |
| Packet Length | 295 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE HEADER(Refer Table 1) | STRUCT | 38 | 0 |
| SECURITY_INFORMATION(Refer Table 37.1) | STRUCT | 12 | 38 |
| MarketType | SHORT | 2 | 50 |
| BROADCAST DESTINATION (Refer Table 37.2 & Table 37.3) | STRUCT | 2 | 52 |
| BroadcastMessageLength | SHORT | 2 | 54 |
| BroadcastMessage [239] | CHAR | 239 | 56 |

Table 37.1 SECURITY_INFORMATION

| Structure Name | SECURITY_INFORMATION | | |
|----------------|----------------------|--------------|--------|
| Packet Length | 12 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| Symbol[10] | CHAR | 10 | 0 |
| Series[2] | CHAR | 2 | 10 |

For Small Endian Machines:

Table 37.2 BROADCAST DESTINATION

| Structure Name | BROADCAST DESTINATION | | |
|----------------|-----------------------|--------------|--------|
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size in bits | Offset |
| Reserved | BIT | 7 | 0 |
| TraderWs | BIT | 1 | 0 |
| Reserved | CHAR | 8 | 1 |

For Big Endian Machines:

Table 37.3 BROADCAST DESTINATION

| Structure Name | BROADCAST DESTINATION | | |
|----------------|-----------------------|--------------|--------|
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size in bits | Offset |
| Reserved | BIT | 1 | 0 |
| TraderWs | BIT | 7 | 0 |
| Reserved | CHAR | 8 | 1 |

General Message Broadcast

Any general message is broadcasted in the following structure. The structure sent is:

Table 38 BROADCAST MESSAGE

| Structure Name | BROADCAST MESSAGE | | |
|---|---------------------------|--------------|--------|
| Transaction code | BCAST_JRNL_VCT_MSG (6501) | | |
| Packet Length | 295 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE HEADER(Refer Table 1) | STRUCT | 38 | 0 |
| BranchNumber | SHORT | 2 | 38 |
| BrokerNumber [5] | CHAR | 5 | 40 |
| ActionCode [3] | CHAR | 3 | 45 |
| Reserved | CHAR | 4 | 48 |
| BROADCAST DESTINATION(Refer Table 38.1 & Table 38.2) | STRUCT | 2 | 52 |
| BroadcastMessageLength | SHORT | 2 | 54 |
| BroadcastMessage [239] | CHAR | 239 | 56 |

For Small Endian Machines

Table 38.1 BROADCAST DESTINATION

| Structure Name | BROADCAST DESTINATION | | |
|----------------|-----------------------|--------------|--------|
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size in Bits | Offset |
| Reserved | BIT | 7 | 0 |
| TraderWs | BIT | 1 | 0 |
| Reserved | BIT | 8 | 1 |

For Big Endian Machines

Table 38.2 BROADCAST DESTINATION

| Structure Name | BROADCAST DESTINATION | | |
|----------------|-----------------------|--------------|--------|
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size in Bits | Offset |
| Reserved | BIT | 1 | 0 |
| TraderWs | BIT | 7 | 0 |

| | | | |
|----------|-----|---|---|
| Reserved | BIT | 8 | 1 |
|----------|-----|---|---|

| Field Name | Description |
|------------------------|---|
| TransactionCode | The transaction code is BCAST_JRNL_VCT_MSG (6501). |
| BranchNumber | This field contains the branch number of the trader or broker. This shall be 0 for generic messages. |
| BrokerNumber | This field contains the Trading Member ID of the broker. This shall be blank for generic messages. |
| ActionCode | This field Indicates the action taken. 'SYS' - System |
| BroadcastDestination | This field contains the destination of the message, that is, Trader Workstation or Control Workstation. |
| BroadcastMessageLength | This field contains the length of the broadcast message. |
| BroadcastMessage | This field contains the broadcast message. |

Chapter 8 Broadcast

Introduction

This section describes the various messages with their structures that were previously sent over Broadcast (multicast) channel. Since version 2.23 these messages will be sent on the interactive channel (TCP/IP) itself. The structures of these messages will remain unchanged.

General Message Broadcast

Any general message is broadcasted in the following structure. The structure sent is:

Table 28 BROADCAST MESSAGE

| Structure Name | BROADCAST MESSAGE | | |
|---|---------------------------|--------------|--------|
| Transaction code | BCAST_JRNL_VCT_MSG (6501) | | |
| Packet Length | 295 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE HEADER(Refer Table 1) | STRUCT | 38 | 0 |
| BranchNumber | SHORT | 2 | 38 |
| BrokerNumber [5] | CHAR | 5 | 40 |
| ActionCode [3] | CHAR | 3 | 45 |
| Reserved | CHAR | 4 | 48 |
| BROADCAST DESTINATION(Refer Table 28.1 & Table 28.2) | STRUCT | 2 | 52 |
| BroadcastMessageLength | SHORT | 2 | 54 |
| BroadcastMessage [239] | CHAR | 239 | 56 |

For Small Endian Machines

Table 28.1 BROADCAST DESTINATION

| Structure Name | BROADCAST DESTINATION | | |
|----------------|-----------------------|--------------|--------|
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size in Bits | Offset |
| Reserved | BIT | 7 | 0 |
| TraderWs | BIT | 1 | 0 |
| Reserved | BIT | 8 | 1 |

For Big Endian Machines

Table 28.2 BROADCAST DESTINATION

| Structure Name | BROADCAST DESTINATION | | |
|----------------|-----------------------|--------------|--------|
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size in Bits | Offset |
| Reserved | BIT | 1 | 0 |
| TraderWs | BIT | 7 | 0 |
| Reserved | BIT | 8 | 1 |

| Field Name | Description |
|------------------------|---|
| TransactionCode | The transaction code is BCAST_JRNL_VCT_MSG (6501). |
| BranchNumber | This field contains the branch number of the trader or broker. |
| BrokerNumber | This field contains the Trading Member ID of the broker. |
| ActionCode | This field Indicates the action taken. 'SYS' - System |
| BroadcastDestination | This field contains the destination of the message, that is, Trader Workstation or Control Workstation. |
| BroadcastMessageLength | This field contains the length of the broadcast message. |
| BroadcastMessage | This field contains the broadcast message. |

Change in System Status / Parameters

This message is sent when any global operating parameters are changed or status of markets is changed. The structure of the message is:

SYSTEM INFORMATION DATA (Refer to [System Information Response](#) in Chapter 4)

| Field Name | Description |
|------------|-------------|
|------------|-------------|

| | |
|-----------------|---|
| TransactionCode | The transaction code is BCAST_SYSTEM_INFORMATION_OUT (7206) |
|-----------------|---|

Change in Security Master

This is sent whenever the parameter of any security is changed. The structure is given below.

Table 29 SECURITY_UPDATE_INFORMATION

| Structure Name | SECURITY_UPDATE_INFORMATION | | |
|---|-----------------------------|--------------|--------|
| Transaction code | BCAST_STOCK_MSTR_CHG (7305) | | |
| Packet Length | 412 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE_HEADER(Refer Table 1) | STRUCT | 38 | 0 |
| Token | SHORT | 2 | 38 |
| SECURITY_INFORMATION(Refer Table 29.1) | STRUCT | 12 | 40 |
| InstrumentType | SHORT | 2 | 52 |
| MaxPhyRedempQuantityLimit | DOUBLE | 8 | 54 |
| RtSchemeCode[5] | CHAR | 5 | 62 |
| AmcSchemeCode[10] | CHAR | 10 | 67 |
| SchemeDepCode | CHAR | 1 | 77 |
| Isin[12] | CHAR | 12 | 78 |
| WarningPercent | SHORT | 2 | 90 |
| SEC_ELIGIBILITY_PER_MARKET [4] (Refer Table 29.2 & Table 29.3) | STRUCT | 16 | 92 |
| AMCCode[3] | CHAR | 3 | 108 |
| CategoryCode[5] | CHAR | 5 | 111 |
| Name [75] | CHAR | 75 | 116 |
| Reserved | CHAR | 1 | 191 |
| IssueRate | SHORT | 2 | 192 |
| MinPhyAddlSubscrValueLimit | DOUBLE | 8 | 194 |
| BuyNAVPrice | LONG | 4 | 202 |
| SellNAVPrice | LONG | 4 | 206 |
| RtAgentCode[10] | CHAR | 10 | 210 |
| ValDecIndicator | SHORT | 2 | 220 |
| CatStartTime | LONG | 4 | 222 |
| QtyDecIndicator | SHORT | 2 | 226 |
| CatEndTime | LONG | 4 | 228 |
| MinPhyFreshSubscrValueLmt | DOUBLE | 8 | 232 |
| MaxPhyRedempValueLimit | DOUBLE | 8 | 240 |
| Reserved1 | LONG | 4 | 248 |
| Reserved2 | LONG | 4 | 252 |
| NavDate | LONG | 4 | 256 |

| | | | |
|---|--------|----|-----|
| Reserved4 | LONG | 4 | 260 |
| ELIGIBILITY_ INDICATORS(Refer Table 29.4) | STRUCT | 2 | 264 |
| MinPhyRedempValLmt | LONG | 4 | 266 |
| MinPhyRedempQtyLmt | LONG | 4 | 270 |
| PURPOSE(Refer Table 29.5 & Table 29.6) | STRUCT | 2 | 274 |
| LocalUpdateDateTime | LONG | 4 | 276 |
| DeleteFlag | CHAR | 1 | 280 |
| Remark [25] | CHAR | 25 | 281 |
| MaxPhyFreshSubscrValueLimit | DOUBLE | 8 | 306 |
| MaxPhyAddlSubscrValueLimit | DOUBLE | 8 | 314 |
| MaxDepFreshSubscrValueLimit | DOUBLE | 8 | 322 |
| MaxDepAddlSubscrValueLimit | DOUBLE | 8 | 330 |
| MinDepFreshSubscrValueLimit | DOUBLE | 8 | 338 |
| MinDepAddlSubscrValueLimit | DOUBLE | 8 | 346 |
| MaxDepRedempQtyLimit | DOUBLE | 8 | 354 |
| MinDepRedempQtyLimit | DOUBLE | 8 | 362 |
| PhySubscrAmountMultiple | DOUBLE | 8 | 370 |
| DepSubscrAmountMultiple | DOUBLE | 8 | 378 |
| SIPEligibility | CHAR | 1 | 386 |
| AMCName[25] | CHAR | 25 | 387 |

Table 29.1 SECURITY_INFORMATION

| Structure Name | SECURITY_INFORMATION | | |
|----------------|----------------------|--------------|--------|
| Packet Length | 12 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| Symbol[10] | CHAR | 10 | 0 |
| Series[2] | CHAR | 2 | 10 |

For Small Endian Machines:

Table 29.2 SEC_ELIGIBILITY_PER_MARKET

| Structure Name | SEC_ELIGIBILITY_PER_MARKET | | |
|----------------|----------------------------|------|--------|
| Packet Length | 4 bytes | | |
| Field Name | Data Type | Size | Offset |
| Reserved | BIT | 15 | 0 |
| Eligibility | BIT | 1 | 0 |
| Status | SHORT | 2 | 2 |

For Big Endian Machines:

Table 29.3 SEC_ELIGIBILITY_PER_MARKET

| Structure Name | SEC_ELIGIBILITY_PER_MARKET | | |
|----------------|----------------------------|--|--|
|----------------|----------------------------|--|--|

| | | | |
|----------------------|------------------|-------------|---------------|
| Packet Length | 4 bytes | | |
| Field Name | Data Type | Size | Offset |
| Reserved | BIT | 1 | 0 |
| Eligibility | BIT | 15 | 0 |
| Status | SHORT | 2 | 2 |

Table 29.4 ELIGIBILITY_ INDICATORS

| | | | |
|-----------------------|-------------------------|---------------------|---------------|
| Structure Name | ELIGIBILITY_ INDICATORS | | |
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size in Bits | Offset |
| Reserved | BIT | 5 | 0 |
| Reserved22 | BIT | 1 | 0 |
| Reserved23 | BIT | 1 | 0 |
| Reserved11 | BIT | 1 | 0 |
| SecAllowBuy | BIT | 1 | 1 |
| SecModCxl | BIT | 1 | 1 |
| SecAllowSell | BIT | 1 | 1 |
| SecAllowDep | BIT | 1 | 1 |
| SecDividend | BIT | 1 | 1 |
| SecDepMandatory | BIT | 1 | 1 |
| Reserved | BIT | 2 | 1 |

For Small Endian Machines:

Table 29.5 PURPOSE

| | | | |
|-----------------------|------------------|---------------------|---------------|
| Structure Name | PURPOSE | | |
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size in bits | Offset |
| Reserved14 | BIT | 2 | 0 |
| Reserved15 | BIT | 1 | 0 |
| Reserved16 | BIT | 1 | 0 |
| Reserved17 | BIT | 1 | 0 |
| Reserved18 | BIT | 1 | 0 |
| Reserved19 | BIT | 1 | 0 |
| Reserved20 | BIT | 1 | 0 |
| Reserved21 | BIT | 8 | 1 |

For Big Endian Machines:

Table 29.6 PURPOSE

| Structure Name | PURPOSE | | |
|----------------|-----------|--------------|--------|
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size in bits | Offset |
| Reserved20 | BIT | 1 | 0 |
| Reserved19 | BIT | 1 | 0 |
| Reserved18 | BIT | 1 | 0 |
| Reserved17 | BIT | 1 | 0 |
| Reserved16 | BIT | 1 | 0 |
| Reserved15 | BIT | 1 | 0 |
| Reserved14 | BIT | 2 | 0 |
| Reserved21 | BIT | 8 | 1 |

| Field Name | Description |
|---------------------------|--|
| TransactionCode | The transaction code is BCAST_SECURITY_MSTR_CHG (7305). |
| Token | This field contains the token number of the scheme being updated. This is unique for a particular symbol-series combination. |
| SecurityInformation | This field contains the Symbol and Series of the scheme. |
| InstrumentType | Reserved for Future Use. It is always 0. |
| MaxPhyRedempQuantityLimit | This field specifies the max quantity allowed for the scheme. This is applicable for Physical Redemption orders. |
| RtSchemeCode | This field specifies the RT Scheme code of the scheme |
| AmcSchemeCode | This field specifies the AMC Scheme code of the scheme |
| SchemeDepCode | This field contains the scheme depository code. If the scheme is eligible for Depository settlement, the value will be <ul style="list-style-type: none"> N for NSDL only |

| Field Name | Description |
|----------------------------|---|
| | <ul style="list-style-type: none"> • C for CDSL only • B for Both NSDL/CDSL. <p>The field will be blank for Non Depository Schemes.</p> |
| ISIN | This field contains ISIN number of the scheme. |
| WarningPercent | This field contains the Folio Number length, applicable to the scheme. The valid values will be 1 to 16. |
| Eligibility | The flag is set to '1' for Spot market. |
| Status | <p>This field contains one of the following values:</p> <ul style="list-style-type: none"> • '2' - Open • '3' - Suspended |
| AMCCode | This field specifies the AMC code of the scheme |
| CategoryCode | This field specifies the category code of the scheme |
| Name | This field contains the scheme name. |
| IssueRate | Reserved for Future Use. It is always 0. |
| MinPhyAddlSubscrValueLimit | This field contains the min Physical subscription amount limit for additional purchase |
| BuyNAVPrice | This field specifies the subscription NAV price of the scheme. |
| SellNAVPrice | This field specifies the redemption NAV price of the scheme |
| RtAgentCode | This field specifies the RT Agent code of the scheme |
| ValDecIndicator | <p>This field specifies the decimal value applicable for the NAV price.</p> <p>This specifies the NAV decimal indicator.</p> |
| CatStartTime | This field specifies the category start time |
| QtyDecIndicator | This field specifies the decimal indicator for quantity. |
| CatEndTime | This field specifies the category end time |
| MinPhyFreshSubscrValueLmt | This field contains the min subscription amount limit for physical fresh purchase |
| MaxPhyRedempValueLimit | This field specifies the max value allowed for the scheme. This is applicable for Physical Redemption orders. |
| NavDate | This field contains NavDate |

| Field Name | Description |
|--------------------|---|
| SecDepMandatory | <ul style="list-style-type: none"> This field is true for a mandatory depository scheme. This field is false if a scheme is allowed only for physical transaction. <p>1 – True 0 – False</p> <p>Please refer the following table for the relation between SecDepMandatory and SecAllowDep fields.</p> |
| SecDividend | <p>This field is true for a dividend fund.</p> <p>1 – True 0 - False</p> |
| SecAllowDep | <p>This field is true if a scheme is applicable for both depository and physical transaction.</p> <p>This field is false if a scheme is allowed only for physical transaction.</p> <p>1 – True 0 - False</p> |
| SecAllowSell | <p>If this field is true then only sell orders are allowed on the scheme.</p> <p>1 – True 0 - False</p> |
| SecModCxl | <p>If this field is true then only further order modifications and cancellations are allowed on the scheme.</p> <p>1 – True 0 - False</p> |
| SecAllowBuy | <p>If this field is true then only buy orders are allowed on the scheme.</p> <p>1 – True 0 - False</p> |
| MinPhyRedempValLmt | <p>This field contains the minimum redemption value limit specific to a scheme. This limit is applicable for both physical. The value is in terms of paise. Default value is 0</p> |
| MinPhyRedempQtyLmt | <p>This field contains the minimum redemption quantity limit specific to a scheme. This limit is applicable for both physical orders. Default value is 0.</p> |

| Field Name | Description |
|-----------------------------|--|
| | For e.g., if the qty limit is 123.45, this field will contain the value as 12345. |
| Purpose | This field contains the EGM / AGM / Interest / Bonus / Rights / Dividend flags set depending on the corporate action. |
| LocalUpdateDateTime | This field contains the local database update date and time. |
| DeleteFlag | This indicates whether the security is deleted or not. <ul style="list-style-type: none"> • 'N' – Active • 'Y' – Deleted |
| Remark | Remarks. |
| MaxPhyFreshSubscrValueLimit | This field contains the maximum physical fresh subscription value limit specific to a scheme. |
| MaxPhyAddlSubscrValueLimit | This field contains the maximum physical Additional subscription value limit specific to a scheme. |
| MaxDepFreshSubscrValueLimit | This field contains the maximum Depository fresh subscription value limit specific to a scheme. |
| MaxDepAddlSubscrValueLimit | This field contains the maximum depository Additional subscription value limit specific to a scheme. |
| MinDepFreshSubscrValueLimit | This field contains the minimum depository fresh subscription value limit specific to a scheme. |
| MinDepAddlSubscrValueLimit | This field contains the minimum depository Additional subscription value limit specific to a scheme. |
| MaxDepRedempQtyLimit | This field contains the maximum depository redemption Quantity limit specific to a scheme. |
| MinDepRedempQtyLimit | This field contains the minimum depository redemption Quantity limit specific to a scheme. |
| PhySubscrAmountMultiple | This field contains the physical Subscription amount multiple specific to a scheme. |
| DepSubscrAmountMultiple | This field contains the depository Subscription amount multiple specific to a scheme. |
| SIPeligibility | This field specifies whether a scheme is eligible for SIP or not. The values are 'Y' – Eligible 'N' – Ineligible |
| AMCName | This field specifies the AMC Name of the scheme |

| Field Name | Only Physical | Physical / Depository | Only Depository |
|-----------------|---------------|-----------------------|-----------------|
| SecDepMandatory | 0 - False | 0 – False | 1 – True |
| SecAllowDep | 0 - False | 1 – True | 0 - False |

Change of Security Status

This message is sent whenever the status of any security changes. The structure sent is:

Table 30 SECURITY_UPDATE_INFORMATION

| Structure Name | SECURITY_UPDATE_INFORMATION | | |
|--|--|--------------|--------|
| Transaction code | BCAST_SECURITY_STATUS_CHG (7320) OR BCAST_SECURITY_STATUS_CHG_PREOPEN (7210) | | |
| Packet Length | 470 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| MESSAGE HEADER (Refer Table 1) | STRUCT | 38 | 0 |
| NumberOfRecords | SHORT | 2 | 38 |
| TOKEN AND ELIGIBILITY [43] (Refer Table 30.1) | STRUCT | 430 | 40 |

Table 30.1 TOKEN AND ELIGIBILITY

| Structure Name | TOKEN AND ELIGIBILITY | | |
|--|-----------------------|---------------|--------|
| Packet Length | 10 bytes | | |
| Field Name | Data Type | Size in bytes | Offset |
| Token | SHORT | 2 | 0 |
| SECURITY STATUS PER MARKET [4] (Refer Table 30.2) | STRUCT | 8 | 2 |

Table 30.2 SECURITY STATUS PER MARKET

| Structure Name | SECURITY STATUS PER MARKET | | |
|----------------|----------------------------|---------------|--------|
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size in bytes | Offset |
| Status | SHORT | 2 | 0 |

Change of Market Status

Whenever the status of the market changes, the following structure is sent:

Table 31 BCAST_VCT_MESSAGES

| Structure Name | BCAST_VCT_MESSAGES | | |
|---|--|--------------|--------|
| Transaction code | BC_CLOSE_MSG (6521) / BC_OPEN_MSG (6511) | | |
| Packet Length | 295 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| BCAST_HEADER (Refer Table 2) | STRUCT | 38 | 0 |
| SECURITY_INFORMATION(Refer Table 31.1) | STRUCT | 12 | 38 |
| MarketType | SHORT | 2 | 50 |
| BROADCAST DESTINATION (Refer Table 31.2 & Table 31.3) | STRUCT | 2 | 52 |
| BroadcastMessageLength | SHORT | 2 | 54 |
| BroadcastMessage [239] | CHAR | 239 | 56 |

Table 31.1 SECURITY_INFORMATION

| Structure Name | SECURITY_INFORMATION | | |
|----------------|----------------------|--------------|--------|
| Packet Length | 12 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| Symbol[10] | CHAR | 10 | 0 |
| Series[2] | CHAR | 2 | 10 |

For Small Endian Machines:

Table 31.2 BROADCAST DESTINATION

| Structure Name | BROADCAST DESTINATION | | |
|----------------|-----------------------|--------------|--------|
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size in bits | Offset |
| Reserved | BIT | 7 | 0 |
| TraderWs | BIT | 1 | 0 |
| Reserved | CHAR | 8 | 1 |

For Big Endian Machines:

Table 31.3 BROADCAST DESTINATION

| Structure Name | BROADCAST DESTINATION | | |
|----------------|-----------------------|--------------|--------|
| Packet Length | 2 bytes | | |
| Field Name | Data Type | Size in bits | Offset |
| Reserved | BIT | 1 | 0 |
| TraderWs | BIT | 7 | 0 |
| Reserved | CHAR | 8 | 1 |

Broadcast Circuit Check

If there has been no data on the broadcast circuit for a stipulated time period, then a pulse is sent. This time is nine seconds now but it can be changed by NSE – Control. This is only to intimate that the circuit is still there but there is no data to send. The structure sent is:

MESSAGE HEADER (Refer to [Table1](#) in Chapter 2)

| Field Name | Description |
|-----------------|---|
| TransactionCode | The transaction code sent is BC_CIRCUIT_CHECK (6541). |

Note:

In the invitation packet, the following fields are to be used

1. Transaction Code field
2. Message length field
3. Invitation Count Field

Other of the fields of this packet is reserved and are to be ignored while processing.

Exception handling for invitation packet

In case of any exception while processing the 'invitation packet' the connection should be dropped. A new connection needs to be established by the front end with the CL.

Appendix**List of Error Codes**

| Error Code ID | Error Code Value | Description of Error Numbers |
|--------------------------------|------------------|--|
| ERR_MARKET_NOT_OPEN | 16000 | The trading system is not available for trading. |
| ERR_INVALID_BRANCH | 16001 | Erroneous transaction code received. |
| ERR_BAD_TRANSACTION_CODE | 16003 | |
| ERR_USER_ALREADY_SIGNED_ON | 16004 | User already signed on. |
| ERR_INVALID_SIGNON | 16006 | Invalid sign-on, Please try again. |
| ERR_SIGNON_NOT_POSSIBLE | 16007 | Signing on to the trading system is restricted. Please try later on. |
| ERR_INVALID_SYMBOL | 16012 | Invalid symbol/series. |
| ERR_SECURITY_NOT_AVAILABLE | 16035 | Security is unavailable for trading at this time. Please try later. |
| ERR_INVALID_BROKER_OR_BRANCH | 16041 | Trading Member does not exist in the system. |
| ERR_USER_NOT_FOUND | 16042 | Dealer does not exist in the system. |
| ERR_PASSWORD_HAS_EXPIRED | 16053 | Your password has expired, must be changed. |
| ERR_INVALID_BRANCH | 16054 | Branch does not exist in the system. |
| ERR_PROGRAM_ERROR | 16056 | Program error. |
| ERR_INVALID_BUYER_USER_ID | 16098 | Invalid trader ID for buyer. |
| ERR_INVALID_SELLER_USER_ID | 16099 | Invalid trader ID for seller. |
| ERR_SYSTEM_ERROR | 16104 | System could not complete your transaction - ADMIN notified. |
| ERR_CANT_COMPLETE_YOUR_REQUEST | 16123 | System not able to complete your request. Please try again. |
| ERR_USER_IS_DISABLED | 16134 | This Dealer is disabled. Please call the Exchange. |
| ERR_INVALID_USER_ID | 16148 | Invalid Dealer ID entered. |

| Error Code ID | Error Code Value | Description of Error Numbers |
|----------------------------------|------------------|--|
| ERR_INVALID_TRADER_ID | 16154 | Invalid Trader ID entered. |
| ERR_NOT_FOUND | 16273 | Does not exist. |
| ERR_MARKETS_CLOSED | 16278 | The markets have not been opened for trading. |
| ERR_BROKER_NOT_ACTIVE | 16285 | The broker is not active. |
| ERR_TRG_PRICE_NOT_MULT_TICK_SIZE | 16316 | The trigger price is not a multiple of tick size. |
| ERR_MF_NOT_MULT_BOARD_LOT | 16322 | MF quantity is not a multiple of regular lot. |
| AMC_SCHEME_CODE_NULL | 16327 | AMC Scheme code is null. |
| RT_SCHEME_CODE_NULL | 16328 | RT Scheme code is null |
| ERR_BROKER_NOT_PERMITTED_IN_MKT | 16329 | Trading Member not permitted in the market. |
| ERR_SECURITY_IS_SUSPENDED | 16330 | Security is suspended. |
| ERR_BRANCH_LIMIT_EXCEEDED | 16333 | Branch Order Value Limit is exceeded. |
| OE_ORD_CAN_CHANGED | 16343 | The order to be cancelled has changed. |
| OE_ORD_CANNOT_CANCEL | 16344 | The order cannot be cancelled. |
| OE_ORD_CANNOT_MODIFY | 16346 | Order cannot be modified. |
| ERR_TRADING_NOT_ALLOWED | 16348 | Trading is not allowed in this market. |
| ERR_USER_TYPE_INQUIRY | 16372 | Order entry not allowed for user as it is of inquiry type. |
| ERR_NO_TRADING_IN_SECURITY | 16387 | Security is not allowed to trade in this market. |
| ERR_WRONG_LOGIN_ADDRESS | 16403 | You are trying to sign on from a different location. Sign on is not allowed. |
| ERR_INVALID_BUY_SELL | 16413 | Requested by can be BUY or SELL or BOTH. |
| ERR_INVALID_INST | 16414 | Invalid combination of book type and instructions (order_type). |

| Error Code ID | Error Code Value | Description of Error Numbers |
|---------------------------------------|------------------|--|
| ERR_NNF_REQ_EXCEEDED | 16417 | Number of NNF requests exceeded. |
| ERR_INVALID_ORDER | 16418 | Order entered has invalid data. |
| ERR_INVALID_ALPHA_CHAR | 16420 | Alpha char must be the same as first two chars of symbol. |
| ERR_INVALID_BOOK_TYPE | 16422 | Book type should be between 6(SP) |
| ERR_INVALID_MSG_LENGTH | 16424 | Message length is invalid. |
| NNF_REQUESTS_EXCEEDED | 16417 | Number of NNF requests within a given time has exceeded. |
| ORDER_NOT_FOUND | 16060 | Modified/Cancelled order not found |
| ORDER_VALUE_EXCEEDS_ORDER_VALUE_LIMIT | 16442 | The current placed order's value is more than users order value limit |
| ORDER_VALUE_LIMIT_EXCEEDED | 16436 | The order value limit has exceeded |
| AMC_CODE_NULL | 16453 | AMC Code is null |
| RTA_CODE_NULL | 16454 | RT Agent Code is null |
| CATEGORY_CODE_NULL | 16455 | Category Code is null |
| INVALID_RTA_CODE | 16456 | RT Agent Code does not exist in the system |
| INVALID_SUBSCRIPTION_AMOUNT | 16459 | The subscription amount entered is greater than value_limit of scheme. or the subscription amount entered is less than minimum subscription amount additional for additional purchase. or the subscription amount entered is less than minimum subscription amount fresh for fresh purchase. |
| INVALID_DEPOSITORY | 16460 | If depository settlement is 'Y' and if any of DepositoryID or |

| Error Code ID | Error Code Value | Description of Error Numbers |
|---------------------------|------------------|--|
| | | DepositoryClientID or DepositoryCode is blank. |
| INVALID_FOLIO_NO | 16461 | If FolioNumber is null with DepositorySettlement as 'N' for a sell order or FolioNumber is not null with DepositorySettlement as 'N' for fresh subscription. or FolioNumber is null with DepositorySettlement as 'N' for additional subscription. |
| INVALID_QUANTITY | 16462 | Quantity is 0 for a redemption order with depository settlement as 'Y'. or quantity is more than qty limit set at host for the scheme for a sell order. or number of digits after decimal for quantity is more than quantity decimal indicator for a sell order. |
| INVALID_REDEMPTION_AMOUNT | 16463 | Total redemption is 'N' and sell order amount is greater than value limit set in at host for the scheme for a sell order. |
| INVALID_CLIENT_DETAILS | 16464 | If any of the client details entered is invalid. |
| INVALID_AMC_CODE | 16465 | AMC Code entered does not exist at host for the scheme. |
| INVALID_CATEGORY_CODE | 16466 | Category Code entered does not exist at host for the scheme. |
| INVALID_AMC_SCHEME_CODE | 16467 | AMC Code entered does not exist at host for the scheme. |
| INVALID_RT_SCHEME_CODE | 16468 | RTA Code entered does not exist at host for the scheme. |
| INVALID_TOTAL_REDEMPTION | 16469 | TotalRedemption flag is not 'N' for a buy order. or |

| Error Code ID | Error Code Value | Description of Error Numbers |
|-----------------------------|------------------|---|
| | | TotalRedemption is not 'N' with DepositorySettlement 'Y' for a sell order. |
| INVALID_PURCHASE_TYPE | 16470 | PurchaseType is not equal to 1 or 2 for a buy order. or PurchaseType is not equal to 0 for a sell order. |
| INVALID_QTY_OR_RED | 16471 | DepositorySettlement is 'N' for a sell order with amount not equal to 0 and quantity is not equal to 0 or TotalRedemption not equal to 'N'. |
| INVALID_AMOUNT_OR_RED | 16472 | DepositorySettlement is 'N' for a sell order with quantity not equal to 0 and amount is not equal to 0 or TotalRedemption not equal to 'N'. |
| INVALID_AMOUNT_OR_QTY | 16473 | DepositorySettlement is 'N' for a sell order with TotalRedemption not equal to 'N' and amount not equal to 0 or quantity not equal to 0. |
| CATEGORY_CLOSED | 16500 | Order entry/mod/cxl time is out of category operating time. |
| ALLOW_BUY | 16552 | Buy orders are not allowed on this scheme. |
| ALLOW_SELL | 16445 | Sell orders are not allowed on this scheme. |
| MODCXL | 16444 | Order entry is not allowed in this session |
| SIP_NOT_ALLOWED_WITH_MFSS | 16515 | SIP Registrations are not allowed in MFSS TS |
| SIP_NOT_ALLOWED_WITH_CAT | 16516 | SIP Registrations are not allowed for category |
| SIP_NOT_ALLOWED_WITH_AMC | 16517 | SIP Registrations are not allowed for AMC |
| SIP_NOT_ALLOWED_WITH_SCHEME | 16518 | SIP Registrations are not allowed for Scheme |
| PHY_SUB_AMOUNT_NOT_MULTIPLE | 16519 | Physical Subscr amount is not an multiple of SIP_SUBSCR_AMOUNT_MULTIPLE |

| Error Code ID | Error Code Value | Description of Error Numbers |
|-------------------------------|------------------|--|
| DEP_SUB_AMOUNT_NOT_MULTIPLE | 16521 | Depository Subscr amount is not an multiple of SIP_SUBSCR_AMOUNT_MULTIPLE |
| SIP_NOT_FOUND | 16522 | SIP not found |
| SIP_NOT_OF_THIS_USER | 16523 | SIP Not of this user |
| SIP_CANNOT_BE_CANCELLED | 16524 | SIP cannot be cancelled |
| SIP_INVALID_ORDER | 16525 | Invalid Order |
| SIP_NOT_ALLOWED_FOR_PERIOD | 16526 | SIP Not allowed for this period |
| SIP_NOT_ALLOWED_FOR_MONTH_YR | 16527 | SIP Not allowed for this Month |
| SIP_FREQUENCY_NOT_AVAILABLE | 16528 | SIP Frequency not available |
| SIP_NOT_ALLOWED_FOR_DAYS_DATE | 16529 | SIP Not allowed for this Days/Dates |
| SIP_AMOUNT_LESS_THAN_MINIMUM | 16530 | SIP amount less than minimum amount |
| SIP_AMOUNT_GRTR_THAN_MAXIMUM | 16531 | SIP amount greater than minimum amount |
| SIP_AMOUNT_LESS_THAN_MIN_TTL | 16532 | SIP amount less than minimum total amount |
| SIP_INVALID_TRANCHE_NUMBER | 16534 | Invalid SIP tranche number |
| INVALID_EX_DATE | 16457 | Invalid NFO Date(Order date falls outside NFO period) |
| ACCOUNT_DEBARRED | 16570 | The Account is Debarred by Exchange |

Reason Codes

The reason codes and the corresponding values are given below.

| Reason Code | Value |
|--------------|-------|
| Security | 5 |
| Broker | 6 |
| Branch | 7 |
| User | 8 |
| Category | 9 |
| AMC_TM | 10 |
| Order Number | 11 |

| | |
|-----------------|----|
| MFSS_SIP | 29 |
| AMC_SIP | 30 |
| CAT_SIP | 31 |
| SCHEME_SIP | 32 |
| FREQUENCY | 33 |
| PERIOD | 34 |
| MONTH_YR | 35 |
| DAYS_DATE | 36 |
| SIP_MIN_AMT | 37 |
| SIP_MAX_AMT | 38 |
| SIP_AMT_MUL | 39 |
| SIP_MIN_TTL_AMT | 40 |
| SIP_TRANCHE | 41 |
| SIP_CANCEL | 42 |
| SIP_REG_NUMBER | 43 |

List of Transaction Codes

| Transaction Code | Code | Structure | Size | I/ B* |
|---------------------------|------|------------------------------|------------|----------|
| SYSTEM_INFORMATION_IN | 1600 | MESSAGE_HEADER | 38 | I |
| SYSTEM_INFORMATION_OUT | 1601 | SYSTEM_INFORMATION_DATA | 84 | I |
| SPOT_IN | 2002 | ORDER_ENTRY_REQUEST | 950 | I |
| SPOT_OUT | 2003 | ORDER_ENTRY_REQUEST | 950 | I |
| ORDER_MOD_IN | 2040 | ORDER_ENTRY_REQUEST | 950 | I |
| ORDER_MOD_OUT | 2041 | ORDER_ENTRY_REQUEST | 950 | I |
| ORDER_MOD_REJECT | 2042 | ORDER_ENTRY_REQUEST | 950 | I |
| ORDER_CANCEL_IN | 2070 | ORDER_ENTRY_REQUEST | 950 | I |
| ORDER_CANCEL_OUT | 2071 | ORDER_ENTRY_REQUEST | 950 | I |
| ORDER_CANCEL_REJECT | 2072 | ORDER_ENTRY_REQUEST | 950 | I |
| ORDER_CONFIRMATION | 2073 | ORDER_ENTRY_REQUEST | 950 | I |
| ORDER_MOD_CONFIRMATION | 2074 | ORDER_ENTRY_REQUEST | 950 | I |
| ORDER_CANCEL_CONFIRMATION | 2075 | ORDER_ENTRY_REQUEST | 950 | I |
| ORDER_ERROR | 2231 | ORDER_ENTRY_REQUEST | 950 | I |
| SIGN_ON_REQUEST_IN | 2300 | SIGNON_IN | 182 | I |
| SIGN_ON_REQUEST_OUT | 2301 | SIGNON OUT ERROR_RESPONSE | 182 178 | I |
| SIGN_OFF_REQUEST_IN | 2320 | MESSAGE_HEADER | 38 | I |
| SIGN_OFF_REQUEST_OUT | 2321 | MESSAGE_HEADER | 38 | I |
| CTRL_MSG_TO_TRADER | 5295 | MS_TRADER_INT_MSG | 285 | B |
| BCAST_JRNL_VCT_MSG | 6501 | BROADCAST_MESSAGES | 295 | B |
| BC_OPEN_MESSAGE | 6511 | BCAST_VCT_MESSAGES | 295 | B |
| BC_CLOSE_MESSAGE | 6521 | BCAST_VCT_MESSAGES | 295 | B |
| BC_CIRCUIT_CHECK | 6541 | MESSAGE_HEADER | 38 | B |
| DOWNLOAD_REQUEST | 7000 | MESSAGE_DOWNLOAD | 46 | I |
| HEADER_RECORD | 7011 | MESSAGE_HEADER | 38 | I |
| MESSAGE_RECORD | 7021 | MESSAGE_HEADER | 1024 | I |
| TRAILER_RECORD | 7031 | MESSAGE_HEADER | 38 | I |

| Transaction Code | Code | Structure | Size | I/ B* |
|----------------------------|------|--|------|----------|
| UPDATE_LOCALDB_IN | 7300 | UPDATE_LOCAL_DATABASE | 94 | I |
| UPDATE_LOCALDB_DATA | 7304 | Packet of size >72 and <=1024 | 1024 | I |
| BCAST_SECURITY_MSTR_CHG | 7305 | SECURITY_UPDATE_INFORMATION | 412 | I/ B |
| UPDATE_LOCALDB_HEADER | 7307 | MESSAGE_HEADER | 40 | I |
| UPDATE_LOCALDB_TRAILER | 7308 | MESSAGE_HEADER | 40 | I |
| BCAST_CAT_MSTR_CHG | 7309 | CATEGORY_UPDATE_INFORMATION | 72 | I |
| BCAST_SECURITY_STATUS_CHG | 7320 | SECURITY_STATUS_UPDATE_INFORMATION | 470 | B |
| PARTIAL_SYSTEM_INFORMATION | 7321 | SYSTEM_INFORMATION_DATA | 84 | I |
| SIP_INQ_REQ | 1762 | SIP REGISTRATION DETAILS DOWNLOAD | 77 | I |
| SIP_INQ_HDR | 1764 | SIP REGISTRATION DETAILS DOWNLOAD_HEADER | 40 | I |
| SIP_INQ_RESP_DATA | 1763 | SIP REGISTRATION DETAILS DOWNLOAD DATA | 954 | I |
| SIP_INQ_TRLR | 1765 | SIP REGISTRATION DETAILS DOWNLOAD TRAILER | 42 | I |
| SIP_HIST_CXL_IN | 2082 | HIST SIP REGISTRATION CXL REQUEST | 64 | I |
| SIP_HIST_CXL_OUT | 2083 | HIST SIP REGISTRATION CXL RESPONSE | 64 | I |
| SIP_HIST_CXL_CONFIRM | 2084 | HIST SIP REGISTRATION CXL CONFIRM | 90 | I |
| BCAST_SIP_MSTR_CHG | 7209 | SIP_UPDATE_INFORMATION | 106 | I/ B |

* Interactive/Broadcast

Quick Reference for Order Entry Parameters

The order flags are given below.

Order Terms:

Modified : input

| Status | Market | Book Type | Order Terms and Other Characteristic Fields |
|--------|-------------|-----------|---|
| Open | Spot Market | SP** | input |
| Close | | | Order entry is not allowed. |

** Other input flags in the order terms are not allowed, hence should not be set.

Market Type

The market types are:

| Status | Market Status ID |
|-------------|------------------|
| Spot Market | 3*** |

** Other market types in the market type are not allowed hence should not be set.

Market Status

The market can be in one of the following statuses:

| Status | Market Status ID |
|--------|------------------|
| Open | 1 |
| Closed | 2 |

Book Types

There are seven books. These books fall in four markets.

| Book Type | Book ID | Market Type |
|------------|---------|-------------|
| Spot Order | 6 | Spot Market |

Security Status

| Status | Status ID |
|-----------|-----------|
| Open | 2 |
| Suspended | 3 |

Activity Types

The activity types that are sent in reports are given below.

| Activity Type | Description | Code |
|-----------------------|-------------------------------------|------|
| ORIGINAL_ORDER | This is the order that was entered. | 1 |
| ACTIVITY_ORDER_CANCEL | The order was cancelled. | 3 |
| ACTIVITY_ORDER_MODIFY | The order was modified. | 4 |

Pipe Delimited File Structures

The upload files have a header record at the beginning of the file followed by the detail records. All the fields in both the header and detail records are separated by pipe ('|'). The fields are not of fixed width. Any two fields are separated by a '|' symbol.

Security File Structure

Table 32 SECURITY FILE HEADER

| Structure Name | SECURITY FILE HEADER | | |
|-------------------|----------------------|---------------|--------|
| Packet Length | 19 bytes | | |
| Field Name | Data Type | Size in bytes | Offset |
| NEATMF [6] | CHAR | 6 | 0 |
| Reserved | CHAR | 1 | 6 |
| VersionNumber [7] | CHAR | 7 | 7 |
| Reserved | CHAR | 1 | 14 |
| DATE | LONG | 4 | 15 |

| Field Name | Description |
|---------------|---|
| NEATMF | Text describes the MF market |
| VersionNumber | Version number of the system. The version number is 1.15.00 |
| DATE | This field contains the time at which the file is generated in the system. This specifies the time at which the file is generated in seconds with reference from midnight January 1 1980 |

Table 33 Stock Structure

| Structure Name | Stock Structure | | |
|---|-----------------|--------------|--------|
| Packet Length | 473 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| Header(Refer Table 32) | STRUCT | 19 | 0 |
| Token | SHORT | 2 | 19 |
| Reserved | CHAR | 1 | 21 |
| Symbol[10] | CHAR | 10 | 22 |
| Reserved | CHAR | 1 | 32 |
| Series[2] | CHAR | 2 | 33 |
| Reserved | CHAR | 1 | 35 |
| InstrumentType | SHORT | 2 | 36 |
| Reserved | CHAR | 1 | 38 |
| MaxPhyRedempQuantityLimit | DOUBLE | 8 | 39 |
| Reserved | CHAR | 1 | 47 |
| RtSchemeCode[5] | CHAR | 5 | 48 |
| Reserved | CHAR | 1 | 53 |
| AmcSchemeCode[10] | CHAR | 10 | 54 |
| Reserved | CHAR | 1 | 64 |
| SchemeDepCode | CHAR | 1 | 65 |
| Reserved | CHAR | 1 | 66 |
| Isin[12] | CHAR | 12 | 67 |
| Reserved | CHAR | 1 | 79 |
| WarningPercent | SHORT | 2 | 80 |
| Reserved | CHAR | 1 | 82 |
| ST_SEC_ELIGIBILITY_PER_MARKET[4](Refer Table 33.1) | STRUCT | 20 | 83 |
| Reserved | CHAR | 1 | 103 |
| AmcCode[3] | CHAR | 3 | 104 |
| Reserved | CHAR | 1 | 107 |
| CategoryCode[5] | CHAR | 5 | 108 |
| Reserved | CHAR | 1 | 113 |

| | | | |
|----------------------------|--------|----|-----|
| Name [75] | CHAR | 75 | 114 |
| Reserved | CHAR | 1 | 189 |
| IssueRate | SHORT | 2 | 190 |
| Reserved | CHAR | 1 | 192 |
| MinPhyAddlSubscrValueLimit | DOUBLE | 8 | 193 |
| Reserved | CHAR | 1 | 201 |
| BuyNAVPrice | LONG | 4 | 202 |
| Reserved | CHAR | 1 | 206 |
| SellNAVPrice | LONG | 4 | 207 |
| Reserved | CHAR | 1 | 211 |
| RtAgentCode[10] | CHAR | 10 | 212 |
| Reserved | CHAR | 1 | 222 |
| ValDecIndicator | LONG | 4 | 223 |
| Reserved | CHAR | 1 | 227 |
| CatStartTime | LONG | 4 | 228 |
| Reserved | CHAR | 1 | 232 |
| QtyDecIndicator | LONG | 4 | 233 |
| Reserved | CHAR | 1 | 237 |
| CatEndTime | LONG | 4 | 238 |
| Reserved | CHAR | 1 | 242 |
| MinPhyFreshSubscrValueLmt | DOUBLE | 8 | 243 |
| Reserved | CHAR | 1 | 251 |
| MaxPhyRedempValueLimit | DOUBLE | 8 | 252 |
| Reserved | CHAR | 1 | 260 |
| Reserved1 | LONG | 4 | 261 |
| Reserved | CHAR | 1 | 265 |
| Reserved2 | LONG | 4 | 266 |
| Reserved | CHAR | 1 | 270 |
| NavDate | LONG | 4 | 271 |
| Reserved | CHAR | 1 | 275 |
| Reserved4 | LONG | 4 | 276 |
| Reserved | CHAR | 1 | 280 |
| Reserved5 | CHAR | 1 | 281 |
| Reserved | CHAR | 1 | 282 |
| Reserved6 | CHAR | 1 | 283 |
| Reserved | CHAR | 1 | 284 |
| Reserved7 | CHAR | 1 | 285 |
| Reserved | CHAR | 1 | 286 |
| SecDepMandatory | CHAR | 1 | 287 |
| Reserved | CHAR | 1 | 288 |
| SecDividend | CHAR | 1 | 289 |
| Reserved | CHAR | 1 | 290 |
| SecAllowDep | CHAR | 1 | 291 |
| Reserved | CHAR | 1 | 292 |
| SecAllowSell | CHAR | 1 | 293 |
| Reserved | CHAR | 1 | 294 |

| | | | |
|----------------------------|--------|----|-----|
| SecModCxl | CHAR | 1 | 295 |
| Reserved | CHAR | 1 | 296 |
| SecAllowBuy | CHAR | 1 | 297 |
| Reserved | CHAR | 1 | 298 |
| MinPhyRedempValLmt | LONG | 4 | 299 |
| Reserved | CHAR | 1 | 303 |
| MinPhyRedempQtyLmt | LONG | 4 | 304 |
| Reserved | CHAR | 1 | 308 |
| Reserved14 | CHAR | 1 | 309 |
| Reserved | CHAR | 1 | 310 |
| Reserved15 | CHAR | 1 | 311 |
| Reserved | CHAR | 1 | 312 |
| Reserved16 | CHAR | 1 | 313 |
| Reserved | CHAR | 1 | 314 |
| Reserved17 | CHAR | 1 | 315 |
| Reserved | CHAR | 1 | 316 |
| Reserved18 | CHAR | 1 | 317 |
| Reserved | CHAR | 1 | 318 |
| Reserved19 | CHAR | 1 | 319 |
| Reserved | CHAR | 1 | 320 |
| Reserved20 | CHAR | 1 | 321 |
| Reserved | CHAR | 1 | 322 |
| LocalDBUpdateDateTime | LONG | 4 | 323 |
| Reserved | CHAR | 1 | 327 |
| DeleteFlag | CHAR | 1 | 328 |
| Reserved | CHAR | 1 | 329 |
| Remarks [25] | CHAR | 25 | 330 |
| Reserved | CHAR | 1 | 355 |
| SIP_Eligibility | CHAR | 1 | 356 |
| Reserved | CHAR | 1 | 357 |
| Max Phy Fresh Subs Val Lmt | DOUBLE | 8 | 358 |
| Reserved | CHAR | 1 | 366 |
| Max Phy Addl Subs Val Lmt | DOUBLE | 8 | 367 |
| Reserved | CHAR | 1 | 375 |
| Max Dep Fresh Subs Val Lmt | DOUBLE | 8 | 376 |
| Reserved | CHAR | 1 | 384 |
| Max Dep Addl Subs Val Lmt | DOUBLE | 8 | 385 |
| Reserved | CHAR | 1 | 393 |
| Min Dep Fresh Subs Val Lmt | DOUBLE | 8 | 394 |
| Reserved | CHAR | 1 | 402 |
| Min Dep Addl Subs Val Lmt | DOUBLE | 8 | 403 |
| Reserved | CHAR | 1 | 411 |
| Max Dep Red Qty Lmt | DOUBLE | 8 | 412 |
| Reserved | CHAR | 1 | 420 |
| Min Dep Red Qty Lmt | DOUBLE | 8 | 421 |
| Reserved | CHAR | 1 | 429 |

| | | | |
|---------------------------|--------|----|-----|
| Multiple_for_phy_subs_amt | DOUBLE | 8 | 430 |
| Reserved | CHAR | 1 | 438 |
| Multiple_for_dep_subs_amt | DOUBLE | 8 | 439 |
| Reserved | CHAR | 1 | 447 |
| AMC_Name[25] | CHAR | 25 | 448 |

Table 33.1 ST_SEC_ELIGIBILITY_PER_MARKET

| | | | |
|-----------------|-------------------------------|---------------|--------|
| Structure Name | ST_SEC_ELIGIBILITY_PER_MARKET | | |
| Packet Length | 5 bytes | | |
| Field Name | Data Type | Size in bytes | Offset |
| Security Status | SHORT | 2 | 0 |
| Reserved | CHAR | 1 | 2 |
| Eligibility | CHAR | 1 | 3 |
| Reserved | CHAR | 1 | 4 |

| Field Name | Description |
|---------------------------|---|
| Token | This field contains the token number of the scheme being updated. This is unique for a particular symbol-series combination. |
| SecurityInformation | This field contains the Symbol and Series of the scheme. |
| InstrumentType | Reserved for Future Use. It is always 0. |
| MaxPhyRedempQuantityLimit | This field specifies the max quantity allowed for the scheme. This is applicable for Physical Redemption orders. |
| RtSchemeCode | This field specifies the RT Scheme code of the scheme |
| AmcSchemeCode | This field specifies the AMC Scheme code of the scheme |
| SchemeDepCode | This field contains the scheme depository code. If the scheme is eligible for Depository settlement, the value will be N for NSDL only C for CDSL only B for Both NSDL/CDSL. The field will be blank for Non Depository Schemes. |
| ISIN | This field contains ISIN number of the scheme. |

| Field Name | Description |
|----------------------------|--|
| WarningPercent | This field contains the Folio Number Length applicable to a scheme. The Valid values would be 1 to 16 |
| Eligibility | The flag is set to '1' for Spot market. |
| Status | This field contains one of the following values: <ul style="list-style-type: none"> '2' - Open '3' - Suspended |
| AMCCode | This field specifies the AMC code of the scheme |
| CategoryCode | This field specifies the category code of the scheme |
| Name | This field contains the scheme name. |
| IssueRate | Reserved for Future Use. It is always 0. |
| MinPhyAddlSubscrValueLimit | This field contains the min subscription amount for additional purchase |
| BuyNAVPrice | This field specifies the subscription NAV price of the scheme |
| SellNAVPrice | This field specifies the redemption NAV price of the scheme |
| RtAgentCode | This field specifies the RT Agent code of the scheme |
| ValDecIndicator | This field specifies the decimal value applicable for the NAV price |
| CatStartTime | This field specifies the category start time |
| QtyDecIndicator | This field specifies the decimal indicator for quantity. |
| CatEndTime | This field specifies the category end time |
| MinPhyFreshSubscrValueLmt | This field contains the min subscription amount for fresh purchase |
| MaxPhyRedempValueLimit | This field specifies the max value allowed for the scheme. This is applicable for Physical Redemption orders. |
| Recorddate | This field contains the NFO End Date. This field consists either date or zero . (record_date consists in Reserved1 field of stock structure). |
| Exdate | This field contains the NFO Start Date. This field consists either date or zero . (ex_date consists in Reserved2 field of stock structure). |

| Field Name | Description |
|-----------------------------|--|
| NavDate | This field contains NavDate |
| SecDepMandatory | This field is true for a mandatory depository scheme. This field is false if a scheme is allowed only for physical transaction. |
| SecDividend | This field is 1 for a dividend fund. 1 – Dividend fund 0 – Other funds |
| SecAllowDep | This field is true if a scheme is applicable for both depository and physical transaction. This field is false if a scheme is allowed only for physical transaction. |
| SecAllowSell | If this field is 1 then only sell orders are allowed on the scheme |
| SecModCxl | If this field is 1 then only further order modifications and cancellations are allowed on the scheme |
| SecAllowBuy | If this field is 1 then only buy orders are allowed on the scheme |
| MinPhyRedempValLmt | This field contains the minimum redemption value limit specific to a scheme. This limit is applicable for both physical and depository redemption orders. The value is in terms of paise. Default value is 0 |
| MinPhyRedempQtyLmt | This field contains the minimum redemption quantity limit specific to a scheme. This limit is applicable for both physical and depository redemption orders. Default value is 0 For e.g., if the qty limit is 123.45, this field will contain the value as 12345. |
| LocalUpdateDateTime | This field contains the local database update date and time. |
| DeleteFlag | This indicates whether the security is deleted or not. • 'N' – Active 'Y' – Deleted |
| Remark | Remarks. |
| MaxPhyFreshSubscrValueLimit | This field contains the maximum physical fresh subscription value limit specific to a scheme. |
| MaxPhyAddlSubscrValueLimit | This field contains the maximum physical Additional subscription value limit specific to a scheme. |
| MaxDepFreshSubscrValueLimit | This field contains the maximum Depository fresh subscription value limit specific to a scheme. |

| Field Name | Description |
|-----------------------------|---|
| MaxDepAddlSubscrValueLimit | This field contains the maximum depository Additional subscription value limit specific to a scheme. |
| MinDepFreshSubscrValueLimit | This field contains the minimum depository fresh subscription value limit specific to a scheme. |
| MinDepAddlSubscrValueLimit | This field contains the minimum depository Additional subscription value limit specific to a scheme. |
| MaxDepRedempQtyLimit | This field contains the maximum depository redemption Quantity limit specific to a scheme. |
| MinDepRedempQtyLimit | This field contains the minimum depository redemption Quantity limit specific to a scheme. |
| PhySubscrAmountMultiple | This field contains the physical Subscription amount multiple specific to a scheme. |
| DepSubscrAmountMultiple | This field contains the depository Subscription amount multiple specific to a scheme. |
| SIPEligibility | This field specifies whether a scheme is eligible for SIP or not. The values are 'Y' – Eligible 'N' – Ineligible |
| AMCName | This field specifies the AMC Name of the scheme |

Category File Structure

Table 34 CATEGORY FILE HEADER

| Structure Name | CATEGORY FILE HEADER | | |
|-------------------|----------------------|---------------|--------|
| Packet Length | 19 bytes | | |
| Field Name | Data Type | Size in bytes | Offset |
| NEATMF [6] | CHAR | 6 | 0 |
| Reserved | CHAR | 1 | 6 |
| VersionNumber [7] | CHAR | 7 | 7 |
| Reserved | CHAR | 1 | 14 |
| DATE | LONG | 4 | 15 |

| Field Name | Description |
|---------------|---|
| NEATMF | Text describes the MF market |
| VersionNumber | Version number of the system. The version number is 1.15.00 |
| DATE | This field contains the time at which the file is generated in the system. This specifies the time at which the file is generated in seconds with reference from midnight January 1 1980 |

Table 35 CATEGORY FILE STRUCTURE

| Structure Name | Category File Structure | | |
|---|-------------------------|--------------|--------|
| Packet Length | 55 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| Header(Refer Table 34) | STRUCT | 19 | 0 |
| CategoryCode[5] | CHAR | 5 | 19 |
| Reserved | CHAR | 1 | 24 |
| CategoryName[25] | CHAR | 25 | 25 |
| Reserved | CHAR | 1 | 50 |
| LocalUpdateDateTime | LONG | 4 | 51 |

| Field Name | Description |
|---------------|---|
| NEATMF | Text describes the MF market |
| VersionNumber | Version number of the system. The version number is 1.15.00 |
| DATE | This field contains the time at which the file is generated in the system. This specifies the time at which the file is generated in seconds with reference from midnight January 1 1980 |

| Field Name | Description |
|------------|-------------|
|------------|-------------|

| | |
|---------------------|--|
| CategoryCode | This field contains the unique Category Code for each category. |
| CategoryName | This field contains the name of the category. |
| LocalUpdateDateTime | This field contains the time when the category information was changed. It is in number of seconds from January 1, 1980. |

SIP File Structure

Table 36 SIP FILE HEADER

| | | | |
|-------------------|-----------------|---------------|--------|
| Structure Name | SIP FILE HEADER | | |
| Packet Length | 19 bytes | | |
| Field Name | Data Type | Size in bytes | Offset |
| NEATMF [6] | CHAR | 6 | 0 |
| Reserved | CHAR | 1 | 6 |
| VersionNumber [7] | CHAR | 7 | 7 |
| Reserved | CHAR | 1 | 14 |
| DATE | LONG | 4 | 15 |

| Field Name | Description |
|---------------|---|
| NEATMF | Text describes the MF market |
| VersionNumber | Version number of the system. The version number is 1.15.00 |
| DATE | This field contains the time at which the file is generated in the system. This specifies the time at which the file is generated in seconds with reference from midnight January 1 1980 |

Table 37 SIP FILE STRUCTURE

| | | | |
|--|--------------------|--------------|--------|
| Structure Name | SIP FILE STRUCTURE | | |
| Packet Length | 242 bytes | | |
| Field Name | Data Type | Size in Byte | Offset |
| Header(Refer Table 36) | STRUCT | 19 | 0 |
| Token | SHORT | 2 | 19 |
| Reserved | CHAR | 1 | 21 |

| | | | |
|------------------------|--------|-----|-----|
| Symbol[10] | CHAR | 10 | 22 |
| Reserved | CHAR | 1 | 32 |
| Series[2] | CHAR | 2 | 33 |
| Reserved | CHAR | 1 | 35 |
| Frequency_Number | SHORT | 2 | 36 |
| Reserved | CHAR | 1 | 38 |
| Freq_Eligibility | CHAR | 1 | 39 |
| Reserved | CHAR | 1 | 40 |
| Periods [120] | CHAR | 120 | 41 |
| Reserved | CHAR | 1 | 161 |
| Months[12] | CHAR | 12 | 162 |
| Reserved | CHAR | 1 | 174 |
| Date_Days[31] | CHAR | 31 | 175 |
| Reserved | CHAR | 1 | 206 |
| SIP_frequency_multiple | SHORT | 2 | 207 |
| Reserved | CHAR | 1 | 209 |
| SIP Min Amount | LONG | 4 | 210 |
| Reserved | CHAR | 1 | 214 |
| SIP Max Amount | DOUBLE | 8 | 215 |
| Reserved | CHAR | 1 | 223 |
| SIP Multiple | SHORT | 2 | 224 |
| Reserved | CHAR | 1 | 226 |
| SIP_Min_total_amt | DOUBLE | 8 | 227 |
| Reserved | CHAR | 1 | 235 |
| LocalDBUpdateDateTime | LONG | 4 | 236 |
| Reserved | CHAR | 1 | 240 |
| Delete Flag | CHAR | 1 | 241 |

| Field Name | Description |
|----------------------|---|
| Token | This field contains the token number of the scheme SIP being updated. This is unique for a particular symbol-series combination. |
| Security Information | This field contains the Symbol and Series of the scheme SIP. |
| FrequencyNumber | This field contains the frequency of the SIP. The values are: 1 - Weekly 2 - Monthly 3 - Quarterly 4 - Semi Anually 5 - Anually |
| FrequencyEligibility | This field indicates whether the SIP is eligible in that particular frequency or not. Flag Value: Y - Eligible N - Ineligible |

| | |
|----------------------|--|
| Periods | <p>The various Durations in months available for the SIP.</p> <p>Values: Y - Eligible in that particular period N - Ineligible in that particular period</p> |
| Months | <p>The Various month combinations in the case of Quarterly and SemiAnually frequencies or various months available in the case of Anually frequency for the SIP.</p> <p>For Quarterly: 1 Char - J-A-J-O 2 Char - F-M-A-N 3 Char - M-J-S-D</p> <p>For Semi Anually: 1 Char - J-J 2 Char - F-A 3 Char - M-S 4 Char - A-O 5 Char - M-N 6 Char - J-D</p> <p>For Anually: 1 Char - Jan 2 Char - Feb etc upto... 12 Char - Dec</p> |
| DaysOrDates | <p>The Various Days available in the Weekly frequency or the various dates available in the case of other frequencies.</p> <p>For Weekly: 1 Char - Mon 2 Char - Tue etc upto... 5 Char Fri</p> <p>For Other Frequencies: 1 Char - 1st 2 Char - 2nd etc upto... 31 Char - 31st</p> |
| SIPFrequencyMultiple | This factor indicates the multiple of SIP frequency. |
| SIPMinimumAmount | The minimum registration amount applicable for the SIP for the corresponding frequency |

| | |
|------------------------|--|
| SIPMaximumAmount | The maximum registration amount applicable for the SIP for the corresponding frequency |
| SIPMultiple | The SIP Amount multiple applicable for the SIP for the corresponding frequency |
| SIPMinimumTotal Amount | The minimum total registration amount inclusive of all the transactions on the SIP |
| LocalUpdateDateTime | This field contains the time when the category information was changed. It is in number of seconds from January 1, 1980. |
| DeleteFlag | This field indicates that corresponding SIP frequency details are deleted in the system |

Order Entry Rules

Required values for various fields for different types of orders are given in the document attached –

1. Fresh Purchase - Physical
2. Additional Purchase - Physical
3. Depository Purchase – (Fresh / Additional)
4. Redemption - Physical
5. Redemption - Depository

1. Fresh Purchase - Physical

| Field Name | Type | Length / Format | Remarks | Fresh Purchase(First Investment) - Physical |
|-----------------|--------|-----------------|-----------------|---|
| SYMBOL | CHAR | 10 | Mandatory field | Symbol |
| SERIES | CHAR | 2 | Mandatory field | Series |
| SUSPENDED | CHAR | 1 | | Should be 'N' |
| CATEGORY_CODE | CHAR | 5 | Mandatory field | Category Code |
| AMC_CODE | CHAR | 3 | Mandatory field | AMC Code |
| AMC_SCHEME_CODE | CHAR | 10 | Mandatory field | AMC Scheme Code |
| RT_AGENT_CODE | CHAR | 10 | Mandatory field | RTA Code |
| RT_SCHEME_CODE | CHAR | 5 | Mandatory field | RTA Scheme Code |
| ORDER_NUMBER | DOUBLE | | | Field should be zero. |
| APPL_NUMBER | CHAR | 10 | Optional | Application No |

| | | | | |
|---------------|--------|--|---|--------|
| BOOK | SHORT | | Always 6 for spot market | 6 |
| BUY_SELL | SHORT | | 1-Purchase 2-Redemption | 1 |
| PURCHASE_TYPE | SHORT | | 1-Fresh Purchase 2-Additional Purchase 0-Redemption orders 3- SIP Purchase | 1 |
| AMOUNT | DOUBLE | | The amount value should not contain any decimal part. The amount value should be less than Rs 1 Crore. For Liquid funds, the amount can be greater than Rs 1Crore | Amount |

| | | | | |
|------------------|--------|---|--|-----------------------|
| QUANTITY | DOUBLE | | <p>Case1: If the value of qty decimal indicator is 0, then qty for redemption can accept maximum of 9999999999999999.</p> <p>Case2: If the value of qty decimal indicator is 1, then qty for redemption can accept maximum of 9999999999999999.9.</p> <p>Case3: If the value of qty decimal indicator is 2, then qty for redemption can accept maximum of 9999999999999999.99.</p> <p>Case4: If the value of qty decimal indicator is 3, then qty for redemption can accept maximum of 9999999999999999.999.</p> <p>If the value of qty decimal indicator is 4, then qty for redemption can accept maximum of 9999999999999999.9999.</p> | Field should be zero. |
| TOTAL_REDEMPTION | CHAR | 1 | It will always be blank | Null |

| | | | | |
|------------------------------|------|---|---|--|
| DIVIDEND_MECHANISM | CHAR | 1 | Applicable only to dividend scheme. The series of a dividend scheme would be DP - Dividend Payout DR - Dividend Reinvest. For a growth scheme, the series would be GR. The fields should be sent as P - Payout R - Reinvest or Null | For Series:DP, should be sent as P For Series:DR, should be sent as R For Other series, should be sent as null |
| ENTRY_DATE_TIME | LONG | | This field should be set to zero while sending the order entry request. | should be set to 0. |
| LAST_MODIFIED_DT_TIME | LONG | | This field should be set to zero while sending the order entry request. If the order has been modified, this field contains the time when the order was last modified. | should be set to 0. |
| ATO (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| MKT (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| ON_STOP (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| DAY (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| GTC (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| FOK (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| AON (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| MF (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| MATCHED_INDICATOR (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |

| | | | | |
|----------------------------|------|----|--|---|
| TRADED (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| MODIFIED | BIT | 1 | It will be '1'b for modified order Otherwise it will be '0'b | 1'b - If Modified '0'b - If Not Modified |
| FROZEN (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| PREOPEN_MATCH (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| ORDER_CTRL_FLAG (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| DEPOSITORY_SETTLEMENT | CHAR | 1 | It will be 'Y' if settlement is through depository for order otherwise it will be 'N' | N |
| DEP_ID | CHAR | 8 | This field should be of 8 digits. | Null |
| DEP_CLIENT_ID | CHAR | 16 | This field should be of 8 digits. | Null |
| DEP_CODE | CHAR | 8 | It will be 'NSDL/CDSL' if settlement is through depository based upon the SchemeDepCode | Null |
| FOLIO_NUMBER | CHAR | 16 | The length of Folio number field should be less than or equal to folio number length applicable for that scheme, specified in scheme master. | Null |
| MODE_OF_HOLDING | CHAR | 2 | SI - single JO - Joint AS - Anyone/Survivor | SI, JO or AS |
| CLIENT_CODE(1) | CHAR | 10 | Mandatory field | Client Code 1 |
| CLIENT_CODE(2) | CHAR | 10 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | Client Code 2 |

| | | | | |
|------------------|------|----|--|--------------------|
| CLIENT_CODE(3) | CHAR | 10 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | Client Code 3 |
| CLIENT_NAME1 | CHAR | 70 | Mandatory field | Client Name 1 |
| CLIENT_NAME2 | CHAR | 35 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | Client Name 2 |
| CLIENT_NAME3 | CHAR | 35 | If MODE_OF_HOLDING -JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | Client Name 3 |
| PAN_NUMBER(1) | CHAR | 10 | Mandatory field | PAN Number 1 |
| PAN_NUMBER(2) | CHAR | 10 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | PAN Number 2 |
| PAN_NUMBER(3) | CHAR | 10 | If MODE_OF_HOLDING -JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | PAN Number 3 |
| KYC_COMPLAINT(1) | CHAR | 1 | Mandatory Field Y N | KYC Compliant 1 |
| KYC_COMPLIANT(2) | CHAR | 1 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | KYC Compliant 2 |
| KYC_COMPLIANT(3) | CHAR | 1 | If MODE_OF_HOLDING - JO/AS , Client details 2 is | KYC Compliant 3 |

| | | | | |
|-----------------|-------|----|---|--------------------|
| | | | mandatory. Client Details 3 is optional. | |
| OCCUPATION | SHORT | | 1 - BUSINESS 2 - SERVICE 3 - PROFESSIONAL 4 - AGRICULTURE 5 - RETIRED 6 - HOUSEWIFE 7 - STUDENT 8 - OTHERS | Occupation Code |
| TAX_STATUS | SHORT | | 1 - INDIVIDUAL 2 - ON BEHALF OF MINOR 3 – HUF 4 – Corporate 5- NRE 6- NRO | Tax Status |
| ADDRESS_LINE(1) | CHAR | 40 | | Address Line 1 |
| ADDRESS_LINE(2) | CHAR | 40 | | Address Line 2 |
| ADDRESS_LINE(3) | CHAR | 40 | | Address Line 3 |
| CITY | CHAR | 35 | | City |

| | | | | |
|------------------|------|---|--|--|
| STATE | CHAR | 2 | UC-Uttranchal MP-Madhya Pradesh GOA-Goa UP-Uttar Pradesh AP-Andhra Pradesh TN-Tamil Nadu SI-Sikkim AS-Assam WB-West Bengal GU-Gujarat MA-Maharashtra HP-Himachal Pradesh MN-Manipur OR-Orissa PO-Pondichery ME-Meghalaya RA-Rajasthan PU-Punjab MI-Mizoram AN-Andaman & Nicobar NA-Nagaland TR-Tripura AR-Arunachal Pradesh BH-Bihar CH-Chandigarh HA-Haryana ND-New Delhi CG-Chattisgarh JK-Jharkhand KA-Karnataka KE-Kerala DL-DELHI JM-JAMMU & KASMIR | State |
| GENDER | CHAR | 1 | M - MALE F - FEMALE | M/F Should be blank; if the tax status is 4 (Corporate) |
| PINCODE | LONG | | | Pin Code |
| PHONE_NUMBER_OFF | CHAR | 8 | | Phone Number - office |

| | | | | |
|------------------|------|----|---|--------------------------|
| PHONE_NUMBER_RES | CHAR | 8 | | Phone Number - Residence |
| MOBILE_NUM | CHAR | 10 | | Mobile Number |
| EMAIL_ID | CHAR | 50 | | Email Id |
| BANK_NAME | CHAR | 40 | ABHYUDAYA CO-OP BANK LTD ABN AMRO BANK ABU DHABI COMMERCIAL BANK ALLAHABAD BANK ANDHRA BANK AXIS BANK BANK OF AMERICA BANK OF BAHRAIN AND KUWAIT BANK OF BARODA BANK OF CEYLON BANK OF INDIA BANK OF MAHARASHTRA BANK OF TOKYO- MITSUBISHI UFJ LTD. BARCLAYS BANK PLC BNP PARIBAS CALYON BANK CANARA BANK CATHOLIC SYRIAN BANK LTD. CENTRAL BANK OF INDIA Citibank Na CITIZENCREDIT CO- OPERATIVE BANK LTD CITY UNION BANK LTD CORPORATION BANK DBS BANK LTD DENA BANK DEUTSCHE BANK DEVELOPMENT CREDIT BANK LIMITED DOMBIVLI NAGARI SAHAKARI BANK LIMITED | Bank Name |

| | | | | |
|--|--|--|---|--|
| | | | HDFC BANK LTD. HSBC ICICI BANK LTD IDBI BANK LTD INDIAN BANK INDIAN OVERSEAS BANK INDUSIND BANK LTD ING VYSYA BANK LTD JANAKALYAN SAHAKARI BANK LTD JPMORGAN CHASE BANK N.A KAPOLE CO OP BANK KARNATAKA BANK LTD KARUR VYSYA BANK KOTAK MAHINDRA BANK KOTAK MAHINDRA BANK MAHANAGAR CO-OP BANK LTD MAHARASHTRA STATE CO OPERATIVE BANK MASHREQBANK PSC NEW INDIA CO- OPERATIVE BANK LTD. NKGSB CO-OP BANK LTD NUTAN NAGARIK SAHAKARI BANK LTD OMAN INTERNATIONAL BANK SAOG ORIENTAL BANK OF COMMERCE PARSIK JANATA SAHAKARI BANK LTD PUNJAB AND MAHARASHTRA CO- OP BANK LTD. PUNJAB AND SIND BANK PUNJAB NATIONAL BANK | |
|--|--|--|---|--|

| | | | | |
|--|--|--|--|--|
| | | | RESERVE BANK OF INDIA SHINHAN BANK SOCIETE GENERALE SOUTH INDIAN BANK STANDARD CHARTERED BANK STATE BANK OF BIKANER AND JAIPUR STATE BANK OF HYDERABAD STATE BANK OF INDIA STATE BANK OF INDORE STATE BANK OF MAURITIUS LTD STATE BANK OF MYSORE STATE BANK OF PATIALA STATE BANK OF TRAVANCORE SYNDICATE BANK TAMILNAD MERCANTILE BANK LTD THE AHMEDABAD MERCANTILE CO- OPERATIVE BANK LTD. THE BANK OF NOVA SCOTIA THE BANK OF RAJASTHAN LTD THE BHARAT CO- OPERATIVE BANK (MUMBAI) LTD THE COSMOS CO- OPERATIVE BANK LTD. THE DHANALAKSHMI BANK LTD THE FEDERAL BANK LTD THE GREATER BOMBAY CO-OP. | |
|--|--|--|--|--|

| | | | | |
|-----------------|------|----|---|------------------------|
| | | | BANK LTD THE JAMMU AND KASHMIR BANK LTD THE KALUPUR COMMERCIAL CO. OP. BANK LTD. THE KALYAN JANATA SAHAKARI BANK LTD. THE LAKSHMI VILAS BANK LTD THE RATNAKAR BANK LTD THE SARASWAT CO- OPERATIVE BANK LTD THE SHAMRAO VITHAL CO- OPERATIVE BANK LIMITED THE TAMILNADU STATE APEX COOPERATIVE BANK LIMITED THE THANE JANATA SAHAKARI BANK LTD UCO BANK UNION BANK OF INDIA UNITED BANK OF INDIA VIJAYA BANK YES BANK LTD OTHERS. If OTHERS is selected, the other bank name entered should be captured in this field. | |
| BANK_BRANCH | CHAR | 40 | | Bank Branch |
| BANK_CITY | CHAR | 35 | | Bank City |
| BANK_ACC_NUMBER | CHAR | 40 | | Bank Account Number |
| ECHO_BACK | CHAR | 4 | This field is used for NNF users. | Echo Back |

| | | | | |
|------------------------------|--------|----|---|--|
| NEFT_CODE | CHAR | 11 | Depends on Payout mechanism. If Payout mechanism is 1 then value - Null, if 2 then value - Null, if 3 then value - MICR CODE, if 4 then value - NEFT CODE, If 5 then value - RTGS CODE | NULL/ MICR CODE/ NEFT CODE/ RTGS CODE |
| BANK_ACC_TYPE | CHAR | 10 | SB - Savings A/c CB - Current A/c NE – for tax status 'NRE' only NO – for tax status 'NRO' only | SB/ CB/ NE/ NO |
| STATEMENT_COMMUNICATION_MODE | CHAR | 1 | Values: 'P' - Physical 'E' - Email | P or E |
| RESERVED | CHAR | 5 | Reserved for future use | Null |
| PAYOUT_MECHANISM | SHORT | | 1 - cheque 2 - direct credit 3 - ECS 4 - NEFT 5 - RTGS | Payout Mechanism |
| DATE_OF_BIRTH | CHAR | 8 | If tax status - 2 this field is mandatory | Date of Birth |
| GUARDIAN_NAME | CHAR | 35 | If tax status - 2 this field is mandatory | Guardian Name |
| GUARDIAN_PAN_NUMBER | CHAR | 10 | If tax status - 2 this field is mandatory | Guardian PAN Number |
| NOMINEE_NAME | CHAR | 40 | | Nominee Name if available |
| NOMINEE_RELATION | CHAR | 40 | | Nominee Relation if available |
| FILLER3 | CHAR | 7 | It is for future purpose | Null |
| NNF_USER_INFO | DOUBLE | | NNF user info field | nnf user info |
| BRANCH | SHORT | | Mandatory field | Branch |
| USER | SHORT | | Mandatory field | User |
| BROKER | CHAR | 5 | Mandatory field | Broker |

| | | | | |
|-------------------------|----------|----|---|---------------------------------------|
| SUB_BROKER_CODE | CHAR | 15 | When it is blank, the Primary ARN of the broker will be populated. When the ARN number is sent, it will be validated against the secondary ARN master. | Blank or ARN number can be populated |
| SIP_Registration_number | Char(15) | 15 | Should be blank for normal orders. For SIP Orders, the value will be blank during order entry. | |
| SIP_flag | char(1) | 1 | To specify the SIP REGuistartions | 'S' - SIP Order 'N' – Normal order |
| SIP_tranche_number | bin(31) | 4 | Should be zero for normal orders. For SIP, the value will be Zero during SIP registration and For modification of SIP registration the 'SIP Tranche Number' received should have value that was present in response packet of sip registration. For same day SIP registration cancellation 'SIP Tranche Number' received should have value that was present in the response packet of registration of sip. For subsequent sip tranche order cancellation the 'SIP Tranche Number' received should have value that was present in order response packet. | |

| | | | | |
|-------------|----------|----|-----------------|--|
| Char_filler | char(24) | 24 | Should be blank | |
|-------------|----------|----|-----------------|--|

2. Additional Purchase - Physical

| Field Name | Type | Length / Format | Remarks | Additional Purchase (Sebsequent Investments) - Physical |
|-----------------|--------|-----------------|--|---|
| SYMBOL | CHAR | 10 | Mandatory field | Symbol |
| SERIES | CHAR | 2 | Mandatory field | Series |
| SUSPENDED | CHAR | 1 | | Should be 'N' |
| CATEGORY_CODE | CHAR | 5 | Mandatory field | Category Code |
| AMC_CODE | CHAR | 3 | Mandatory field | AMC Code |
| AMC_SCHEME_CODE | CHAR | 10 | Mandatory field | AMC Scheme Code |
| RT_AGENT_CODE | CHAR | 10 | Mandatory field | RTA Code |
| RT_SCHEME_CODE | CHAR | 5 | Mandatory field | RTA Scheme Code |
| ORDER_NUMBER | DOUBLE | | | Field should be zero. |
| APPL_NUMBER | CHAR | 10 | Optional | Application No |
| BOOK | SHORT | | Always 6 for spot market | 6 |
| BUY_SELL | SHORT | | 1-Purchase 2-Redemption | 1 |
| PURCHASE_TYPE | SHORT | | 1-Fresh Purchase 2-Additional Purchase 0-Redemption orders 3- SIP Purchase | 2 |
| AMOUNT | DOUBLE | | The amount value should not contain any decimal part. The amount value should be less than Rs 1 Crore. For liquid funds the amount can be greater than Rs 1 Crore. | Amount |

| | | | | |
|------------------|--------|---|--|-----------------------|
| QUANTITY | DOUBLE | | <p>Case1: If the value of qty decimal indicator is 0, then qty for redemption can accept maximum of 9999999999999999.</p> <p>Case2: If the value of qty decimal indicator is 1, then qty for redemption can accept maximum of 9999999999999999.9.</p> <p>Case3: If the value of qty decimal indicator is 2, then qty for redemption can accept maximum of 9999999999999999.99.</p> <p>Case4: If the value of qty decimal indicator is 3, then qty for redemption can accept maximum of 9999999999999999.999.</p> <p>If the value of qty decimal indicator is 4, then qty for redemption can accept maximum of 9999999999999999.9999.</p> | Field should be zero. |
| TOTAL_REDEMPTION | CHAR | 1 | It will always be blank | Null |

| | | | | |
|------------------------------|------|---|--|--|
| DIVIDEND_MECHANISM | CHAR | 1 | Applicable only to dividend scheme. The series of a dividend scheme would be DP - Dividend Payout DR - Dividend Reinvest. For a growth scheme, the series would be GR. The fields should be sent as P - Payout R - Reinvest or Null | For Series:DP, should be sent as P For Series:DR, should be sent as R For Other series, should be sent as null |
| ENTRY_DATE_TIME | LONG | | This field should be set to zero while sending the order entry request. | should be set to 0. |
| LAST_MODIFIED_DT_TIME | LONG | | This field should be set to zero while sending the order entry request. If the order has been modified, this field contains the time when the order was last modified. | should be set to 0. |
| ATO (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| MKT (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| ON_STOP (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| DAY (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| GTC (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| FOK (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| AON (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| MF (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| MATCHED_INDICATOR (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |

| | | | | |
|----------------------------|------|----|--|---|
| TRADED (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| MODIFIED | BIT | 1 | It will be '1'b for modified order Otherwise it will be '0'b | 1'b - If Modified '0'b - If Not Modified |
| FROZEN (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| PREOPEN_MATCH (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| ORDER_CTRL_FLAG (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| DEPOSITORY_SETTLEMENT | CHAR | 1 | It will be 'Y' if settlement is through depository for order otherwise it will be 'N' | N |
| DEP_ID | CHAR | 8 | This field should be of 8 digits. | Null |
| DEP_CLIENT_ID | CHAR | 16 | This field should be of 8 digits. | Null |
| DEP_CODE | CHAR | 8 | It will be 'NSDL/ <u>CDSL</u> ' if settlement is through depository based upon the SchemeDepCode | Null |
| FOLIO_NUMBER | CHAR | 16 | The length of Folio number field should be less than or equal to folio number length applicable for that scheme, specified in scheme master. | Folio No. |
| MODE_OF_HOLDING | CHAR | 2 | SI - single JO - Joint AS - Anyone/Survivor | SI, JO or AS |
| CLIENT_CODE(1) | CHAR | 10 | Mandatory field | Client Code 1 |
| CLIENT_CODE(2) | CHAR | 10 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | Client Code 2 |
| CLIENT_CODE(3) | CHAR | 10 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | Client Code 3 |
| CLIENT_NAME1 | CHAR | 70 | Mandatory field | Client Name 1 |

| | | | | |
|------------------|-------|----|---|--------------------|
| CLIENT_NAME2 | CHAR | 35 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | Client Name 2 |
| CLIENT_NAME3 | CHAR | 35 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | Client Name 3 |
| PAN_NUMBER(1) | CHAR | 10 | Mandatory field | PAN Number 1 |
| PAN_NUMBER(2) | CHAR | 10 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | PAN Number 2 |
| PAN_NUMBER(3) | CHAR | 10 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | PAN Number 3 |
| KYC_COMPLAINT(1) | CHAR | 1 | Mandatory Field Y N | KYC Compliant 1 |
| KYC_COMPLIANT(2) | CHAR | 1 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | KYC Compliant 2 |
| KYC_COMPLIANT(3) | CHAR | 1 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | KYC Compliant 3 |
| OCCUPATION | SHORT | | 1 - BUSINESS 2 - SERVICE 3 - PROFESSIONAL 4 - AGRICULTURE 5 - RETIRED 6 - HOUSEWIFE 7 - STUDENT 8 - OTHERS | Occupation Code |
| TAX_STATUS | SHORT | | 1 - INDIVIDUAL 2 - ON BEHALF OF MINOR 3 – HUF | Tax Status |

| | | | | |
|-----------------|------|----|---|---|
| | | | 4 – Corporate 5 – NRE 6 - NRO | |
| ADDRESS_LINE(1) | CHAR | 40 | | Null |
| ADDRESS_LINE(2) | CHAR | 40 | | Null |
| ADDRESS_LINE(3) | CHAR | 40 | | Null |
| CITY | CHAR | 35 | | Null |
| STATE | CHAR | 2 | UC-Uttranchal MP-Madhya Pradesh GOA-Goa UP-Uttar Pradesh AP-Andhra Pradesh TN-Tamil Nadu SI-Sikkim AS-Assam WB-West Bengal GU-Gujarat MA-Maharashtra HP-Himachal Pradesh MN-Manipur OR-Orissa PO-Pondichery ME-Meghalaya RA-Rajasthan PU-Punjab MI-Mizoram AN-Andaman & Nicobar NA-Nagaland TR-Tripura AR-Arunachal Pradesh BH-Bihar CH-Chandigarh HA-Haryana ND-New Delhi CG-Chattisgarh JK-Jharkhand KA-Karnataka KE-Kerala DL-DELHI JM-JAMMU & KASHMIR | Null |
| GENDER | CHAR | 1 | M - MALE F - FEMALE | M/F Should be blank; if the tax status is 4 (Corporate) |

| | | | | |
|------------------|------|----|--|-----------------------|
| PINCODE | LONG | | | Field should be zero. |
| PHONE_NUMBER_OFF | CHAR | 8 | | Null |
| PHONE_NUMBER_RES | CHAR | 8 | | Null |
| MOBILE_NUM | CHAR | 10 | | Null |
| EMAIL_ID | CHAR | 50 | | Null |
| BANK_NAME | CHAR | 40 | ABHYUDAYA CO-OP BANK LTD ABN AMRO BANK ABU DHABI COMMERCIAL BANK ALLAHABAD BANK ANDHRA BANK AXIS BANK BANK OF AMERICA BANK OF BAHRAIN AND KUWAIT BANK OF BARODA BANK OF CEYLON BANK OF INDIA BANK OF MAHARASHTRA BANK OF TOKYO- MITSUBISHI UFJ LTD. BARCLAYS BANK PLC BNP PARIBAS CALYON BANK CANARA BANK CATHOLIC SYRIAN BANK LTD. CENTRAL BANK OF INDIA Citibank Na CITIZENCREDIT CO- OPERATIVE BANK LTD CITY UNION BANK LTD CORPORATION BANK DBS BANK LTD DENA BANK DEUTSCHE BANK DEVELOPMENT CREDIT BANK LIMITED DOMBIVLI NAGARI SAHAKARI BANK LIMITED HDFC BANK LTD. HSBC ICICI BANK LTD | Null |

| | | | | |
|--|--|--|---|--|
| | | | IDBI BANK LTD INDIAN BANK INDIAN OVERSEAS BANK INDUSIND BANK LTD ING VYSYA BANK LTD JANAKALYAN SAHAKARI BANK LTD JPMORGAN CHASE BANK N.A KAPOLE CO OP BANK KARNATAKA BANK LTD KARUR VYSYA BANK KOTAK MAHINDRA BANK KOTAK MAHINDRA BANK MAHANAGAR CO-OP BANK LTD MAHARASHTRA STATE CO OPERATIVE BANK MASHREQBANK PSC NEW INDIA CO- OPERATIVE BANK LTD. NKGSB CO-OP BANK LTD NUTAN NAGARIK SAHAKARI BANK LTD OMAN INTERNATIONAL BANK SAOG ORIENTAL BANK OF COMMERCE PARSIK JANATA SAHAKARI BANK LTD PUNJAB AND MAHARASHTRA CO- OP BANK LTD. PUNJAB AND SIND BANK PUNJAB NATIONAL BANK RESERVE BANK OF INDIA SHINHAN BANK | |
|--|--|--|---|--|

| | | | | |
|--|--|--|--|--|
| | | | SOCIETE GENERALE SOUTH INDIAN BANK STANDARD CHARTERED BANK STATE BANK OF BIKANER AND JAIPUR STATE BANK OF HYDERABAD STATE BANK OF INDIA STATE BANK OF INDORE STATE BANK OF MAURITIUS LTD STATE BANK OF MYSORE STATE BANK OF PATIALA STATE BANK OF TRAVANCORE SYNDICATE BANK TAMILNAD MERCANTILE BANK LTD THE AHMEDABAD MERCANTILE CO- OPERATIVE BANK LTD. THE BANK OF NOVA SCOTIA THE BANK OF RAJASTHAN LTD THE BHARAT CO- OPERATIVE BANK (MUMBAI) LTD THE COSMOS CO- OPERATIVE BANK LTD. THE DHANALAKSHMI BANK LTD THE FEDERAL BANK LTD THE GREATER BOMBAY CO-OP. BANK LTD THE JAMMU AND KASHMIR BANK LTD THE KALUPUR COMMERCIAL CO. OP. BANK LTD. THE KALYAN JANATA | |
|--|--|--|--|--|

| | | | | |
|-----------------|------|----|--|-----------|
| | | | SAHAKARI BANK LTD. THE LAKSHMI VILAS BANK LTD THE RATNAKAR BANK LTD THE SARASWAT CO- OPERATIVE BANK LTD THE SHAMRAO VITHAL CO- OPERATIVE BANK LIMITED THE TAMILNADU STATE APEX COOPERATIVE BANK LIMITED THE THANE JANATA SAHAKARI BANK LTD UCO BANK UNION BANK OF INDIA UNITED BANK OF INDIA VIJAYA BANK YES BANK LTD OTHERS. If OTHERS is selected, the other bank name entered should be captured in this field. | |
| BANK_BRANCH | CHAR | 40 | | Null |
| BANK_CITY | CHAR | 35 | | Null |
| BANK_ACC_NUMBER | CHAR | 40 | | Null |
| ECHO_BACK | CHAR | 4 | This field is used for NNF users. | Echo Back |
| NEFT_CODE | CHAR | 11 | Depends on Payout mechanism. If Payout mechanism is 1 then value - Null, if 2 then value - Null, if 3 then value - MICR CODE, if 4 then value - NEFT CODE, If 5 then value - RTGS CODE | Null |

| | | | | |
|------------------------------|----------|----|--|---------------------------------------|
| BANK_ACC_TYPE | CHAR | 10 | SB - Savings A/c CB - Current A/c NE – for tax status 'NRE' only NO – for tax status 'NRO' only | Null |
| STATEMENT_COMMUNICATION_MODE | CHAR | 1 | Values: 'P' - Physical 'E' - Email | Null |
| RESERVED | CHAR | 5 | Reserved for future use | Null |
| PAYOUT_MECHANISM | SHORT | | 1 - cheque 2 - direct credit 3 - ECS 4 - NEFT 5 - RTGS | Field should be zero. |
| DATE_OF_BIRTH | CHAR | 8 | If tax status - 2 this field is mandatory | Date of Birth |
| GUARDIAN_NAME | CHAR | 35 | If tax status - 2 this field is mandatory | Guardian Name |
| GUARDIAN_PAN_NUMBER | CHAR | 10 | If tax status - 2 this field is mandatory | Guardian PAN Number |
| NOMINEE_NAME | CHAR | 40 | | Null |
| NOMINEE_RELATION | CHAR | 40 | | Null |
| FILLER3 | CHAR | 7 | It is for future purpose | Null |
| NNF_USER_INFO | DOUBLE | | NNF user info field | nnf user info |
| BRANCH | SHORT | | Mandatory field | Branch |
| USER | SHORT | | Mandatory field | User |
| BROKER | CHAR | 5 | Mandatory field | Broker |
| SUB_BROKER_CODE | CHAR | 15 | When it is blank, the Primary ARN of the broker will be populated. When the ARN number is sent, it will be validated against the secondary ARN master. | Blank or ARN number can be populated |
| SIP_Registration_number | Char(15) | 15 | Should be blank for normal orders. For SIP Orders, the value will be blank during order entry. | |
| SIP_flag | char(1) | 1 | To specify the SIP Registrations | 'S' - SIP Order 'N' – Normal order |

| | | | | |
|--------------------|----------|----|---|--|
| SIP_tranche_number | bin(31) | 4 | Should be zero for normal orders. For SIP Orders, the value will be zero during order entry. | |
| Char_filler | char(24) | 24 | Should be blank | |

3. Depository Purchase

| Field Name | Type | Length / Format | Remarks | Depository Purchase (Both Fresh and Additional) |
|-----------------|--------|-----------------|---|---|
| SYMBOL | CHAR | 10 | Mandatory field | Symbol |
| SERIES | CHAR | 2 | Mandatory field | Series |
| SUSPENDED | CHAR | 1 | | Should be 'N' |
| CATEGORY_CODE | CHAR | 5 | Mandatory field | Category Code |
| AMC_CODE | CHAR | 3 | Mandatory field | AMC Code |
| AMC_SCHEME_CODE | CHAR | 10 | Mandatory field | AMC Scheme Code |
| RT_AGENT_CODE | CHAR | 10 | Mandatory field | RTA Code |
| RT_SCHEME_CODE | CHAR | 5 | Mandatory field | RTA Scheme Code |
| ORDER_NUMBER | DOUBLE | | | Field should be zero. |
| APPL_NUMBER | CHAR | 10 | Optional | Application No |
| BOOK | SHORT | | Always 6 for spot market | 6 |
| BUY_SELL | SHORT | | 1-Purchase 2-Redemption | 1 |
| PURCHASE_TYPE | SHORT | | 1-Fresh Purchase 2-Additional Purchase 0-Redemption orders 3- SIP Purchase | 1 – Fresh Purchase 2 - Additional Purchase |
| AMOUNT | DOUBLE | | The amount value should not contain any decimal part. The amount value should be less than Rs 1 Crore. For liquid funds the amount can be greater than Rs 1 Crore. | Amount |

| | | | | |
|------------------|--------|---|--|-----------------------|
| QUANTITY | DOUBLE | | <p>Case1: If the value of qty decimal indicator is 0, then qty for redemption can accept maximum of 9999999999999999.</p> <p>Case2: If the value of qty decimal indicator is 1, then qty for redemption can accept maximum of 9999999999999999.9.</p> <p>Case3: If the value of qty decimal indicator is 2, then qty for redemption can accept maximum of 9999999999999999.99.</p> <p>Case4: If the value of qty decimal indicator is 3, then qty for redemption can accept maximum of 9999999999999999.999.</p> <p>If the value of qty decimal indicator is 4, then qty for redemption can accept maximum of 9999999999999999.9999.</p> | Field should be zero. |
| TOTAL_REDEMPTION | CHAR | 1 | It will always be blank | Null |

| | | | | |
|------------------------------|------|---|--|---|
| DIVIDEND_MECHANISM | CHAR | 1 | Applicable only to dividend scheme. The series of a dividend scheme would be DP - Dividend Payout DR - Dividend Reinvest. For a growth scheme, the series would be GR. The fields should be sent as P - Payout R - Reinvest or Null | For Series:DP, should be sent as P For Series:DR, should be sent as R For Other series, should be sent as null |
| ENTRY_DATE_TIME | LONG | | This field should be set to zero while sending the order entry request. | should be set to 0. |
| LAST_MODIFIED_DT_TIME | LONG | | This field should be set to zero while sending the order entry request. If the order has been modified, this field contains the time when the order was last modified. | should be set to 0. |
| ATO (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| MKT (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| ON_STOP (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| DAY (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| GTC (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| FOK (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| AON (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| MF (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| MATCHED_INDICATOR (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |

| | | | | |
|----------------------------|------|----|--|---|
| TRADED (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| MODIFIED | BIT | 1 | It will be '1'b for modified order Otherwise it will be '0'b | 1'b - If Modified '0'b - If Not Modified |
| FROZEN (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| PREOPEN_MATCH (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| ORDER_CTRL_FLAG (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| DEPOSITORY_SETTLEMENT | CHAR | 1 | It will be 'Y' if settlement is through depository for order otherwise it will be 'N' | Y |
| DEP_ID | CHAR | 8 | This field should be of 8 digits. | DP Id |
| DEP_CLIENT_ID | CHAR | 16 | This field should be of 8 digits. | Client Id |
| DEP_CODE | CHAR | 8 | It will be 'NSDL/CDSL' if settlement is through depository based upon the SchemeDepCode | Field should be sent as ' NSDL / CDSL based upon the SchemeDepCode. |
| FOLIO_NUMBER | CHAR | 16 | The length of Folio number field should be less than or equal to folio number length applicable for that scheme, specified in scheme master. | Null |
| MODE_OF_HOLDING | CHAR | 2 | SI - single JO - Joint AS - Anyone/Survivor | SI, JO or AS |
| CLIENT_CODE(1) | CHAR | 10 | Mandatory field | The CD code has to be sent |
| CLIENT_CODE(2) | CHAR | 10 | If MODE_OF_HOLDING - JO/AS , Client details 2 (Name and PAN number) is mandatory. Client Details 3 is optional. | Should be null |

| | | | | |
|------------------|------|----|---|--|
| CLIENT_CODE(3) | CHAR | 10 | If MODE_OF_HOLDING - JO/AS , Client details 2 (Name and PAN number) is mandatory. Client Details 3 is optional. | Should be null |
| CLIENT_NAME1 | CHAR | 70 | Mandatory field | Client Name 1 |
| CLIENT_NAME2 | CHAR | 35 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | Client Name 2 |
| CLIENT_NAME3 | CHAR | 35 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | Client Name 3 |
| PAN_NUMBER(1) | CHAR | 10 | Mandatory field | PAN Number 1 |
| PAN_NUMBER(2) | CHAR | 10 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | PAN Number 2 |
| PAN_NUMBER(3) | CHAR | 10 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | PAN Number 3 |
| KYC_COMPLAINT(1) | CHAR | 1 | Mandatory Field Y | KYC Compliant 1 should be sent as Y. |
| KYC_COMPLIANT(2) | CHAR | 1 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | KYC Compliant 2 should be sent as Y. |
| KYC_COMPLIANT(3) | CHAR | 1 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | KYC Compliant 3 should be sent as Y. |

| | | | | |
|-----------------|-------|----|---|-----------------|
| OCCUPATION | SHORT | | 1 - BUSINESS 2 - SERVICE 3 - PROFESSIONAL 4 - AGRICULTURE 5 - RETIRED 6 - HOUSEWIFE 7 - STUDENT 8 - OTHERS | Occupation Code |
| TAX_STATUS | SHORT | | 1 - INDIVIDUAL 2 - ON BEHALF OF MINOR 3 – HUF 4 – Corporate 5- NRE 6 – NRO | Tax Status |
| ADDRESS_LINE(1) | CHAR | 40 | | Null |
| ADDRESS_LINE(2) | CHAR | 40 | | Null |
| ADDRESS_LINE(3) | CHAR | 40 | | Null |
| CITY | CHAR | 35 | | Null |

| | | | | |
|------------------|------|----|--|--|
| STATE | CHAR | 2 | UC-Uttranchal MP-Madhya Pradesh GOA-Goa UP-Uttar Pradesh AP-Andhra Pradesh TN-Tamil Nadu SI-Sikkim AS-Assam WB-West Bengal GU-Gujarat MA-Maharashtra HP-Himachal Pradesh MN-Manipur OR-Orissa PO-Pondichery ME-Meghalaya RA-Rajasthan PU-Punjab MI-Mizoram AN-Andaman & Nicobar NA-Nagaland TR-Tripura AR-Arunachal Pradesh BH-Bihar CH-Chandigarh HA-Haryana ND-New Delhi CG-Chhattisgarh JK-Jharkhand KA-Karnataka KE-Kerala DL-DELHI JM-JAMMU & KASMIR | Null |
| GENDER | CHAR | 1 | M - MALE F - FEMALE | M/F Should be blank; if the tax status is 4 (Corporate) |
| PINCODE | LONG | | | Field should be zero. |
| PHONE_NUMBER_OFF | CHAR | 8 | | Null |
| PHONE_NUMBER_RES | CHAR | 8 | | Null |
| MOBILE_NUM | CHAR | 10 | | Null |
| EMAIL_ID | CHAR | 50 | | Null |

| | | | | |
|-----------|------|----|--|------|
| BANK_NAME | CHAR | 40 | ABHYUDAYA CO-OP BANK LTD ABN AMRO BANK ABU DHABI COMMERCIAL BANK ALLAHABAD BANK ANDHRA BANK AXIS BANK BANK OF AMERICA BANK OF BAHRAIN AND KUWAIT BANK OF BARODA BANK OF CEYLON BANK OF INDIA BANK OF MAHARASHTRA BANK OF TOKYO- MITSUBISHI UFJ LTD. BARCLAYS BANK PLC BNP PARIBAS CALYON BANK CANARA BANK CATHOLIC SYRIAN BANK LTD. CENTRAL BANK OF INDIA Citibank Na CITIZENCREDIT CO- OPERATIVE BANK LTD CITY UNION BANK LTD CORPORATION BANK DBS BANK LTD DENA BANK DEUTSCHE BANK DEVELOPMENT CREDIT BANK LIMITED DOMBIVLI NAGARI SAHAKARI BANK LIMITED HDFC BANK LTD. HSBC ICICI BANK LTD IDBI BANK LTD INDIAN BANK INDIAN OVERSEAS BANK INDUSIND BANK LTD ING VYSYA BANK LTD | Null |
|-----------|------|----|--|------|

| | | | | |
|--|--|--|---|--|
| | | | JANAKALYAN SAHAKARI BANK LTD JPMORGAN CHASE BANK N.A KAPOLE CO OP BANK KARNATAKA BANK LTD KARUR VYSYA BANK KOTAK MAHINDRA BANK KOTAK MAHINDRA BANK MAHANAGAR CO-OP BANK LTD MAHARASHTRA STATE CO OPERATIVE BANK MASHREQBANK PSC NEW INDIA CO- OPERATIVE BANK LTD. NKGSB CO-OP BANK LTD NUTAN NAGARIK SAHAKARI BANK LTD OMAN INTERNATIONAL BANK SAOG ORIENTAL BANK OF COMMERCE PARSIK JANATA SAHAKARI BANK LTD PUNJAB AND MAHARASHTRA CO- OP BANK LTD. PUNJAB AND SIND BANK PUNJAB NATIONAL BANK RESERVE BANK OF INDIA SHINHAN BANK SOCIETE GENERALE SOUTH INDIAN BANK STANDARD CHARTERED BANK STATE BANK OF BIKANER AND JAIPUR | |
|--|--|--|---|--|

| | | | | |
|--|--|--|---|--|
| | | | STATE BANK OF HYDERABAD STATE BANK OF INDIA STATE BANK OF INDORE STATE BANK OF MAURITIUS LTD STATE BANK OF MYSORE STATE BANK OF PATIALA STATE BANK OF TRAVANCORE SYNDICATE BANK TAMILNAD MERCANTILE BANK LTD THE AHMEDABAD MERCANTILE CO- OPERATIVE BANK LTD. THE BANK OF NOVA SCOTIA THE BANK OF RAJASTHAN LTD THE BHARAT CO- OPERATIVE BANK (MUMBAI) LTD THE COSMOS CO- OPERATIVE BANK LTD. THE DHANALAKSHMI BANK LTD THE FEDERAL BANK LTD THE GREATER BOMBAY CO-OP. BANK LTD THE JAMMU AND KASHMIR BANK LTD THE KALUPUR COMMERCIAL CO. OP. BANK LTD. THE KALYAN JANATA SAHAKARI BANK LTD. THE LAKSHMI VILAS BANK LTD THE RATNAKAR BANK LTD THE SARASWAT CO- | |
|--|--|--|---|--|

| | | | | |
|-----------------|------|----|--|-----------|
| | | | <p>OPERATIVE BANK LTD THE SHAMRAO VITHAL CO- OPERATIVE BANK LIMITED THE TAMILNADU STATE APEX COOPERATIVE BANK LIMITED THE THANE JANATA SAHAKARI BANK LTD UCO BANK UNION BANK OF INDIA UNITED BANK OF INDIA VIJAYA BANK YES BANK LTD OTHERS. If OTHERS is selected, the other bank name entered should be captured in this field.</p> | |
| BANK_BRANCH | CHAR | 40 | | Null |
| BANK_CITY | CHAR | 35 | | Null |
| BANK_ACC_NUMBER | CHAR | 40 | | Null |
| ECHO_BACK | CHAR | 4 | This field is used for NNF users. | Echo Back |
| NEFT_CODE | CHAR | 11 | <p>Depends on Payout mechanism. If Payout mechanism is 1 then value - Null, if 2 then value - Null, if 3 then value - MICR CODE, if 4 then value - NEFT CODE, If 5 then value - RTGS CODE</p> | Null |

| | | | | |
|------------------------------|----------|----|--|---------------------------------------|
| BANK_ACC_TYPE | CHAR | 10 | SB - Savings A/c CB - Current A/c NE – for tax status 'NRE' only NO – for tax status 'NRO' only | Null |
| STATEMENT_COMMUNICATION_MODE | CHAR | 1 | Values: 'P' - Physical 'E' - Email | Null |
| RESERVED | CHAR | 5 | Reserved for future use | Null |
| PAYOUT_MECHANISM | SHORT | | 1 - cheque 2 - direct credit 3 - ECS 4 - NEFT 5 - RTGS | Field should be zero. |
| DATE_OF_BIRTH | CHAR | 8 | If tax status - 2 this field is mandatory | Date of Birth |
| GUARDIAN_NAME | CHAR | 35 | If tax status - 2 this field is mandatory | Guardian Name |
| GUARDIAN_PAN_NUMBER | CHAR | 10 | If tax status - 2 this field is mandatory | Guardian PAN Number |
| NOMINEE_NAME | CHAR | 40 | | Null |
| NOMINEE_RELATION | CHAR | 40 | | Null |
| FILLER3 | CHAR | 7 | It is for future purpose | Null |
| NNF_USER_INFO | DOUBLE | | NNF user info field | nnf user info |
| BRANCH | SHORT | | Mandatory field | Branch |
| USER | SHORT | | Mandatory field | User |
| BROKER | CHAR | 5 | Mandatory field | Broker |
| SUB_BROKER_CODE | CHAR | 15 | When it is blank, the Primary ARN of the broker will be populated. When the ARN number is sent, it will be validated against the secondary ARN master. | Blank or ARN number can be populated |
| SIP_Registration_number | Char(15) | 15 | Should be blank for normal orders. For SIP Orders, the value will be blank during order entry. | |
| SIP_flag | char(1) | 1 | To specify the SIP Registrations | 'S' - SIP Order 'N' – Normal order |

| | | | |
|--------------------|----------|----|--|
| SIP_tranche_number | bin(31) | 4 | Should be zero for normal orders. For SIP, the value will be zero during SIP registration. For modification of SIP registration the 'SIP Tranche Number' received should have value that was present in response packet of sip registration. For same day SIP registration cancellation 'SIP Tranche Number' received should have value that was present in the response packet of registration of sip. For subsequent sip tranche order cancellation the 'SIP Tranche Number' received should have value that was present in order response packet. |
| Char_filler | char(24) | 24 | Should be blank |

4. Redemption - Physical

| Field Name | Type | Length / Format | Remarks | Redemption (Physical) |
|---------------|------|-----------------|-----------------|-----------------------|
| SYMBOL | CHAR | 10 | Mandatory field | Symbol |
| SERIES | CHAR | 2 | Mandatory field | Series |
| SUSPENDED | CHAR | 1 | | Should be 'N' |
| CATEGORY_CODE | CHAR | 5 | Mandatory field | Category Code |
| AMC_CODE | CHAR | 3 | Mandatory field | AMC Code |

| | | | | |
|-----------------|--------|----|---|---|
| AMC_SCHEME_CODE | CHAR | 10 | Mandatory field | AMC Scheme Code |
| RT_AGENT_CODE | CHAR | 10 | Mandatory field | RTA Code |
| RT_SCHEME_CODE | CHAR | 5 | Mandatory field | RTA Scheme Code |
| ORDER_NUMBER | DOUBLE | | | Field should be zero. |
| APPL_NUMBER | CHAR | 10 | Optional | Application No |
| BOOK | SHORT | | Always 6 for spot market | 6 |
| BUY_SELL | SHORT | | 1-Purchase 2-Redemption | 2 |
| PURCHASE_TYPE | SHORT | | 1-Fresh Purchase 2-Additional Purchase 0-Redemption orders 3- SIP Purchase | 0 |
| AMOUNT | DOUBLE | | The amount value should not contain any decimal part. The amount value should be less than Rs 1 Crore. The amount should be less than the scheme physical redemption value limit. For liquid funds the amount can be greater than Rs 1 Crore. | For Physical Redemption either quantity or Amount Populated. (If redemption is through amount, then amount will be populated otherwise field should be zero). |

| | | | | |
|------------------|--------|---|--|--|
| QUANTITY | DOUBLE | | <p>Case1: If the value of qty decimal indicator is 0, then qty for redemption can accept maximum of 9999999999999999.</p> <p>Case2: If the value of qty decimal indicator is 1, then qty for redemption can accept maximum of 9999999999999999.9.</p> <p>Case3: If the value of qty decimal indicator is 2, then qty for redemption can accept maximum of 9999999999999999.99.</p> <p>Case4: If the value of qty decimal indicator is 3, then qty for redemption can accept maximum of 9999999999999999.999.</p> <p>If the value of qty decimal indicator is 4, then qty for redemption can accept maximum of 9999999999999999.9999.</p> <p>The quantity should be less than the scheme physical redemption quantity limit</p> | <p>For Physical Redemption either quantity or Amount Populated</p> <p>(If redemption is through quantity, then quantity will be populated otherwise field should be zero).</p> |
| TOTAL_REDEMPTION | CHAR | 1 | It will always be blank | Null |

| | | | | |
|------------------------------|------|---|--|--|
| DIVIDEND_MECHANISM | CHAR | 1 | Applicable only to dividend scheme. The series of a dividend scheme would be DP - Dividend Payout DR - Dividend Reinvest. For a growth scheme, the series would be GR. The fields should be sent as P - Payout R - Reinvest or Null | For Series:DP, should be sent as P For Series:DR, should be sent as R For Other series, should be sent as null |
| ENTRY_DATE_TIME | LONG | | This field should be set to zero while sending the order entry request. | should be set to 0. |
| LAST_MODIFIED_DT_TIME | LONG | | This field should be set to zero while sending the order entry request. If the order has been modified, this field contains the time when the order was last modified. | should be set to 0. |
| ATO (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| MKT (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| ON_STOP (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| DAY (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| GTC (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| FOK (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| AON (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| MF (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| MATCHED_INDICATOR (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |

| | | | | |
|----------------------------|------|----|--|---|
| TRADED (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| MODIFIED | BIT | 1 | It will be '1'b for modified order Otherwise it will be '0'b | 1'b - If Modified '0'b - If Not Modified |
| FROZEN (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| PREOPEN_MATCH (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| ORDER_CTRL_FLAG (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| DEPOSITORY_SETTLEMENT | CHAR | 1 | It will be 'Y' if settlement is through depository for order otherwise it will be 'N' | N |
| DEP_ID | CHAR | 8 | This field should be of 8 digits. | Null |
| DEP_CLIENT_ID | CHAR | 16 | This field should be of 8 digits. | Null |
| DEP_CODE | CHAR | 8 | It will be 'NSDL/ <u>CDSL</u> ' if settlement is through depository based upon the SchemeDepCode | Null |
| FOLIO_NUMBER | CHAR | 16 | The length of Folio number field should be less than or equal to folio number length applicable for that scheme, specified in scheme master. | Folio No. |
| MODE_OF_HOLDING | CHAR | 2 | SI - single JO - Joint AS - Anyone/Survivor | SI, JO or AS |
| CLIENT_CODE(1) | CHAR | 10 | Mandatory field | Client Code 1 |
| CLIENT_CODE(2) | CHAR | 10 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | Client Code 2 |
| CLIENT_CODE(3) | CHAR | 10 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | Client Code 3 |

| | | | | |
|------------------|-------|----|---|-----------------|
| CLIENT_NAME1 | CHAR | 70 | Mandatory field | Client Name 1 |
| CLIENT_NAME2 | CHAR | 35 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | Client Name 2 |
| CLIENT_NAME3 | CHAR | 35 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | Client Name 3 |
| PAN_NUMBER(1) | CHAR | 10 | Mandatory field | PAN Number 1 |
| PAN_NUMBER(2) | CHAR | 10 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | PAN Number 2 |
| PAN_NUMBER(3) | CHAR | 10 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | PAN Number 3 |
| KYC_COMPLAINT(1) | CHAR | 1 | Mandatory Field Y N | KYC Compliant 1 |
| KYC_COMPLIANT(2) | CHAR | 1 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | KYC Compliant 2 |
| KYC_COMPLIANT(3) | CHAR | 1 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | KYC Compliant 3 |
| OCCUPATION | SHORT | | 1 - BUSINESS 2 - SERVICE 3 - PROFESSIONAL 4 - AGRICULTURE 5 - RETIRED 6 - HOUSEWIFE 7 - STUDENT 8 - OTHERS | Occupation Code |

| | | | | |
|-----------------|-------|----|--|------------|
| TAX_STATUS | SHORT | | 1 - INDIVIDUAL 2 - ON BEHALF OF MINOR 3 – HUF 4 – Corporate 5 – NRE 6 - NRO | Tax Status |
| ADDRESS_LINE(1) | CHAR | 40 | | Null |
| ADDRESS_LINE(2) | CHAR | 40 | | Null |
| ADDRESS_LINE(3) | CHAR | 40 | | Null |
| CITY | CHAR | 35 | | Null |
| STATE | CHAR | 2 | UC-Uttranchal MP-Madhya Pradesh GOA-Goa UP-Uttar Pradesh AP-Andhra Pradesh TN-Tamil Nadu SI-Sikkim AS-Assam WB-West Bengal GU-Gujarat MA-Maharashtra HP-Himachal Pradesh MN-Manipur OR-Orissa PO-Pondichery ME-Meghalaya RA-Rajasthan PU-Punjab MI-Mizoram AN-Andaman & Nicobar NA-Nagaland TR-Tripura AR-Arunachal Pradesh BH-Bihar CH-Chandigarh HA-Haryana ND-New Delhi CG-Chattisgarh JK-Jharkhand KA-Karnataka KE-Kerala DL-DELHI JM-JAMMU & KASMIR | Null |
| GENDER | CHAR | 1 | M - MALE F - FEMALE | M/F |

| | | | | |
|------------------|------|----|---|---|
| | | | | Should be blank; if the tax status is 4 (Corporate) |
| PINCODE | LONG | | | Field should be zero. |
| PHONE_NUMBER_OFF | CHAR | 8 | | Null |
| PHONE_NUMBER_RES | CHAR | 8 | | Null |
| MOBILE_NUM | CHAR | 10 | | Null |
| EMAIL_ID | CHAR | 50 | | Null |
| BANK_NAME | CHAR | 40 | ABHYUDAYA CO-OP BANK LTD ABN AMRO BANK ABU DHABI COMMERCIAL BANK ALLAHABAD BANK ANDHRA BANK AXIS BANK BANK OF AMERICA BANK OF BAHRAIN AND KUWAIT BANK OF BARODA BANK OF CEYLON BANK OF INDIA BANK OF MAHARASHTRA BANK OF TOKYO- MITSUBISHI UFJ LTD. BARCLAYS BANK PLC BNP PARIBAS CALYON BANK CANARA BANK CATHOLIC SYRIAN BANK LTD. CENTRAL BANK OF INDIA Citibank Na CITIZENCREDIT CO- OPERATIVE BANK LTD CITY UNION BANK LTD CORPORATION BANK DBS BANK LTD DENA BANK DEUTSCHE BANK DEVELOPMENT CREDIT BANK LIMITED | Null |

| | | | | |
|--|--|--|--|--|
| | | | DOMBIVLI NAGARI SAHAKARI BANK LIMITED HDFC BANK LTD. HSBC ICICI BANK LTD IDBI BANK LTD INDIAN BANK INDIAN OVERSEAS BANK INDUSIND BANK LTD ING VYSYA BANK LTD JANAKALYAN SAHAKARI BANK LTD JPMORGAN CHASE BANK N.A KAPOLE CO OP BANK KARNATAKA BANK LTD KARUR VYSYA BANK KOTAK MAHINDRA BANK KOTAK MAHINDRA BANK MAHANAGAR CO-OP BANK LTD MAHARASHTRA STATE CO OPERATIVE BANK MASHREQBANK PSC NEW INDIA CO- OPERATIVE BANK LTD. NKGSB CO-OP BANK LTD NUTAN NAGARIK SAHAKARI BANK LTD OMAN INTERNATIONAL BANK SAOG ORIENTAL BANK OF COMMERCE PARIK JANATA SAHAKARI BANK LTD PUNJAB AND MAHARASHTRA CO- OP BANK LTD. PUNJAB AND SIND | |
|--|--|--|--|--|

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|--|--|--|---|--|
| | | | BANK PUNJAB NATIONAL BANK RESERVE BANK OF INDIA SHINHAN BANK SOCIETE GENERALE SOUTH INDIAN BANK STANDARD CHARTERED BANK STATE BANK OF BIKANER AND JAIPUR STATE BANK OF HYDERABAD STATE BANK OF INDIA STATE BANK OF INDORE STATE BANK OF MAURITIUS LTD STATE BANK OF MYSORE STATE BANK OF PATIALA STATE BANK OF TRAVANCORE SYNDICATE BANK TAMILNAD MERCANTILE BANK LTD THE AHMEDABAD MERCANTILE CO- OPERATIVE BANK LTD. THE BANK OF NOVA SCOTIA THE BANK OF RAJASTHAN LTD THE BHARAT CO- OPERATIVE BANK (MUMBAI) LTD THE COSMOS CO- OPERATIVE BANK LTD. THE DHANALAKSHMI BANK LTD THE FEDERAL BANK LTD THE GREATER BOMBAY CO-OP. BANK LTD | |
|--|--|--|---|--|

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|-----------------|------|----|--|-----------|
| | | | THE JAMMU AND KASHMIR BANK LTD THE KALUPUR COMMERCIAL CO. OP. BANK LTD. THE KALYAN JANATA SAHAKARI BANK LTD. THE LAKSHMI VILAS BANK LTD THE RATNAKAR BANK LTD THE SARASWAT CO- OPERATIVE BANK LTD THE SHAMRAO VITHAL CO- OPERATIVE BANK LIMITED THE TAMILNADU STATE APEX COOPERATIVE BANK LIMITED THE THANE JANATA SAHAKARI BANK LTD UCO BANK UNION BANK OF INDIA UNITED BANK OF INDIA VIJAYA BANK YES BANK LTD OTHERS. If OTHERS is selected, the other bank name entered should be captured in this field. | |
| BANK_BRANCH | CHAR | 40 | | Null |
| BANK_CITY | CHAR | 35 | | Null |
| BANK_ACC_NUMBER | CHAR | 40 | | Null |
| ECHO_BACK | CHAR | 4 | This field is used for NNF users. | Echo Back |

| | | | | |
|------------------------------|--------|----|---|--------------------------------------|
| NEFT_CODE | CHAR | 11 | Depends on Payout mechanism. If Payout mechanism is 1 then value - Null, if 2 then value - Null, if 3 then value - MICR CODE, if 4 then value - NEFT CODE, If 5 then value - RTGS CODE | Null |
| BANK_ACC_TYPE | CHAR | 10 | SB - Savings A/c CB - Current A/c NE – for tax status 'NRE' only NO – for tax status 'NRO' only | Null |
| STATEMENT_COMMUNICATION_MODE | CHAR | 1 | Values: 'P' - Physical 'E' - Email | Null |
| RESERVED | CHAR | 5 | Reserved for future use | Null |
| PAYOUT_MECHANISM | SHORT | | 1 - cheque 2 - direct credit 3 - ECS 4 - NEFT 5 - RTGS | Field should be zero. |
| DATE_OF_BIRTH | CHAR | 8 | If tax status - 2 this field is mandatory | Date of Birth |
| GUARDIAN_NAME | CHAR | 35 | If tax status - 2 this field is mandatory | Guardian Name |
| GUARDIAN_PAN_NUMBER | CHAR | 10 | If tax status - 2 this field is mandatory | Guardian PAN Number |
| NOMINEE_NAME | CHAR | 40 | | Null |
| NOMINEE_RELATION | CHAR | 40 | | Null |
| FILLER3 | CHAR | 7 | It is for future purpose | Null |
| NNF_USER_INFO | DOUBLE | | NNF user info field | nnf user info |
| BRANCH | SHORT | | Mandatory field | Branch |
| USER | SHORT | | Mandatory field | User |
| BROKER | CHAR | 5 | Mandatory field | Broker |
| SUB_BROKER_CODE | CHAR | 15 | When it is blank, the Primary ARN of the broker will be populated. When the ARN number is sent, it | Blank or ARN number can be populated |

| | | | | |
|-------------------------|----------|----|--|--------------------------------------|
| SIP_Registration_number | Char(15) | 15 | will be validated against the secondary ARN master. Should be blank for normal orders. For SIP Orders, the value will be blank during order entry. | 'S'- SIP Order 'N' – Normal order |
| SIP_flag | char(1) | 1 | To specify the SIP Registrations | |
| SIP_tranche_number | bin(31) | 4 | Should be zero for normal orders. For SIP Orders, the value will be zero during order entry. | |
| Char_filler | char(24) | 24 | Should be blank | |

5. Redemption - Depository

| Field Name | Type | Length / Format | Remarks | Redemption (Depository) |
|-----------------|--------|-----------------|---|-------------------------|
| SYMBOL | CHAR | 10 | Mandatory field | Symbol |
| SERIES | CHAR | 2 | Mandatory field | Series |
| SUSPENDED | CHAR | 1 | | Should be 'N' |
| CATEGORY_CODE | CHAR | 5 | Mandatory field | Category Code |
| AMC_CODE | CHAR | 3 | Mandatory field | AMC Code |
| AMC_SCHEME_CODE | CHAR | 10 | Mandatory field | AMC Scheme Code |
| RT_AGENT_CODE | CHAR | 10 | Mandatory field | RTA Code |
| RT_SCHEME_CODE | CHAR | 5 | Mandatory field | RTA Scheme Code |
| ORDER_NUMBER | DOUBLE | | | Field should be zero. |
| APPL_NUMBER | CHAR | 10 | Optional | Application No |
| BOOK | SHORT | | Always 6 for spot market | 6 |
| BUY_SELL | SHORT | | 1-Purchase 2-Redemption | 2 |
| PURCHASE_TYPE | SHORT | | 1-Fresh Purchase 2-Additional Purchase 0-Redemption orders 3- SIP Purchase | 0 |

| | | | | |
|------------------|--------|---|--|-----------------------|
| AMOUNT | DOUBLE | | The amount value should not contain any decimal part. The amount value should be less than Rs 1 Crore. For liquid funds the amount can be greater than Rs 1 Crore. | Field should be zero. |
| QUANTITY | DOUBLE | | <p>Case1: If the value of qty decimal indicator is 0, then qty for redemption can accept maximum of 99999999999999.</p> <p>Case2: If the value of qty decimal indicator is 1, then qty for redemption can accept maximum of 9999999999999.9.</p> <p>Case3: If the value of qty decimal indicator is 2, then qty for redemption can accept maximum of 999999999999.99.</p> <p>Case4: If the value of qty decimal indicator is 3, then qty for redemption can accept maximum of 9999999999.999.</p> <p>If the value of qty decimal indicator is 4, then qty for redemption can accept maximum of 999999999.9999.</p> | Quantity |
| TOTAL_REDEMPTION | CHAR | 1 | It will always be blank | Null |

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|------------------------------|------|---|--|---|
| DIVIDEND_MECHANISM | CHAR | 1 | Applicable only to dividend scheme. The series of a dividend scheme would be DP - Dividend Payout DR - Dividend Reinvest. For a growth scheme, the series would be GR. The fields should be sent as P - Payout R - Reinvest or Null | For Series:DP, should be sent as P For Series:DR, should be sent as R For Other series, should be sent as null |
| ENTRY_DATE_TIME | LONG | | This field should be set to zero while sending the order entry request. | should be set to 0. |
| LAST_MODIFIED_DT_TIME | LONG | | This field should be set to zero while sending the order entry request. If the order has been modified, this field contains the time when the order was last modified. | should be set to 0. |
| ATO (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| MKT (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| ON_STOP (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| DAY (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| GTC (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| FOK (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| AON (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| MF (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| MATCHED_INDICATOR (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |

| | | | | |
|----------------------------|------|----|--|---|
| TRADED (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| MODIFIED | BIT | 1 | It will be '1'b for modified order Otherwise it will be '0'b | 1'b - If Modified '0'b - If Not Modified |
| FROZEN (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| PREOPEN_MATCH (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| ORDER_CTRL_FLAG (Reserved) | BIT | 1 | It will always be '0'b | should be set to '0'b. |
| DEPOSITORY_SETTLEMENT | CHAR | 1 | It will be 'Y' if settlement is through depository for order otherwise it will be 'N' | Y |
| DEP_ID | CHAR | 8 | This field should be of 8 digits. | DP Id |
| DEP_CLIENT_ID | CHAR | 16 | This field should be of 8 digits. | Client Id |
| DEP_CODE | CHAR | 8 | It will be 'NSDL/ <u>CDSL</u> ' if settlement is through depository based upon the SchemeDepCode | Field should be sent as ' NSDL / CDSL based upon the SchemeDepCode. |
| FOLIO_NUMBER | CHAR | 16 | The length of Folio number field should be less than or equal to folio number length applicable for that scheme, specified in scheme master. | Null |
| MODE_OF_HOLDING | CHAR | 2 | SI - single JO - Joint AS - Anyone/Survivor | SI, JO or AS |
| CLIENT_CODE(1) | CHAR | 10 | Mandatory field | The CD code has to be sent |
| CLIENT_CODE(2) | CHAR | 10 | If MODE_OF_HOLDING - JO/AS , Client details 2 (Name and PAN number)is mandatory. Client Details 3 is optional. | Should be null |

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|------------------|------|----|--|--|
| CLIENT_CODE(3) | CHAR | 10 | If MODE_OF_HOLDING - JO/AS , Client details 2(Name and PAN number) is mandatory. Client Details 3 is optional. | Should be null |
| CLIENT_NAME1 | CHAR | 70 | Mandatory field | Client Name 1 |
| CLIENT_NAME2 | CHAR | 35 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | Client Name 2 |
| CLIENT_NAME3 | CHAR | 35 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | Client Name 3 |
| PAN_NUMBER(1) | CHAR | 10 | Mandatory field | PAN Number 1 |
| PAN_NUMBER(2) | CHAR | 10 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | PAN Number 2 |
| PAN_NUMBER(3) | CHAR | 10 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | PAN Number 3 |
| KYC_COMPLAINT(1) | CHAR | 1 | Mandatory Field Y | KYC Compliant 1 should be sent as Y. |
| KYC_COMPLIANT(2) | CHAR | 1 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | KYC Compliant 2 should be sent as Y. |
| KYC_COMPLIANT(3) | CHAR | 1 | If MODE_OF_HOLDING - JO/AS , Client details 2 is mandatory. Client Details 3 is optional. | KYC Compliant 3 should be sent as Y. |

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|-----------------|-------|----|---|-----------------|
| OCCUPATION | SHORT | | 1 - BUSINESS 2 - SERVICE 3 - PROFESSIONAL 4 - AGRICULTURE 5 - RETIRED 6 - HOUSEWIFE 7 - STUDENT 8 - OTHERS | Occupation Code |
| TAX_STATUS | SHORT | | 1 - INDIVIDUAL 2 - ON BEHALF OF MINOR 3 – HUF 4 – Corporate 5- NRE 6 - NRO | Tax Status |
| ADDRESS_LINE(1) | CHAR | 40 | | Null |
| ADDRESS_LINE(2) | CHAR | 40 | | Null |
| ADDRESS_LINE(3) | CHAR | 40 | | Null |
| CITY | CHAR | 35 | | Null |

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|------------------|------|----|--|--|
| STATE | CHAR | 2 | UC-Uttaranchal MP-Madhya Pradesh GOA-Goa UP-Uttar Pradesh AP-Andhra Pradesh TN-Tamil Nadu SI-Sikkim AS-Assam WB-West Bengal GU-Gujarat MA-Maharashtra HP-Himachal Pradesh MN-Manipur OR-Orissa PO-Pondicherry ME-Meghalaya RA-Rajasthan PU-Punjab MI-Mizoram AN-Andaman & Nicobar NA-Nagaland TR-Tripura AR-Arunachal Pradesh BH-Bihar CH-Chandigarh HA-Haryana ND-New Delhi CG-Chhattisgarh JK-Jharkhand KA-Karnataka KE-Kerala DL-DELHI JM-JAMMU & KASMIR | Null |
| GENDER | CHAR | 1 | M - MALE F - FEMALE | M/F Should be blank; if the tax status is 4 (Corporate) |
| PINCODE | LONG | | | Field should be zero. |
| PHONE_NUMBER_OFF | CHAR | 8 | | Null |
| PHONE_NUMBER_RES | CHAR | 8 | | Null |
| MOBILE_NUM | CHAR | 10 | | Null |
| EMAIL_ID | CHAR | 50 | | Null |

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|-----------|------|----|--|------|
| BANK_NAME | CHAR | 40 | ABHYUDAYA CO-OP BANK LTD ABN AMRO BANK ABU DHABI COMMERCIAL BANK ALLAHABAD BANK ANDHRA BANK AXIS BANK BANK OF AMERICA BANK OF BAHRAIN AND KUWAIT BANK OF BARODA BANK OF CEYLON BANK OF INDIA BANK OF MAHARASHTRA BANK OF TOKYO- MITSUBISHI UFJ LTD. BARCLAYS BANK PLC BNP PARIBAS CALYON BANK CANARA BANK CATHOLIC SYRIAN BANK LTD. CENTRAL BANK OF INDIA Citibank Na CITIZENCREDIT CO- OPERATIVE BANK LTD CITY UNION BANK LTD CORPORATION BANK DBS BANK LTD DENA BANK DEUTSCHE BANK DEVELOPMENT CREDIT BANK LIMITED DOMBIVLI NAGARI SAHAKARI BANK LIMITED HDFC BANK LTD. HSBC ICICI BANK LTD IDBI BANK LTD INDIAN BANK INDIAN OVERSEAS BANK INDUSIND BANK LTD ING VYSYA BANK LTD | Null |
|-----------|------|----|--|------|

| | | | | |
|--|--|--|---|--|
| | | | JANAKALYAN SAHAKARI BANK LTD JPMORGAN CHASE BANK N.A KAPOLE CO OP BANK KARNATAKA BANK LTD KARUR VYSYA BANK KOTAK MAHINDRA BANK KOTAK MAHINDRA BANK MAHANAGAR CO-OP BANK LTD MAHARASHTRA STATE CO OPERATIVE BANK MASHREQBANK PSC NEW INDIA CO- OPERATIVE BANK LTD. NKGSB CO-OP BANK LTD NUTAN NAGARIK SAHAKARI BANK LTD OMAN INTERNATIONAL BANK SAOG ORIENTAL BANK OF COMMERCE PARSIK JANATA SAHAKARI BANK LTD PUNJAB AND MAHARASHTRA CO- OP BANK LTD. PUNJAB AND SIND BANK PUNJAB NATIONAL BANK RESERVE BANK OF INDIA SHINHAN BANK SOCIETE GENERALE SOUTH INDIAN BANK STANDARD CHARTERED BANK STATE BANK OF BIKANER AND JAIPUR | |
|--|--|--|---|--|

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|--|--|--|---|--|
| | | | STATE BANK OF HYDERABAD STATE BANK OF INDIA STATE BANK OF INDORE STATE BANK OF MAURITIUS LTD STATE BANK OF MYSORE STATE BANK OF PATIALA STATE BANK OF TRAVANCORE SYNDICATE BANK TAMILNAD MERCANTILE BANK LTD THE AHMEDABAD MERCANTILE CO- OPERATIVE BANK LTD. THE BANK OF NOVA SCOTIA THE BANK OF RAJASTHAN LTD THE BHARAT CO- OPERATIVE BANK (MUMBAI) LTD THE COSMOS CO- OPERATIVE BANK LTD. THE DHANALAKSHMI BANK LTD THE FEDERAL BANK LTD THE GREATER BOMBAY CO-OP. BANK LTD THE JAMMU AND KASHMIR BANK LTD THE KALUPUR COMMERCIAL CO. OP. BANK LTD. THE KALYAN JANATA SAHAKARI BANK LTD. THE LAKSHMI VILAS BANK LTD THE RATNAKAR BANK LTD THE SARASWAT CO- | |
|--|--|--|---|--|

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|-----------------|------|----|--|-----------|
| | | | <p>OPERATIVE BANK LTD THE SHAMRAO VITHAL CO- OPERATIVE BANK LIMITED THE TAMILNADU STATE APEX COOPERATIVE BANK LIMITED THE THANE JANATA SAHAKARI BANK LTD UCO BANK UNION BANK OF INDIA UNITED BANK OF INDIA VIJAYA BANK YES BANK LTD OTHERS. If OTHERS is selected, the other bank name entered should be captured in this field.</p> | |
| BANK_BRANCH | CHAR | 40 | | Null |
| BANK_CITY | CHAR | 35 | | Null |
| BANK_ACC_NUMBER | CHAR | 40 | | Null |
| ECHO_BACK | CHAR | 4 | This field is used for NNF users. | Echo Back |
| NEFT_CODE | CHAR | 11 | <p>Depends on Payout mechanism. If Payout mechanism is 1 then value - Null, if 2 then value - Null, if 3 then value - MICR CODE, if 4 then value - NEFT CODE, If 5 then value - RTGS CODE</p> | Null |

| | | | | |
|------------------------------|----------|----|--|---------------------------------------|
| BANK_ACC_TYPE | CHAR | 10 | SB - Savings A/c CB - Current A/c NE – for tax status 'NRE' only NO – for tax status 'NRO' only | Null |
| STATEMENT_COMMUNICATION_MODE | CHAR | 1 | Values: 'P' - Physical 'E' - Email | Null |
| RESERVED | CHAR | 5 | Reserved for future use | Null |
| PAYOUT_MECHANISM | SHORT | | 1 - cheque 2 - direct credit 3 - ECS 4 - NEFT 5 - RTGS | Field should be zero. |
| DATE_OF_BIRTH | CHAR | 8 | If tax status - 2 this field is mandatory | Date of Birth |
| GUARDIAN_NAME | CHAR | 35 | If tax status - 2 this field is mandatory | Guardian Name |
| GUARDIAN_PAN_NUMBER | CHAR | 10 | If tax status - 2 this field is mandatory | Guardian PAN Number |
| NOMINEE_NAME | CHAR | 40 | | Null |
| NOMINEE_RELATION | CHAR | 40 | | Null |
| FILLER3 | CHAR | 7 | It is for future purpose | Null |
| NNF_USER_INFO | DOUBLE | | NNF user info field | nnf user info |
| BRANCH | SHORT | | Mandatory field | Branch |
| USER | SHORT | | Mandatory field | User |
| BROKER | CHAR | 5 | Mandatory field | Broker |
| SUB_BROKER_CODE | CHAR | 15 | When it is blank, the Primary ARN of the broker will be populated. When the ARN number is sent, it will be validated against the secondary ARN master. | Blank or ARN number can be populated |
| SIP_Registration_number | Char(15) | 15 | Should be blank for normal orders. For SIP Orders, the value will be blank during order entry. | |
| SIP_flag | char(1) | 1 | To specify the SIP Registrations | 'S' - SIP Order 'N' – Normal order |

| | | | | |
|--------------------|----------|----|---|--|
| SIP_tranche_number | bin(31) | 4 | Should be zero for normal orders. For SIP Orders, the value will be Zero during order entry. | |
| Char_filler | char(24) | 24 | Should be blank | |