STERLING SOFTWARE PVT LTD

Technical Specifications - Transactions

Project: NMFII-Exception Trxn Service

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1 Web Services - Technical Specifications

1.1 Introduction

1.2 Definitions

The following are the definitions for the terms used in the document:

1.3 Scope of the project

1.3.1 Within Scope

The scope of this project is limited to designing, building and implementing Common Transaction Acceptance Platform as described in this document.

1.3.2 Out of scope

• Building and hosting of website / client application.

1.4 General Requirements

- In addition to the service specific parameters as described in this document, the following parameters shall be mandatory input for each service:
 - o Application ID Unique User ID to authenticate Web service requests.
 - Password Valid password for the User ID.
- The Web services will be deployed on secure channel (HTTPS).
- The Web services will return data in industry standard XML message format.
- Based on this input we have to implement the service level authentication.

SI. No	Column Name	Data Type	Mandatory	Field Validation		
1	Application ID	Varchar2(20)	Yes	Must be a valid user id for the purpose of authenticating web service requests.		
2	Password	Varchar2(15)	Yes	Must be a valid password for the Application ID.		
3	Broker Code	Varchar2(15)	Yes	Must be valid Broker Code.		

- The web services shall return the result code as '0' or any other digit(s), where 0 indicates success and non-zero value indicates errors.
- Request and Response format will have xml version like <?xml version=""1.0"" encoding=""UTF-8""?>
- The values of Application ID & Password are:
 - 1. Application ID << Contact NSE BO >>
 - 2. Password << Contact NSE BO >>

This is mandatory information to consume the API

- Valid Broker Code Broker should be empaneled
- Valid Application ID and Password

1.4.1 Method for Purchase Exception Transaction

Method Name: "PURCHASETRXNEXCEPTION"

This service will allow Purchase Exception Transaction

Note: Nominee related request tags are removed in PURCHASETRXNEXCEPTION Method and based on registered IIN Nominee details will be taken.

In API we have enabled payment options RTGS/NEFT, Cheque, Demand draft, Debit Mandate in addition to that Online.

1. Online and UPI Payment process

Some distributors want to initiate the Payment process immediately in their Client Login portal instead of NSENMF sending payment link as email.

This feature made as optional in Purchase API. By default it will be Payment eMail link.

During the Purchase request if the API client opted for the Response as Payment link the following process will take place otherwise normal email link process will continue.

- Along with API purchase response NSENMF will return PAYMENT LINK URL as string.
- The Distributor has to invoke the link in their portal to proceed for payment.
- Payment URL will lead to existing process and payment status will be sent to NSENMF URL.
 NSENMF will redirect the payment status information to the respective distributor Web page / API URL given during purchase request.
- API distributors need to provide a Web page / API to PUSH the payment status to their portal

2. RTGS/NEFT Payment process

For RTGS / NEFT type, payment link will be triggered to Investor email id. Investor has to click the link to update UTR number for authorization.

3. Debit Mandate Payment Process

For this type of payment UMRN number is mandatory.

We have introduced new flag <<Trxn_Initiator>> to identify the transaction coming from ARN portal is either initiated by Investor (I) or Others (O).

For privilege enabled distributor, if the flag is passed as "I" then, OTP will be triggered as SMS to the IIN registered mobile number. Investor has to key in the OTP in ARN Web Portal. The ARN portal should send the OTP via another API method for authorization at our end.

Note: Applicable only for privilege enabled distributor

- i) On submit call "ValidateOTP" method to authorize the transaction.
- ii) To regenerate OTP call the "GenerateOTP' Method.

For others, if the flag is "null" or "O" then, OTP will be triggered as SMS / EMAIL to the IIN registered mobile number / email id. Investor has to respond with the OTP for authorization

4. Cheque, Demand Draft Payment process

API will accept the instrument details.

Distributor has to bank the cheques manually by filling the challan in respective banks.

Pass the input as xml format mentioned below.

```
<NMFIIService>
       <service request>
              <appln_id>KGNANA</appln_id>
              <password>HJR$W34F3</password>
              <broker code>ARN-44332
              <iin>5011006336</iin>
              <sub_trxn_type>N</sub_trxn_type>
              <poa>N</poa>
              <poa_bank_trxn_type>NDCPMS</poa_bank_trxn_type>
              <trxn acceptance>OL</trxn acceptance>
              <demat user>N</demat user>
              <dp id></dp id>
              <bank>AXIS</bank>
              <ac no>037010100256352</ac no>
              <ifsc_code>UTIB0000037</ifsc_code>
              <sub broker arn code></sub broker arn code>
              <sub_broker_code></sub_broker_code>
              <euin_opted>N</euin_opted>
              <euin></euin>
              <trxn_execution></trxn_execution>
              <remarks></remarks>
              <payment mode>OL</payment mode>
              <br/>
<br/>
billdesk bank>AXIS</billdesk bank>
              <instrm bank></instrm bank>
              <instrm_ac_no></instrm_ac_no>
              <instrm no></instrm no>
              <instrm amount>3232</instrm amount>
              <instrm_date></instrm_date>
              <instrm_branch></instrm_branch>
              <instrm_charges><instrm_charges>
              <micr></micr>
              <rtgs code></rtgs code>
              <neft ifsc></neft ifsc>
              <advisory_charge> </advisory_charge>
               <dd charge></dd charge>
```

```
<cheque_deposit_mode></cheque_deposit_mode>
             <debit amount type></debit amount type>
             <sip micr no></sip micr no>
             <sip_bank></sip_bank>
             <sip branch></sip branch>
             <sip acc no></sip acc no>
             <sip_ac_type></sip_ac_type>
             <sip ifsc code></sip ifsc code>
             <sip paymech></sip paymech>
             <umrn> </umrn>
             <ach amt></ach amt>
             <ach fromdate></ach fromdate>
             <ach_enddate></ach_enddate>
             <until cancelled></until cancelled>
             <Return paymnt flag>Y</Return paymnt flag>
             <Client_callback_url>Provide your Webpage / API URL</Client_callback_url>
             <Bank holder name>Krishna</Bank holder name>
             <Bank holder name1></Bank holder name1>
             <Bank_holder_name2></Bank_holder_name2>
             <trxn initiator>I / O</trxn initiator>
              <trans count>1</trans count>
              <utr no>564545</utr no>
              <transfer date>15-Feb-2017 </transfer date>
              <investor_auth_log></investor_auth_log>
              <ach_exist>Y</ach_exist>
      </service_request>
      <childtrans>
            <amc>T</amc>
             <folio></folio>
             cproduct code>SIP3G
             <ft acc no></ft acc no>
             <reinvest>N</reinvest>
             <amount>10000</amount>
             <sip from date></sip from date>
             <sip_end_date></sip_end_date>
             <sip_freq></sip_freq>
             <sip amount></sip_amount>
             <sip_period_day></sip_period_day>
             <input ref no>52521</input ref no>
             <perpetual flag></perpetual flag>
             <insurance enabled></insurance enabled>
             <GOAL BASED SIP></GOAL BASED SIP>
             <GOAL_TYPE></GOAL_TYPE>
             <GOAL AMOUNT></GOAL AMOUNT>
             <FREEDOM SIP>Y</FREEDOM SIP>
             <FREEDOM_TARGET_SCHEME>RG2GR</FREEDOM_TARGET_SCHEME>
             <FREEDOM TENURE>12</FREEDOM TENURE>
             <FREEDOM_SWP_AMOUNT>50000</FREEDOM_SWP_AMOUNT>
             <FREEDOM_SCHEME_OPTION>A</FREEDOM_SCHEME_OPTION>
      </childtrans>
</NMFIIService>
```

XML Tag	Field Description	Data Type	Mandatory	Remarks
appln_id	Appln Id	Varchar2(20)	Y	
password	Password	Varchar2(15)	Y	
broker_code	Broker Code	Varchar2(15)	Υ	
iin	IIN	Varchar2(10)	Υ	
sub_trxn_type	Sub Trxn Type	varchar2(7)	Υ	'N' for normal, 'S' for systematic.
poa	POA	Char(1)	Υ	Executed by POA – values Y or N
POA_Bank_Trxn_Type	POA Bank Trxn Type	Varchar2(10)	N	Value should be NDCPMS or DCPMS
trxn_acceptance	Trxn Acceptance	Varchar2(10)	Υ	Ph(By Phone) or OL(Online) or ALL
demat_user	Demat User	Char(1)	Υ	Y or N
dp_id	DP Id	Varchar2(20)	N	
bank	Bank	Varchar2(40)	N	Bank Code is mandatory for payment mode ("OL,TR,M, UPI")
ac_no	Ac No	Varchar2(40)	N	ac_no is mandatory for payment mode ("OL,TR,M,UPI")
ifsc_code	IFSC code	Varchar2(40)	N	ifsc_code is mandatory for payment mode ("OL,TR,M,UPI")
sub_broker_arn_code	Sub Broker ARN Code	Varchar2(20)	N	
sub_broker_code	Sub Broker Code	Varchar2(30)	N	
euin_opted	EUIN Opted	Char(1)	Y	
euin	EUIN	Varchar2(20)	N	
trxn_execution	Trxn Execution	Char(1)	N	
remarks	Remarks	Varchar2(1000)	N	
payment_mode	Payment Mode	Varchar2(7)	Y	1. "Q" = Cheque 2. "D" = Demand Draft 3. "M" = Debit Mandate 4. "OL" = Online 5. "TR" = RTGS/NEFT 6. "UPI" = UPI
billdesk_bank	Bill Desk Bank	Varchar2(40)	N	Bill desk Bank Code is mandatory for payment mode Online ("OL"), UPI
instrm_bank	Instrument Bank	Varchar2(40)		Mandatory for following payment mode 1. "Q" = Cheque 2. "D" = Demand Draft 3. "M" = Debit Mandate
instrm_ac_no	Instrument Account No	Varchar2(40)	N	Mandatory for following payment mode 1. "Q" = Cheque 2. "D" = Demand Draft
instrm_no	Instrument No	Varchar2(30)	N	Mandatory for following payment mode 1. "Q" = Cheque 2. "D" = Demand Draft

instrm_amount	Instrument Amount	Number(25,8)	N	Mandatory for following payment mode 1. "Q" = Cheque 2. "D" = Demand Draft 3. "M" = Debit Mandate 4. "OL" = Online
instrm_date	Instrument Date	date(dd-Mon- yyyy)	N	Mandatory for following payment mode 1. "Q" = Cheque 2. "D" = Demand Draft
instrm_branch	Instrument Branch	Varchar2(40)	N	Mandatory for following payment mode 1. "Q" = Cheque 2. "D" = Demand Draft
instrm_charges	Instrument Charge	Number(25,8)	N	
micr	MICR	Varchar2(20)	N	
rtgs_code	RTGS code	Varchar2(11)	N	Mandatory for following payment mode 1. "TR" = RTGS
neft_ifsc	NEFT IFSC code	Varchar2(40)	N	
advisory_charge	Advisory charge	Number(7)	N	
dd_charge	DD_charge	Number(7)	N	Mandatory for following payment mode 1. " D " = Demand Draft
cheque_deposit_mode	Cheque deposit mode	Varchar2(5)	N	MFSS / CMS
				MFSS – Deposit at the service center. CMS – Deposit at the CMS Branch Default Value will be "MFSS"
debit_amount_type	Debit amount type	Char(1)	N	Mandatory if Sub_trxn_type is Systematic
sip_micr_no	SIP MICR	Varchar2(20)	N	
sip_bank	SIP Bank	Varchar2(40)	Υ	Mandatory if Sub_trxn_type is Systematic
sip_branch	SIP Branch	Varchar2(40)	Y	Mandatory if Sub_trxn_type is Systematic
sip_acc_no	SIP Account no	Varchar2(40)	Y	Mandatory if Sub_trxn_type is Systematic
sip_ac_type	SIP ac type	Varchar2(5)	Y	Mandatory if Sub_trxn_type is Systematic
sip_ifsc_code	SIP IFSC Code	Varchar2(15)	Υ	
sip_paymech	SIP payment mech	Varchar2(15)	N	Mandatory if Sub_trxn_type is Systematic.
				Value will be "M / DC"

				M [Mandate] – ACH Mandate Details are mandatory.
				DC [Direct Credit] - ACH Mandate details are not Mandatory.
ach_amt	ACH Amount	Number(25,8)	Y	Mandatory if Sub_trxn_type is Systematic
ach_fromdate	ACH from date	Date(dd-Mon- yyyy)	Y	Mandatory if Sub_trxn_type is Systematic. Validation: ACH from date should not greater than SIP From date
ach_enddate	ACH end date	Date(dd-Mon- yyyy)	Y	Mandatory if Sub_trxn_type is Systematic Validation: ACH to date should be greater or equal to than sip to date
UMRN	UMRN Number	Varchar2(40)	N	If UMRN Exist then Bank Name, Branch Name, Account Number, Account Type, Debit Amount Type, ACH Amount, ACH From Date, ACH End Date, Bank Holder Name will be passed automatically to the database based on UMRN. so no need to provide the value again in the Bank Name, Branch Name Tags etcyou can leave blank if UMRN provided.
.until_cancelled	Until cancelled for SIP End date	Char(1)	N	Mandatory if Sub_trxn_type is Systematic if until_cancelled ="Y" default date will be "31-Dec-2999"
Return_paymnt_flag	Return payment flag	Char(1)	N	Y or N. If Return Payment Flag is 'Y' then you should provide the Client Call Back URL. Ref section 1.5 (New API Online Payment Process) If Return Payment Flag is 'N' then will work as normal.
Client_callback_url	Client call back url	Varchar2(1000)	N	IF payment Mode = OL,UPI
				Provide your Webpage / API URL. After Payment, page will be redirect to client call back url with Customer ID, Payment Ref No, Payment Status and Payment Message in the URL:
				Payment Status will be SUCCESS or FAILURE. For FAILURE case, Payment Failure Message will be passed in the PaymentMsg Parameter and for SUCCESS PaymentMsg Parameter value will be blank.
				Example Url given below http://YourURL?CustomerID=50110000

				29&PaymentRefNo=541&PaymentStat us=SUCCESS&PaymentMsg=
Bank_holder_name	Bank holder name	Varchar2(70)	Υ	
Bank_holder_name1	Bank holder name1	Varchar2(70)	N	
Bank_holder_name2	Bank holder name2	Varchar2(70)	N	
trxn_initiator	Transaction Initiator	Varchar2(1)	N	We have introduced new flag < <trxn_initiator>> to identify the transaction coming from ARN portal is either initiated by Investor (I) or Others (O). For privilege enabled distributor, if the flag is passed as "I" then, OTP will be triggered as SMS to the IIN registered mobile number. Investor has to key in the OTP in ARN Web Portal. The ARN portal should send the OTP via another API method for authorization at our end. For others, if the flag is "null" or "O" then, OTP will be triggered as SMS / EMAIL to the IIN registered mobile number / email id. Investor has to respond with the OTP for authorization.</trxn_initiator>
Trans_count	Transaction Count	Number	Y	The Number of Child Transaction can be placed based on Transaction Count
utr_no	UTR Number	Varchar2(30)	N	
transfer_date	UTR Transfer Date	Date(dd-Mon- yyyy)	N	
Investor_auth_log	Investor_auth_log	varchar2(200)	N	To bypass OTP communication from NMFII as a compliance perspective our system seeks the Investor Concern's from API client. Hence this log to be sent by the API client . This tag is applicable based on ARN privilege and this is mandatory for "Debit Mandate (OTM)" when opting for OTP bypass. For this tag, Value should be Investor IP Address, Date time of investor given their concern
ach_exist	ACH Exist	char(1)		Default value will be 'N'

		Pass the value 'Y', If ACH Mandate Details are already registered for the IIN.
		Pass the Value 'N', if wants to register New mandate.
		 IIN registered bank details are allowed for new Mandate Registration.
		 If POA tag is 'Y' then you have to provide the POA Registered Bank details for new mandate registration
		 If POA tag is 'N' then you have to provide the IIN Registered Bank details for new mandate registration

Multi Transaction Table:

XML Tag	Field Description	Data Type	Mandatory	Remarks
amc	AMC	Varchar2(5)	Y	AMC Code
folio	Folio	Varchar2(20)	N	If folio number is blank then we will consider as Fresh Purchase otherwise we consider as Additional Purchase.
product_code	Product Code	Varchar2(20)	Y	If Freedom SIP flag is 'Y' then Freedom SIP: - The Product Code should be passed based on Freedom SIP flag is 'Y'. Kindly refer Product Master for allowed Freedom SIP Schemes. HDFC Dream SIP: - The Product Code should be passed based on Freedom SIP flag is 'Y' and Freedom Scheme Option. Kindly refer Product Master for allowed
				Dream SIP Schemes.
ft_acc_no	FT Account Number	Varchar2(20)	N	
reinvest	ReInvest	Char(1)	Y	
amount	Amount	Number(25,8)	Y	

sip_from_date	SIP from date	Date(dd-Mon-yyyy)	N	
sip_end_date	SIP end date	Date(dd-Mon-yyyy)	N	
sip_freq	SIP frequency	Varchar2(20)	N	
sip_amount	SIP amount	Number(25,8)	N	
sip_period_day	SIP period day	Varchar2(10)	N	Daily (D) - No need to provide the SIP Period Day Value. It will take value from SIP from Date. Weekly (WD) - Need to provide Specific dates in SIP Period Day value. It will check the product master, whether the date is available for the given product code or not. Once In a Week (OW) - No need provide the SIP Period Day Value. SIP Period Day value (02 - Monday, 03 - Tuesday, 04 - Wednesday, 05 - Thursday, 06 - Friday) will be taken automatically from SIP From Date. SIP from date should falls between Monday to Friday dates and also system we will validate against the SIP/STP/SWP dates in product master, whether the date (02,03,04,05,06) is available for given product code or not. Monthly (OM), Quarterly (Q), Half-Yearly (H), Yearly(Y), Twice a Month ((TW) - Need to provide SIP Period Day value. It will check the product master, whether the date is available for the given product code or not. Business Day (BZ) - No need to provide SIP period day value. It will take value from SIP From Date and also we will validate whether the given SIP From date falls on business day or not.
input_ref_no	Input ref no	Varchar2(20)	N	This user Input Reference No will reflect in output Service Response XML for user reference.
perpetual_flag	Perpetual Flag	Char(1)	N	Value should be "Y" or "N"
				If value is Y then the default value for SIP End Date will be 31-Dec-2099.
insurance_enabled	Insurance Enabled	Char(1)	N	Applicable only for Sub_trxn_type is Systematic. Value should be "Y / N". If value "Y" then we will validate
				whether the scheme is eligible for Insurance. If eligible then the below things are

				mandatory. 1. Investor Age must be between 19 and 50. 2. Nominee name is required 3. Nominee DOB is required. 4. Nominee Percentage must be 100 5. If Nominee (Minor) Relationship is required.
GOAL_BASED_SIP	Goal Based SIP	CHAR(1)	N	Value should be Y or N
GOAL_TYPE	Goal Type	Varchar2 (100)	N	Mandatory when Goal Based SIP value is Y. Pass either any one of the values mentioned below. 1.Kids Marriage 2.Kids Education 3.Retirement Planning 4.Tax Savings 5.Dream House 6.Dream Car 7.Dream Vacation
GOAL_AMOUNT	Goal Amount	Number(25,8)	N	Mandatory when Goal Based SIP value is Y. 10000
FREEDOM_SIP	Freedom SIP	CHAR(1)	N	Applicable only for Sub_trxn_type is Systematic. Value should be "Y / N". If value "Y" then FREEDOM_SIP and FREEDOM_SIP TARGET ,TENURE ,AMOUNT tags are mandatory.
FREEDOM_TARGET _SCHEME	Freedom SIP Target scheme	Varchar2(50)	N	Need to pass the scheme code based on product master. ALLOW_FREEDOM_SWP Flag should be 'Y' in product master.
FREEDOM_TENURE	Freedom Tenure in years	Number(5)	N	Based on FREEDOM SIP Mater need to pass the tenure. Example: 12
FREEDOM_SWP_A MOUNT	Freedom Amount of investor interest	Number(25,8)	N	SWP amount tab should be kept editable: For e.g, if an investor enters SIP

				Amount Rs 1000 & selects tenure 12 yrs, its option should show 2000, however user can edit it and place a value<=2000.
FREEDOM_SCHEME_ OPTION	Freedom Scheme Option	Char(1)	N	Applicable only for the AMC Code - "H". Value should be "A / B". A – 'Option A' it means that the Source Scheme (Product Code) and the Freedom Target Scheme should be same. B – 'Option B' it means that the Source Scheme (Product Code) and the Freedom Target Scheme should be different.

```
For Success Case:
<NMFIIService>
     <service_status>
       <service return code>0</service return code>
       <service msg>Success</service msg>
     </service status>
     <service response>
              <unique_no>12345</unique_no>
              <trxn_no>4567</trxn_no>
              <application no>9874</application no>
              <fund>Hdfc</fund>
              <folio>110115</folio>
              <scheme>BFD</scheme>
              <scheme_Name>Tata Balanced Fund Plan A - Dividend/scheme_Name>
              <amt>5000</amt>
              <input_ref_no>52521<input_ref_no>
              <status_desc>Ok</status_desc>
              <status code>0</status code>
     </service response>
</NMFIIService>
For Success Case ( Return_paymnt_flag = Y and Payment Mode = OL ):
<NMFIIService>
     <service_status>
       <service_return_code>0</service_return_code>
       <service msg>Success</service msg>
<paymentlink>https://uat.nsenmf.com/Transactions/MFDMakePayment.aspxlZQcOCZ8HrJuu3BL5B4fwZ
```

CWsA56VgflabjVdQkHi%2fS4iRShzPbyhedYy2HlkT4CXJOkvYwuLltzuOtoWmtdDuLFmwAPLevnGbz%2 f5zyfmEKBlyKphMyEVQKym%2fDgYQpuiwp4FZTRCuSNaWAFZSUycFHYWjOx%2fAbPlSETv3IVmd9C hGLhhEdJBXeTF0qPTVivms7EgomhWshtTc7xztjGIRgXuylzRqmWIKxS

```
PpSogkK78ynMXGIzmyKLQU%2fwYAXwmfu0hquPKdpwDPQpBDP0IOYKtKM4rz0LHI%2bQQ7Nu71DE
KZowJ7rvGXsmEu07JLu7ct3%2bhHjoa9%2fNrKyXl%2bn01g%3d%3d</Paymentlink>
    </service status>
    <service_response>
            <unique_no>12345</unique_no>
            <trxn no>4567</trxn no>
            <application no>9874</application no>
            <fund>Hdfc</fund>
            <folio>110115</folio>
            <scheme>BFD</scheme>
             <scheme Name>Tata Balanced Fund Plan A - Dividend</scheme Name>
            <amt>5000</amt>
            <status_desc>Ok</status_desc>
             <status code>0</status code>
      <paymentlink>https://uat.nsenmf.com/Transactions/MFDMakePayment.aspx?IZQcOCZ8HrJuu3B
L5B4fwZCWsA56VgflabjVdQkHi%2fS4iRShzPbyhedYy2HlkT4CXJOkvYwuLltzuOtoWmtdDuLFmwAPLev
nGbz%2f5zyfmEKBlyKphMyEVQKym%2fDgYQpuiwp4FZTRCuSNaWAFZSUycFHYWjOx%2fAbPISETv3
IVmd9ChGLhhEdJBXeTF0qPTVivms7EgomhWshtTc7xztjGIRgXuylzRqmWIKxSPpSoqkK78ynMXGIzmy
KLQU%2fwYAXwmfu0hquPKdpwDPQpBDP0IOYKtKM4rz0LHI%2bQQ7Nu71DEKZowJ7rvGXsmEu07JL
u7ct3%2bhHjoa9%2fNrKyXl%2bn01g%3d%3d</Paymentlink>
    <input ref no>52521<input ref no>
    </service response>
</NMFIIService>
For Success Case(Return_paymnt_flag = Y and payment_mode = UPI):
<NMFIISERVICES>
 <service response>
 <Unique_No>790975</Unique_No>
  <Trxn No>10547732</Trxn No>
  <Application No>131717
  <Fund>HDFC Mutual Fund</Fund>
  <Folio/>
  <Scheme>BFD</Scheme>
  <Scheme Name>HDFC Balanced Fund - Dividend</Scheme Name>
  <Amt>5,000.00</Amt>
  <Status Desc>Ok</Status Desc>
  <Status code>0</Status code>
  <Paymentlink><a
    href=https://uat.nsenmf.com/Transactions/MFDUPIMakePayment.aspx?JOc6PYTEMvOYHq
    FG3n%2f8AhU%2fE4Ra9v0UrRzfbhni6budB252HRWg5UJq4AclVNvIsHN1VT6vUGTogsBpC
    hhXvfg4A0or81qHPOq7GdefBwYODHktMXGMkJHtVVhLEGZBsujXFle3N%2bd7jU8z%2b%
    2bqLXtiSvUzS4Jzv5OZw%2boQzu3Epbnxyej3vW3cYX3sYO1g%2b2wARv90k%2fHzKtiGPG
    iSdu8N%2bQRyemSuTW7M35Cj3ztLVSnM2HSiUngn7nPyuW0FdpLb%2fqMQk0moaJu5Jw
    7qSsDaxXYpP979sWoF%2b%2fljKThApzWuDKZBb7Oze2qYoN9XSxHl2zOOCv%2bqQxguj
    6FM2BQ%3d%3d'>http://localhost:61640/Transactions/MFDUPIMakePayment.aspx?JOc6
    PYTEMvOYHqFG3n%2f8AhU%2fE4Ra9v0UrRzfbhni6budB252HRWq5UJq4AclVNvIsHN1VT
    6vUGTogsBpChhXvfg4A0or81qHPOq7GdefBwYODHktMXGMkJHtVVhLEGZBsujXFle3N%2
    bd7jU8z%2b%2bgLXtiSvUzS4Jzv5OZw%2boQzu3Epbnxyej3vW3cYX3sYO1g%2b2wARv90
    k%2fHzKtiGPGjSdu8N%2bQRyemSuTW7M35Cj3ztLVSnM2HSiUngn7nPyuW0FdpLb%2fgM
```

Qk0moaJu5Jw7qSsDaxXYpP979sWoF%2b%2fljKThApzWuDKZBb7Oze2qYoN9XSxHI2zOO

Cv%2bqQxguj6FM2BQ%3d%3d</Paymentlink>

```
</service response>
<service status>
 <service return code>0</service return code>
  <service_msg>Success</service_msg>
  <Paymentlink><a
    href=https://uat.nsenmf.com/Transactions/MFDUPIMakePayment.aspx?JOc6PYTEMvOYHq
    FG3n%2f8AhU%2fE4Ra9v0UrRzfbhni6budB252HRWq5UJq4AclVNvIsHN1VT6vUGToqsBpC
    hhXvfg4A0or81qHPOq7GdefBwYODHktMXGMkJHtVVhLEGZBsujXFle3N%2bd7jU8z%2b%
    2bqLXtiSvUzS4Jzv5OZw%2boQzu3Epbnxyej3vW3cYX3sYO1g%2b2wARv90k%2fHzKtiGPG
    jSdu8N%2bQRyemSuTW7M35Cj3ztLVSnM2HSiUngn7nPyuW0FdpLb%2fgMQk0moaJu5Jw
    7qSsDaxXYpP979sWoF%2b%2fljKThApzWuDKZBb7Oze2qYoN9XSxHl2zOOCv%2bqQxquj
    6FM2BQ%3d%3d'>http://localhost:61640/Transactions/MFDUPIMakePayment.aspx?JOc6
    PYTEMvOYHqFG3n%2f8AhU%2fE4Ra9v0UrRzfbhni6budB252HRWg5UJg4AcIVNvIsHN1VT
    6vUGTogsBpChhXvfg4A0or81qHPOq7GdefBwYODHktMXGMkJHtVVhLEGZBsujXFle3N%2
    bd7jU8z%2b%2bqLXtiSvUzS4Jzv5OZw%2boQzu3Epbnxyej3vW3cYX3sYO1g%2b2wARv90
    k%2fHzKtiGPGjSdu8N%2bQRyemSuTW7M35Cj3ztLVSnM2HSiUngn7nPyuW0FdpLb%2fgM
    Qk0moaJu5Jw7qSsDaxXYpP979sWoF%2b%2fljKThApzWuDKZBb7Oze2qYoN9XSxHI2zOO
    Cv%2bgQxguj6FM2BQ%3d%3d</a></Paymentlink> </service status>
</NMFIISERVICES>
```

Note:

Nominee Request fields removed from Request xml, At the time of Fresh purchase nominee details capture from prospect table nominee details.

Note:

After Payment, page will be redirect to client call back url with Customer ID, Payment Ref No, Payment Status and Payment Message in the URL.:

Payment Status will be SUCCESS or FAILURE. For FAILURE case, Payment Failure Message will be passed in the PaymentMsg Parameter and for SUCCESS PaymentMsg Parameter value will be blank.

Example:

http://YourURL?CustomerID=5011000029&PaymentRefNo=541&PaymentStatus=FAILURE&PaymentMsg=Invalid Authentication at Bank

For Failure Case:

```
<NMFIIService>
    <service_status>
        <service_return_code>1</service_return_code>
        <service_msg>Failure</service_msg>
        </service_status>
        <service_response>
        <unique_no>12345</unique_no>
        <trxn_no>4567</trxn_no>
        </unique_no>
```

```
<application_no>9874</application_no>
<fund>Hdfc</fund>
<folio>110115</folio>
<scheme>BFD</scheme>
<scheme|Name>Tata Balanced Fund Plan A - Dividend</scheme_Name>
<amt>5000</amt>
<input_ref_no>52521<input_ref_no>
<status_desc>Invalid folio for given amc</status_desc>
<status_code>1</status_code>
</status_response>
</NMFIIService>
```

Output data as table format:

For Service Status:

XML Tag	Remarks
service_return_code	0 / 1
service_msg	(0) Success / (1) Failure
Paymentlink	If Return_paymnt_flag=Y then payment url send via output xml otherwise payment url send via mail

For Service Response:

Success:

XML Tag	Field Description	data type	Remarks
Unique_No	Unique Ref No	varchar2(20)	12345
Trxn_No	Transaction No	number(10)	4567
Application_No	Application No	Number(10)	9874
Fund	AMC Code	varchar2(5)	Hdfc
Folio	Folio No	varchar2(20)	110115
Scheme	Scheme	varchar2(20)	Bfd
Scheme_Name	Scheme Name	varchar2(200)	Tata Balanced Fund Plan A - Dividend
Amt	Amount	number(25,8)	5000
Status_Desc	Transaction Status	varchar	Ok
Status_Code	Transaction Code	varchar2	0
Paymentlink	Payment url	Varchar(1000)	If Return_paymnt_flag=Y then payment url send via output xml

			otherwise payment url send via mail
input_ref_no	input_ref_no	Varchar(20)	52521

Failure:

XML Tag	Field Description	data type	Remarks
Unique_No	Unique Ref No	varchar2(20)	12345
Trxn_No	Transaction No	number(10)	4567
Application_No	Application No	Number(10)	9874
Fund	AMC Code	varchar2(5)	Hdfc
Folio	Folio No	varchar2(20)	110115
Scheme	Scheme	varchar2(20)	Bfd
Scheme_Name	Scheme Name	varchar2(200)	Tata Balanced Fund Plan A - Dividend
Amt	Amount	number(25,8)	5000
Status_Desc	Transaction Status	varchar	Invalid Product for given amc.
Status_Code	Transaction Code	varchar2	1
input_ref_no	Input ref no	Varchar(20)	52521

1.4.2 Method to Redemption Exception Transaction

Method Name: "REDEEMTRXNEXCEPTION"

This service will allow Redemption Exception Transaction

Pass the input as xml format mentioned below.

```
<NMFIIService>
      <service_request>
             <appln_id>KGNANA</appln_id>
             <password>HJR$W34F3</password>
             <br/>broker_code>ARN-44332
             <iin>5011006336</iin>
             <poa>N</poa>
             <poa_bank_trxn_type>NDCPMS</poa_bank_trxn_type>
             <trxn_acceptance>OL</trxn_acceptance>
             <dp_id></dp_id>
             <acc_no>037010100256352</acc_no>
             <bank_name>AXIS</bank_name>
             <ifsc_code>UTIB0000037</ifsc_code>
             <remarks>test</remarks>
             <trxn_initiator>I / O</trxn_initiator>
              <trans_count>1</trans_count>
             <investor_auth_log></investor_auth_log>
```

```
</service_request>
<childtrans>
<amc>T</amc>
<folio>5145607</folio>
<product_code>SIP3G</product_code>
<ft_acc_no></ft_acc_no>
<amt_unit_type>Amount</amt_unit_type>
<amt_unit>1000</amt_unit>
<all_units>Y</all_units>
<reinvest>N</reinvest>
<input_ref_no>52521</input_ref_no>
</NMFIIService>
```

XML Tag	Field Description	Data type	Mandatory	Remarks
appln_id	Appln Id	varchar2(20)	Υ	
password	Password	varchar2(15)	Y	
broker_code	Broker Code	varchar2(15)	Υ	
iin	IIN	varchar2(10)	Υ	
poa	POA	char(1)	Y	Executed by POA – values Y or N If POA flag is 'Y' then Mail will be triggered to POA Holder for transaction authorization.
POA_Bank_Trxn_Type	POA Bank Trxn Type	Varchar2(10)	N	This tag is not required. Don't skip this tag instead pass blank value in this tag.
trxn_acceptance	Trxn Acceptance	varchar2(10)	Υ	Ph(By Phone) or OL(Online) or ALL
dp_id	DP Id	varchar2(20)	N	
acc_no	Acc No	varchar2(20)	Υ	Bank Name, Account Number and
bank_name	Bank Name	varchar2(40)	Υ	IFSC Code is not required for redemption transaction.
ifsc_code	IFSC Code	varchar2(40)	Y	Credit will be happen based on default bank registered at the RTA level.
remarks	Remarks	varchar2(1000)	N	
trxn_initiator	Transaction Initiator	Varchar2(1)	N	We have introduced new flag < <trxn_initiator>> to identify the transaction coming from ARN portal is either initiated by Investor (I) or Others (O).</trxn_initiator>
				For privilege enabled distributor, if the flag is passed as "I" then, OTP will be triggered as SMS to the IIN registered mobile number. Investor has to key in the OTP in ARN Web Portal. The ARN portal should send the OTP via another

				API method for authorization at our end. For others, if the flag is "null" or "O" then, OTP will be triggered as SMS / EMAIL to the IIN registered mobile number / email id. Investor has to respond with the OTP for authorization.
Trans_count	Transaction Count	Number	Y	The Number of Child Transaction can be placed based on Transaction Count
Investor_auth_log	Investor_auth_log	varchar2(200)	N	To bypass OTP communication from NMFII as a compliance perspective our system seeks the Investor Concern's from API client. Hence this log to be sent by the API client . This tag is applicable based on ARN privilege and this is mandatory for "Redemption" when opting for OTP bypass. For this tag, Value should be Investor IP Address, Date time of investor given their concern

Multi Transaction Table:

XML Tag	Field Description	Data type	Mandatory	Remarks
amc	AMC	varchar2(5)	Y	AMC Code
folio	Folio	varchar2(20)	Y	
product_code	Product Code	varchar2(20)	Y	
ft_acc_no	FT Account Number	Varchar2(20)	N	
amt_unit_type	Amount or Unit Type	varchar2(10)	Y	Amount or Unit
amt_unit	Amount or Unit	number(25,8)	N	Mandatory If all_units Value 'N'.
all_units	All Units	char(1)	Y	
Reinvest	Reinvest (Dividend Option)	Char(1)	Y	Dividend Option value should be 'Y' or 'N' or 'Z'.
input_ref_no	Input ref no	Varchar(20)	N	This user Input Reference No will reflect in output Service Response XML for user reference.

For Success Case:

```
<NMFIIService>
    <service_status>
        <service_return_code>0</service_return_code>
        <service_msg>Success</service_msg>
        </service_status>
```

```
<service_response>
              <unique_no>12345</unique_no>
              <trxn no>4567</trxn no>
              <application_no>9874</application_no>
              <fund>Hdfc</fund>
              <folio>110115</folio>
              <scheme>BFD</scheme>
              <scheme Name>Tata Balanced Fund Plan A - Dividend/scheme Name>
              <amt>5000</amt>
              <amt_unit_type>AMOUNT/UNIT</amt_unit_type>
              <status desc>Ok</status desc>
              <status code>0</status code>
              <input_ref_no>52521<input_ref_no>
    </service response>
</NMFIIService>
For Failure Case:
<NMFIIService>
    <service status>
       <service return code>1/service return code>
       <service_msg>Failure</service_msg>
    </service status>
    <service_response>
              <unique_no>12345</unique_no>
              <trxn no>4567</trxn no>
              <application no>9874</application no>
              <fund>Hdfc</fund>
              <folio>110115</folio>
              <scheme>BFD</scheme>
              <scheme_Name>Tata Balanced Fund Plan A - Dividend</scheme_Name>
              <amt>5000</amt>
              <amt_unit_type>AMOUNT/UNIT</amt_unit_type>
              <status_desc>Invalid folio for given amc</status_desc>
              <status code>1</status code>
              <input_ref_no>52521<input_ref_no>
    </service_response>
</NMFIIService>
```

Output data as table format:

For Service Status:

XML Tag	Remarks
service_return_code	0 / 1
service_msg	(0) Success / (1) Failure

For Service Response:

Success:

XML Tag	Field Description	data type	Remarks
Unique_No	Unique Ref No	varchar2(20)	12345
Trxn_No	Transaction No	number(10)	4567
Application_No	Application No	Number(10)	9874
Fund	AMC Code	varchar2(5)	Hdfc
Folio	Folio No	varchar2(20)	110115
Scheme	Scheme	varchar2(20)	AG
Scheme_Name	Scheme Name	varchar2(200)	Tata Balanced Fund Plan A - Dividend
Amt	Amount	number(25,8)	5000
Amt_Unit_Type	Amt or Unit Type	Varchar2(20)	AMOUT/UNIT
Status_Desc	Transaction Status	varchar	Ok
Status_Code	Transaction Code	varchar2	0
input_ref_no	Input ref no	Varchar2(20)	52521

Failure:

XML Tag	Field Description	data type	Remarks
Unique_No	Unique Ref No	varchar2(20)	12345
Trxn_No	Transaction No	number (10)	4567
Application_No	Application No	Number(10)	9874
Fund	AMC Code	varchar2(5)	Hdfc
Folio	Folio No	varchar2(20)	110115
Scheme	Scheme	varchar2(20)	AG
Scheme_Name	Scheme Name	varchar2(200)	Tata Balanced Fund Plan A - Dividend
Amt	Amount	number (25,8)	5000
Amt_Unit_Type	Amt or Unit Type	Varchar2(20)	AMOUNT/UNIT
Status_Desc	Transaction Status	varchar	Invalid Folio for given amc
Status_Code	Transaction Code	varchar2	1
input_ref_no	input_ref_no	Varchar2(20)	52521

1.4.3 Method to Switch Exception Transaction

Method Name: "SWITCHTRXNEXCEPTION"

This service will allow Switch Transaction

Pass the input as xml format mentioned below.

```
<NMFIIService>
      <service_request>
             <appln_id>test</appln_id>
             <password>test$123</password>
             <broker code>ARN-70209
             <iin>5011000029</iin>
             <poa>Y</poa>
             <poa bank_trxn_flag>NDCPMS</poa_bank_trxn_flag>
             <trxn_acceptance>OL</trxn_acceptance>
             <dp_id>2345678901122222</dp_id>
             <sub_broker_arn_code>0441124578212</sub_broker_arn_code>
             <sub_broker_code>ARN-0145</sub_broker_code>
             <euin_opted>Y / N</euin_opted>
             <euin>E123456</euin>
             <remarks>test</remarks>
              <trxn initiator>I / O</trxn initiator>
              <trans count>1</trans count>
              <investor_auth_log></investor_auth_log>
      </service request>
      <childtrans>
             <amc>D</amc>
             <folio>5145607</folio>
             <source_product_code>BFD</source_product_code>
             <source_ft_acc_no></source_ft_acc_no>
             <target product code>BFD</target product code>
             <target_ft_acc_no></target_ft_acc_no>
             <source reinvest>Y</source reinvest>
             <target reinvest>Y</target reinvest>
             <amt_unit_type>Amount / Unit</amt_unit_type>
             <amt_unit>1000</amt_unit>
             <all units>Y/N</all units>
             <input_ref_no>52521</input_ref_no>
      </childtrans>
</NMFIIService>
```

XML Tag	Field Description	Data Type	Mandatory	Remarks
appln_id	Appln Id	Varchar2(20)	Υ	
password	Password	Varchar2(15)	Y	
broker_code	Broker Code	Varchar2(15)	Y	
iin	IIN	Varchar2(10)	Y	
poa	POA	Char (1)	Y	Executed by POA – values Y or N

POA_Bank_Trxn_Type	POA Bank Trxn Type	Varchar2(10)	N	Value should be NDCPMS or DCPMS
trxn_acceptance	Trxn Acceptance	Varchar2(10)	Υ	Ph (By Phone) or OL(Online) or ALL
dp_id	DP Id	Varchar2(20)	Ν	
sub_broker_arn_code	Sub Broker ARN Code	Varchar2(20)	N	
sub_broker_code	Sub Broker Code	Varchar2(30)	N	
euin_opted	EUIN Opted	Char (1)	Υ	Yes or No
euin	EUIN	Varchar2(20)	N	
remarks	Remarks	Varchar2(1000)	N	
trxn_initiator	Transaction Initiator	Varchar2(1)	N	We have introduced new flag < <trxn_initiator>> to identify the transaction coming from ARN portal is either initiated by Investor (I) or Others (O). For privilege enabled distributor, if the flag is passed as "I" then, OTP will be triggered as SMS to the IIN registered mobile number. Investor has to key in the OTP in ARN Web Portal. The ARN portal should send the OTP via another API method for authorization at our end. For others, if the flag is "null" or "O" then, OTP will be triggered as SMS / EMAIL to the IIN registered mobile number / email id. Investor has to respond with the OTP for authorization.</trxn_initiator>
Trans_count	Transaction Count	Number	Υ	The Number of Child Transaction can be placed based on Transaction Count
Investor_auth_log	Investor_auth_log	varchar2(200)		To bypass OTP communication from NMFII as a compliance perspective our system seeks the Investor Concern's from API client. Hence this log to be sent by the API client. This tag is applicable based on ARN privilege and this is mandatory for "SWITCH" when opting for OTP bypass. For this tag, Value should be Investor IP Address, Date time of investor given their concern

Multi Transaction Table:

XML Tag	Field Description	Data type	Mandatory	Remarks
amc	AMC	varchar2(5)	Υ	AMC Code

folio	Folio	varchar2(20)	Υ	
source_product_code	Source Product Code	Varchar2(20)	Y	
source_ft_acc_no	Source FT Account Number	Varchar2(20)	N	
target_product_code	Target Product Code	Varchar2(20)	Y	
target_ft_acc_no	Target FT Account Number	Varchar2(20)	N	
source_reinvest	Source product reinvest	Varchar2(20)	Y	N
target_reinvest	Target product reinvest	Varchar2(20)	Y	N
amt_unit_type	Amount or Unit Type	varchar2(10)	Y	Amount or Unit
amt_unit	Amount or Unit	number (25,8)	Y	value
all_units	All Units	char (1)	Y	
input_ref_no	Input ref no	Varchar2(20)	N	This user Input Reference No will reflect in output Service Response XML for user reference.

For Success Case:

```
<NMFIIService>
    <service status>
      <service_return_code>0</service_return_code>
      <service_msg>Success</service_msg>
    </service status>
    <service_response>
             <unique_no>12345</unique_no>
             <trxn no>4567</trxn no>
             <application_no>9874</application_no>
             <fund>Hdfc</fund>
             <folio>110115</folio>
             <Source_product>BFD</Source_product>
             <Target_product>BFD</Source_product>
              <Source_product_Name>Tata Balanced Fund Plan A - Dividend</scheme_Name>
             <Target_product_Name>Birla Sun Life '95 Fund - Growth-Regular
                            Plan</Target_product_Name>
             <amt>5000</amt>
             <amt_unit_type>AMOUNT/UNIT</amt_unit_type>
             <status_desc>Ok</status_desc>
             <status_code>0</status_code>
             <input_ref_no>52521<input_ref_no>
    </service_response>
</NMFIIService>
```

For Failure Case:

<NMFIIService>

```
<service_status>
      <service_return_code>1</service_return_code>
      <service_msg>Failure</service_msg>
    </service_status>
    <service_response>
             <unique no>12345</unique no>
             <trxn_no>4567</trxn_no>
             <application no>9874</application no>
             <fund>Hdfc</fund>
             <folio>110115</folio>
             <Source product>BFD</Source product>
             <Target_product>AG</Source_product>
              <Source_product_Name>Tata Balanced Fund Plan A - Dividend</scheme_Name>
             <Target_product_Name>Birla Sun Life '95 Fund - Growth-Regular
             Plan</Target_product_Name>
             <amt>5000</amt>
             <amt unit type>AMOUNT/UNIT</amt unit type>
             <status_desc>Invalid folio for given amc</status_desc>
             <status_code>1</status_code>
             <input_ref_no>52521<input_ref_no>
    </service response>
</NMFIIService>
```

Output data as table format:

For Service Status:

XML Tag	Remarks	
service_return_code	0/1	
service_msg	(0) Success / (1) Failure	

For Service Response:

Success:

XML Tag	Field Description	Data Type	Remarks
Unique_No	Unique Ref No	varchar2(20)	12345
Trxn_No	Transaction No	number(10)	4567
Application_No	Application No	Number(10)	9874
Fund	AMC Code	varchar2(5)	HDFC
Folio	Folio No	varchar2(20)	1101245
Source_Scheme	Switch Out Scheme	varchar2(20)	BFD
Target_Scheme	Switch IN Scheme	varchar2(20)	AG
Source_Scheme_Name	Switch IN Scheme Name	varchar2(200)	Tata Balanced Fund Plan A - Dividend

Target_Scheme_Name	Switch out Scheme Name	varchar2(200)	Birla Sun Life '95 Fund - Growth-Regular Plan
Amt	Amount	number(25,8)	5000
Amt_Unit_Type	Amt or Unit Type	Varchar2(20)	AMOUNT/UNIT
Status_Desc	Transaction Status	varchar2	Ok
Status_Code	Transaction Code	varchar2	0
input_ref_no	Input ref no	Varchar2(20)	52521

For Failure:

XML Tag	Field Description	Data Type	Remarks
Unique_No	Unique Ref No	varchar2(20)	12345
Trxn_No	Transaction No	number(10)	4567
Application_No	Application No	Number(10)	9874
Fund	AMC Code	varchar2(5)	HDFC
Folio	Folio No	varchar2(20)	1101245
Source_Scheme	Switch Out Scheme	varchar2(20)	BFD
Target_Scheme	Switch IN Scheme	varchar2(20)	AG
Source_Scheme_Name	Switch Out Scheme Name	varchar2(200)	Tata Balanced Fund Plan A - Dividend
Target_Scheme_Name	Switch IN Scheme Name	varchar2(200)	Tata Balanced Fund Plan A - Dividend
Amt	Amount	number(25,8)	5000
Amt_Unit_Type	Amt or Unit Type	Varchar2(20)	AMOUNT/UNIT
Status_Desc	Transaction Status	varchar2	Invalid Folio for given amc
Status_Code	Transaction Code	varchar2	1
input_ref_no	Input ref no	Varchar2(20)	52521

1.4.4 Method for Systematic Exception Transaction

Method Name: "SYSTRXNREGEXCEPTION"

This service will allow Systematic Transaction Registration

Pass the input as xml format mentioned below.

```
<euin>E123456</euin>
              <sub brok arn></sub brok arn>
              <trxn acceptance></trxn acceptance>
              <sip_paymech></sip_paymech>
              <acc no></acc no>
              <bank></bank>
             <br/>
<br/>
dranch></br/>
/branch>
             <acc type></acc type>
             <micr no></micr no>
             <ifsc code></ifsc code>
             <debit amt type></debit amt type>
             <umrn></umrn>
             <ach_amt></ach_amt>
             <ach fromdate></ach fromdate>
             <ach enddate></ach enddate>
             <until_cancelled></until_cancelled>
             <Bank_holder_name>Krishnan</Bank_holder_name>
             <Bank_holder_name1></Bank_holder_name1>
             <Bank_holder_name2></Bank_holder_name2>
             <trans_count>1</trans_count>
             <ach exist>Y</ach exist>
             <trxn initiator>I / O</trxn initiator>
             <POA>N</POA>
      </service_request>
      <childtrans>
             <amc>D</amc>
             <folio>5145607</folio>
             cproduct_code>
             <source_ft_acc_no></source_ft_acc_no>
             <target_product></target_product>
             <target ft acc no></target ft acc no>
             <source_reinvest>Y</source_reinvest>
             <target reinvest>Y</target reinvest>
             <amt unit type></amt unit type>
              <amt_unit></amt_unit>
              <all unit></all unit>
             <from date>01-Jan-1990</from date>
             <to_date>02-Jan-1990</to_date>
             <periodicity></periodicity>
             <period day></period day>
             <input ref no>52521</input ref no>
             <perpetual flag></perpetual flag>
             <insurance enabled></insurance enabled>
             <GOAL BASED SIP></GOAL BASED SIP>
             <GOAL TYPE></GOAL TYPE>
             <GOAL AMOUNT></GOAL AMOUNT>
             <FREEDOM_SIP>Y</FREEDOM_SIP>
              <FREEDOM_TARGET_SCHEME>RG2GR</FREEDOM_TARGET_SCHEME>
              <FREEDOM_TENURE>12</FREEDOM_TENURE>
              <FREEDOM SWP AMOUNT>50000/FREEDOM SWP AMOUNT>
              <FREEDOM_SCHEME_OPTION>A</FREEDOM_SCHEME_OPTION>
      </childtrans>
</NMFIIService>
```

XML Tag	Field Description	Data Type	Mandatory	Remarks
appln_id	Appln Id	varchar2(20)	Y	
password	Password	varchar2(15)	Y	
broker_code	Broker Code	varchar2(15)	Υ	
iin	IIN	varchar2(20)	Y	
trxn_type	Trxn Type	varchar2(7)	Υ	SIP or SWP or STP
dp_id	DP ID	varchar2(20)	Υ	
euin_opted	EUIN opted	char(1)	Υ	
euin	EUIN	varchar2(20)	N	
sub_brok_arn	Sub brok Arn	varchar2(20)	N	
trxn_acceptance	Transaction through	varchar2(10)	N	Ph(By Phone) or OL(Online) or ALL
sip_paymech	SIP payment mech	Varchar2(15)	N	Applicable only for SIP. Value will be "M / DC" M [Mandate] – ACH Mandate Details are mandatory DC [Direct Credit] - ACH Mandate details are not Mandatory.
acc_no	Account No	varchar2(40)	N	Applicable only for SIP
bank	Bank	varchar2(40)	N	Applicable only for SIP
branch	Branch	varchar2(40)	N	Applicable only for SIP
acc_type	Acc type	varchar2(10)	Υ	Applicable only for SIP
micr_no	MICR No	varchar2(20)	N	Applicable only for SIP
ifsc_code	IFSC code	varchar2(40)	Υ	Applicable only for SIP
debit_amt_type	Debit amt type	char(1)	N	Applicable only for SIP
umrn	UMRN	varchar2(20)	N	If UMRN Exist then Bank Name, Branch Name, Account Number, Account Type, Debit Amount Type, ACH Amount, ACH From Date, ACH End Date, Bank Holder Name will be passed automatically to the database based on UMRN. so no need to provide the value again in the Bank Name, Branch Name Tags etcyou can leave blank if UMRN provided.
ach_amt	ACH Amount	Number(25,8)	N	Mandatory if Sub_trxn_type is SIP
ach_fromdate	ACH from date	Date(dd-Mon-yyyy)	N	Mandatory if Sub_trxn_type is SIP. Validation : ACH from date should
				not greater than SIP From date.
ach_enddate	ACH end date	Date(dd-Mon-yyyy)	N	Mandatory if Sub_trxn_type is SIP. Validation : ACH to date should be

				greater or equal to than sip to date.
until_cancelled	Until cancelled for SIP End date	Char(1)	N	Mandatory if Sub_trxn_type is SIP if until_cancelled ="Y" default date will be "31-Dec-2999"
Bank_holder_name	Bank holder name	Varchar2(70)	Y	
Bank_holder_name1	Bank holder name1	Varchar2(70)	N	
Bank_holder_name2	Bank holder name2	Varchar2(70)	N	
Trans_count	Transaction Count	Number	Y	The Number of Child Transaction can be placed based on Transaction Count
ach_exist	ACH Exist	char(1)		 Pass the value 'Y', If ACH Mandate Details are already registered for the IIN. Pass the Value 'N', if wants to register New mandate. IIN registered bank details are allowed for new Mandate Registration. If POA tag is 'Y' then you have to provide the POA Registered Bank details for new mandate registration If POA tag is 'N' then you have to provide the IIN Registered Bank details for new mandate registration
trxn_initiator	Transaction Initiator	Varchar2(1)	N	We have introduced new flag <trxn_initiator> to identify the transaction coming from ARN portal is either initiated by Investor (I) or Others (O). For privilege enabled distributor, if the flag is passed as "I" then, OTP will be triggered as SMS to the IIN registered mobile number. Investor has to key in the OTP in ARN Web Portal. The ARN portal should send the OTP via another API method for authorization at our end. For others, if the flag is "null" or "O" then, OTP will be triggered as SMS / EMAIL to the IIN registered mobile number / email id. Investor has to</trxn_initiator>

				respond with the OTP for authorization.
POA	POA	CHAR (1)	N	Value should be 'Y' or 'N'

Multi Transaction Table:

XML Tag	Field Description	Data Type	Mandatory	Remarks
amc	AMC	Varchar2(5)	Y	AMC Code
folio	Folio	Varchar2(20)	Y	For additional purchase alone mandatory.
product_code	Product Code	Varchar2(20)	Υ	If Freedom SIP flag is 'Y' then
				Freedom SIP: - The Product Code should be passed based on Freedom SIP flag is 'Y'.
				Kindly refer Product Master for allowed Freedom SIP Schemes.
				HDFC Dream SIP: - The Product Code should be passed based on Freedom SIP flag is 'Y' and Freedom Scheme Option. Kindly refer Product Master for allowed Dream SIP Schemes.
source_ft_acc_no	Source FT Account	Varchar2(20)	N	Disamen constitue.
	Number			
target_product	Target Product Code	varchar2(20)	N	For STP transaction alone
targer_ft_acc_no	Target FT Account Number	Varchar2(20)	N	
source_reinvest	Source ReInvest	Char(1)	Y	
Target_reinvest	Target ReInvest	Char(1)	Y	
amt_unit_type	Amount or Unit Type	varchar2(40)	Y	Only 'Amount' is allowed for SIP, STP and SWP
amt_unit	Amount or Unit	number(25,8)	Υ	Provide Amount value
all_unit	All Units	char(1)	N	Units not allowed. Leave blank
from_date	From date	date(dd-Mon-yyyy)	Υ	
to_date	To date	date(dd-Mon-yyyy)	Y	
periodicity	Periodicity	varchar2(5)	Y	
period_day	Period Day	varchar2(50)	Y	Daily (D) - No need provide the SIP Period Day Value. Weekly (WD) - Need to provide Specific dates in SIP Period Day value. It will check the product master, whether the

				date is available for the given product code or not. Once In a Week (OW) - No need provide the SIP Period Day Value. SIP Period Day value (02 - Monday, 03 - Tuesday, 04- Wednesday, 05 - Thursday, 06 - Friday) will be taken automatically from SIP From Date. SIP from date should falls between Monday to Friday dates and also system we will validate against the SIP/STP/SWP dates in product master, whether the date (02,03,04,05,06) is available for given product code or not. Monthly (OM), Quarterly (Q), Half-Yearly (H), Yearly(Y), Twice a Month ((TW) - Need to provide SIP Period Day value. It will check the product master, whether the date is available for the given product code or not. Business Day (BZ) - No need to provide SIP period day value. It will take value from SIP From Date and also we will validate whether the given SIP From date falls on business day or not.
input_ref_no	Input ref no	Varchar2 (20)	N	This user Input Reference No will reflect in output Service Response XML for user reference.
perpetual_flag	Perpetual Flag	Char(1)	N	Value should be "Y" or "N" If value is Y then the default value for SIP End Date will be 31-Dec-2099.
insurance_enabled	Insurance Enabled	Char(1)	N	Applicable only for SIP. Value should be "Y / N". If value "Y" then we will validate whether the scheme is eligible for Insurance. If eligible then the below things are mandatory. 1. Investor Age must be between 19 and 50. 2. Nominee name is required 3. Nominee DOB is required. 4. Nominee Percentage must be 100 5. If Nominee (Minor) Relationship is required."
GOAL_BASED_SIP	Goal Based SIP	Char(1)	N	Applicable only for SIP is Systematic. Value should be "Y / N".

				If value "Y" then Goal_Type and Goal_Amount tags are mandatory.
GOAL_TYPE	Goal Type	Varchar2 (100)	N	Mandatory when Goal Based SIP value is Y.
				Pass either any one of the values mentioned below.
				1.Kids Marriage 2.Kids Education 3.Retirement Planning 4.Tax Savings 5.Dream House 6.Dream Car 7.Dream Vacation
GOAL_AMOUNT	Goal Amount	Number(25,8)	N	Mandatory when Goal Based SIP value is Y.
				10000
FREEDOM_SIP	Freedom SIP	CHAR(1)	N	Applicable only for Sub_trxn_type is Systematic. Value should be "Y / N".
				If value "Y" then FREEDOM_SIP and FREEDOM_SIP TARGET ,TENURE ,AMOUNT tags are mandatory.
FREEDOM_TARGET_S CHEME	Freedom SIP Target scheme	Varchar2(50)	N	Need to pass the scheme code based on product master.
				ALLOW_FREEDOM_SWP Flag should be 'Y' in product master.
FREEDOM_TENURE	Freedom Tenure in years	Number(5)	N	Based on FREEDOM SIP Mater need to pass the tenure.
				Example: 12
FREEDOM_SWP_AMO UNT	Freedom Amount of investor interest	Number(25,8)	N	SWP amount tab should be kept editable:
				For e.g, if an investor enters SIP Amount Rs 1000 & selects tenure 12 yrs, its option should show 2000, however user can edit it and place a value<=2000.
FREEDOM_SCHEME_ OPTION	Freedom Scheme Option	Char (1)	N	Applicable only for the AMC Code - "H".
0. 11014				Value should be "A / B".
				A – 'Option A' it means that the Source Scheme (Product Code) and the Freedom Target Scheme should be

	same. B – 'Option B' it means that the Source Scheme (Product Code) and the Freedom Target Scheme should be different.
--	--

For Success Case:

```
<NMFIIService>
    <service status>
       <service_return_code>0</service_return_code>
       <service_msg>Success</service_msg>
    </service_status>
    <service_response>
              <unique_no>12345</unique_no>
              <trxn no>4567</trxn no>
              <application_no>9874</application_no>
              <fund>Hdfc</fund>
              <folio>110115</folio>
              <Scheme>BFD</Scheme>
              <Scheme_Name>Tata Balanced Fund Plan A - Dividend</scheme_Name>
              <amt>5000</amt>
              <status_desc>Ok</status_desc>
              <status_code>0</status_code>
              <input_ref_no>52521<input_ref_no>
    </service response>
</NMFIIService>
For Failure Case:
<NMFIIService>
    <service_status>
       <service_return_code>1</service_return_code>
       <service_msg>Failure</service_msg>
    </service_status>
    <service_response>
              <unique no>12345</unique no>
              <trxn no>4567</trxn no>
              <application_no>9874</application_no>
              <fund>Hdfc</fund>
              <folio>110115</folio>
              <Scheme>BFD</Scheme>
              <Scheme_Name>Tata Balanced Fund Plan A - Dividend</scheme_Name>
              <amt>5000</amt>
              <status_desc>Invalid folio for given amc</status_desc>
              <status_code>1</status_code>
              <input ref no>52521<input ref no>
    </service response>
</NMFIIService>
```

Output data as table format:

For Service Status:

XML Tag	Remarks
service_return_code	0/1
service_msg	(0) Success / (1) Failure

For Service Response:

Success:

XML Tag	Field Description	data type	Remarks
Unique_No	Unique Ref No	varchar2(20)	12345
Trxn_No	Transaction No	number(10)	4567
Application_No	Application No	Number(10)	9874
Fund	AMC Code	varchar2(5)	HDFC
Folio	Folio No	varchar2(20)	1101245
Source_Scheme	Switch Out Scheme	varchar2(20)	BFD
Target_Scheme	Switch IN Scheme	varchar2(20)	AG
Target_Scheme_Name	Switch IN Scheme Name	varchar2(200)	Birla Sun Life '95 Fund - Growth- Regular Plan
Source_Scheme_Name	Switch Out Scheme Name	varchar2(200)	Tata Balanced Fund Plan A - Dividend
Amt	Amount	number(25,8)	5000
Status_Desc	Transaction Status	varchar	ok
Status_Code	Transaction Code	varchar2	0
input_ref_no	Input ref no	Varchar2(20)	52521

Failure:

XML Tag	Field Description	data type	Remarks
Unique_No	Unique Ref No	varchar2(20)	
Trxn_No	Transaction No	number (10)	
Application_No	Application No	Number(10)	

Fund	AMC Code	varchar2(5)	HDFC
Folio	Folio No	varchar2(20)	1101245
Source_Scheme	Switch Out Scheme	varchar2(20)	BFD
Target_Scheme	Switch IN Scheme	varchar2(20)	AG
Source_Scheme_Name	Switch Out Scheme Name	varchar2(200)	Birla Sun Life '95 Fund - Growth- Regular Plan
Target_Scheme_Name	Switch IN Scheme Name	varchar2(200)	Tata Balanced Fund Plan A - Dividend
Amt	Amount	number (25,8)	5000
Status_Desc	Status Description	Varchar2	Sip from date should not be less than current date.
Status_Code	Status Code	varchar2	1
input_ref_no	Input ref no	Varchar2(20)	52521

1.4.5 Method to SUBMITUTRNUMBER

Method Name: "SUBMITUTRNUMBER"

This service will allow update the UTR Number and authorize the transaction.

Pass the input as xml format mentioned below.

XML Tag	Field Description	Data Type	Mandatory	Remarks
appln_id	Appln Id	Varchar2(20)	Y	KGNANA
password	Password	Varchar2(15)	Y	TEST\$258
broker_code	Broker Code	Varchar2(15)	Y	ARN-70209
UTR_no	UTR Number	Varchar2(30)	Y	12123
payment_ref_no	Payment Ref No	Varchar2(20)	Y	12123
transfer_date	UTR Date	Date	Y	15-Feb-2017

The invoke requested service and return the following output.

For Success Case:

```
<NMFIIService>
    <service_status>
      <service_return_code>0</service_return_code>
       <service_msg>Success</service_msg>
    </service_status>
    <service_response>
       <return_msg>
              Updated successfully.
       </return_msg>
    </service_response>
</NMFIIService>
For Failure Case:
<NMFIIService>
    <service_status>
      <service_return_code>1
       <service_msg>Failure</service_msg>
    </service_status>
    <service_response>
      <return_msg>
             Unable to update the UTR Number.
      </return_msg>
    </service_response>
</NMFIIService>
```

Output data as table format:

For Service Status:

XML Tag	Remarks
service_return_code	0/1
service_msg	(0) Success / (1) Failure

For Service Response:

Success:

XML Tag	Remarks
return_msg	Update successfully.

Failure:

XML Tag	Remarks
return_msg	Unable to update the UTR Number.

1.4.5 Document Change History

Date	Version	Change Reference
12-Oct-2016	1.0	Document Created and updated
29-Nov-2016	1.1	Added new request tag reinvest in REDEEMTRXNEXCEPTION Method 1.4.2
26-Dec-2016	1.2	Added bank_holder_name tag in PURCHASETRXNEXCEPTION Method in section 1.4.1, SYSTRXNREGEXCEPTION Method in section 1.4.4
02-Jan-2017	1.3	Added iin_conf_flag tag in PURCHASETRXNEXCEPTION Method in section 1.4.1, REDEEMTRXNEXCEPTION Method in section 1.4.2, SWITCHTRXNEXCEPTION Method in section 1.4.3
06-Feb-2017	1.4	Removed Mandatory Validation of Bank_Code, ACC_No, IFSC Code for Payment Mode Cheque, Demand Draft and Pay Order in PURCHASETRXNEXCEPTION Method 1.4.1
09-Feb-2017	1.4	Added trxn_initiator Tag in PURCHASETRXNEXCEPTION Method 1.4.1, REDEEMTRXNEXCEPTION Method 1.4.2 Section, SWITCHTRXNEXCEPTION Method 1.5.3 Section.
02/10/17	1.4	Added new response field Bank_holder_name,Bank_holder_name1, Bank_holder_name2 in PURCHASETRXNEXCEPTION Method 1.5.3
15-Feb-2017	1.5	Added SUBMITUTRNUMBER Method in 1.4.7 Section
15-Feb-2017	1.5	Remarks updated in sip_paymech for ACH Mandate details are required or not in PURCHASETRXNEXCEPTION Method 1.4.1 and SYSTRXNREGEXCEPTION Method 1.4.4 Section
10-Mar-2017	1.5	Added request and response tag input_ref_no in PURCHASETRXNEXCEPTION Method 1.4.1, REDEEMTRXNEXCEPTION Method 1.4.2, SWITCHTRXNEXCEPTION Method 1.4.3 and SYSTRXNREGEXCEPTION Method 1.4.4 Section
23-Mar-2017	1.6	FT_ACC_NO tag added in PURCHASETRXNEXCEPTION Method 1.5.3, REDEEMTRXNEXCEPTION Method 1.4.2. SOURCE_FT_ACC_NO and TARGET_FT_ACC_NO tags added in SWITCHTRXNEXCEPTION Method 1.4.3, SYSTRXNREGEXCEPTION Method 1.4.4
30-Mar-2017	1.7	Made Folio Number as Non Mandatory in PURCHASETRXNEXCEPTION Method 1.4.1.
28-Apr-2017	1.8	As like Redemption and Switch Transaction SMS OTP concept implemented in SYSTRXNREGEXCEPTION Method 1.4.4 Section
05-May-2017	1.9	Added perpetual_flag request Tag in PURCHASETRXNEXCEPTION Method 1.4.1, SYSTRXNREGEXCEPTION Method 1.4.4
22-May-2017	2.0	Added Investor_auth_log request Tag in PURCHASETRXNEXCEPTION Method 1.4.1, REDEEMTRXNEXCEPTION Method 1.4.2, SWITCHTRXNEXCEPTION Method 1.4.3
01-Jun-2017	2.1	Added new Request field ach_exist in PURCHASETRXNEXCEPTION Method

		1.4.1 and SYSTRXNREGEXCEPTION Method 1.4.4 Section
09-Aug-2017	2.2	Nominee related request tags are removed in
		PURCHASETRXNEXCEPTION Method and based on registered IIN
		Nominee details will be taken.
28-Sep-2017	2.3	New Frequency type (BZ) added in PURCHASETRXNEXCEPTION Method 1.4.1 and SYSTRXNREGEXCEPTION Method 1.4.4 Section
23-Jul-2018	2.4	Allowed Partial Units in REDEEMTRXNEXCEPTION Method 1.4.2 and SWITCHTRXNEXCEPTION Method 1.4.3
10-Aug-2018	2.5	insurance_enabled tag added in PURCHASETRXNEXCEPTION Method 1.4.1, and SYSTRXNREGEXCEPTION Method 1.4.4
21-Aug-2018	2.6	Poa_bank_trxn_flag tag added in PURCHASETRXNEXCEPTION Method 1.4.1, REDEEMTRXNEXCEPTION Method 1.4.2, SWITCHTRXNEXCEPTION Method 1.4.3
18-Sep-2018	2.7	Added request field of GOAL_BASED_SIP, GOAL_TYPE and GOAL_AMOUNT in PURCHASETRXNEXCEPTION Method 1.4.1, SYSTRXNREGEXCEPTION Method 1.4.4 Method
18-Sep-2018	2.7	STP and SWP allowed in SYSTRXNREGEXCEPTION Method 1.4.4 Method
19-Nov-2018	2.8	POA tag added in SYSTRXNREGEXCEPTION Method 1.4.4 Method
27-Nov-2018	2.9	Added trxn_initiator Tag in SYSTRXNREGEXCEPTION Method in Section 1.4.4.
27-Jan-2020	3.0	1.FREEDOM_SIP tag added in PURCHASETRXNEXCEPTION and SYSTRXNREGEXCEPTION method 1.4 and 1.4.4 section 2.FREEDOM_TARGET_SCHEME tag added in PURCHASETRXNEXCEPTION and SYSTRXNREGEXCEPTION method 1.4 and 1.4.4 section 3.FREEDOM_TENURE tag added in PURCHASETRXNEXCEPTION and SYSTRXNREGEXCEPTION method 1.4 and 1.4.4 section 4.FREEDOM_SWP_AMOUNT tag added in PURCHASETRXNEXCEPTION and
27-Jan-2020	3.0	SYSTRXNREGEXCEPTION method 1.4 and 1.4.4 section 1. Added new response field of Application_No in PURCHASETRXNEXCEPTION Method 1.4, REDEEMTRXNEXCEPTION Method 1.4.2, SWITCHTRXNEXCEPTION Method 1.4.3, SYSTRXNREGEXCEPTION Method in Section 1.4.4.
04-Feb-2020	3.1	Bank Name, Account Number and IFSC Code is not mandatory for redemption transaction. Credit will be happen based on default bank registered at the RTA level. Remarks updated for Bank Name, Account Number and IFSC Code in REDEEMTRXNEXCEPTION Method 1.4.2
24-Aug-2020	3.2	Remarks column updated for ACH_Exist field in PURCHASETRXNEXCEPTION and SYSTRXNREGEXCEPTION method 1.4.1 and 1.4.4 section
23-Oct-2020	3.3	New Payment Mode "UPI" included in PURCHASETRXNEXCEPTION API Method
28-May-2021	3.4	Changed IFSC Code Mandatory in the methods of PURCHASETRXNEXCEPTION Under Section 1.4.1 SYSTRXNREGEXCEPTION Under Section 1.4.4
06-Jul-2021	3.5	FT Scheme Account Number made non-mandatory for the below methods PURCHASETRXNEXCEPTION under section 1.4.1 REDEEMTRXNEXCEPTION under section 1.4.2 SWITCHTRXNEXCEPTION under section 1.4.3 SYSTRXNREGEXCEPTION under section 1.4.4
19-Nov-2021	3.6	Removed iin_conf_flag tag in PURCHASETRXNEXCEPTION Method in section 1.4.1, REDEEMTRXNEXCEPTION Method in section 1.4.2, SWITCHTRXNEXCEPTION Method in section 1.4.3

16-Dec-2021	3.7	Added FREEDOM_SCHEME_OPTION tag in PURCHASETRXN Method 1.4.1,
		SYSTRXNREG under section 1.4.4

1.4.7 Important Note

Error Message	Description
Bad Request	Invalid URL (Http or Https or URL is wrong).
Error occurred while processing	Tag Missing (The input XML string should contain all the XML tags irrespective of mandatory).

1.4.8 How to consume Service:

Test URL: https://uat.nsenmf.com/NMFII-ExceptionTrxnService/NMFIIExpTrxnService

```
Dim request As HttpWebRequest = Nothing
Dim xmllnput As New XmlDocument
Dim strInputString As New StringBuilder
With strInputString
  .Append("<?xml version=""1.0"" encoding=""UTF-8""?>")
  .Append("<NMFIIService>")
  .Append("<service_request>")
  .Append("<appln_id>test777</appln_id>")
  .Append("<password>HJR$W34F3</password>")
  .Append("<br/>broker code>ARN-44332</broker code>")
  .Append("<iin>5011006336</iin>")
  .Append("<dp_id></dp_id>")
  .Append("<trxn_acceptance>OL</trxn_acceptance>")
  .Append("<bank_name>HDF</bank_name>")
  .Append("<acc_no>037010100256352</acc_no>")
  .Append("<ifsc_code>UTIB0000037</ifsc_code>")
  .Append("<user_type>Broker</user_type>")
  .Append("<br/>broker_loc_code>M</broker_loc_code>")
  .Append("<poa>N</poa>")
  .Append("<remarks></remarks>")
  .Append("<trans_count>1</trans_count>")
  .Append("</service_request>")
  .Append("<childTrans>")
  .Append("<amc>108</amc>")
  .Append("<folio>518271454207</folio>")
  .Append("code>RPGPGGR("code>")
  .Append("<reinvest>Z</reinvest>")
  .Append("<amt_unit_type>Unit</amt_unit_type>")
  .Append("<amt_unit>11492.64</amt_unit>")
  .Append("<all_units>N</all_units>")
  .Append("</childTrans>")
  .Append("</NMFIIService>")
Fnd With
xmlInput.LoadXml(strInputString.ToString())
```

Dim url As String = "https://uat.nsenmf.com/NMFIITrxnService/NMFTrxnService/" & "REDEEMTRXNEXCEPTION" request = DirectCast(WebRequest.Create(url), HttpWebRequest)

```
request.Method = "POST"
request.ContentType = "application/xml; charset=utf-8"
Dim sXml As String = xmllnput.InnerXml
request.ContentLength = sXml.Length
Dim sw = New StreamWriter(request.GetRequestStream())
sw.Write(sXml)
sw.Close()

Dim resp As HttpWebResponse = TryCast(request.GetResponse(), HttpWebResponse)
Dim ds As New DataSet
If resp.StatusCode = HttpStatusCode.OK Then
    Dim stream As StreamReader = New StreamReader(resp.GetResponseStream)
    ds.ReadXml(stream)
End If
```