

e-Mandate integration guide

Corporate to HDFC BANK

Partners will have to redirect the page to e-mandate application along with parameter details mentioned in below table.

UAT URL: <https://emandateut.hdfcbank.com/Emandate.aspx>

Production URL: <https://emandate.hdfcbank.com/Emandate.aspx>

UAT Simulator <https://emandateut.hdfcbank.com/testingapi.aspx> (Values in simulator to be entered as per details shared in request structure table below). You must cross check the encrypted values & checksum generated by your application with simulator values. If it matches, then e-Mandate integration will work properly.

Below Net-Banking credentials to be used:

Account Number	Cust ID	Password	Static OTP	Relationship Type
50100000005810	50187305	hdfcbankuat	123456	SOW
50100104828488	50000024	hdfcbankuat	123456	JOF
50100101094371	50285226	hdfcbankuat	123456	NRE
50100105605892	50194770	hdfcbankuat	123456	JOO
50100103761724	50285226	hdfcbankuat	123456	NRO

Below Debit Card credentials to be used:

Account Number	Debit Card Number	Pin Number	Expiry Date	Static OTP	Relationship Type
00020350000114	5264 1901 5961 1630	0664	0929	123456	JOO
00030330002347	5264 1901 5961 1648	5258	0929	123456	JOF

Please Note:

- 1) Don't include space while entering the debit card no.
- 2) After three wrong attempts, the debit card will get blocked and the test data will be invalid.

Key for AES 256 encryption: k2hLr4X0ozNyZByj5DT66edtCEee1x+6

Please note: Fields name with 'AES 256' should be encrypted in AES 256 method.

Alternative dummy NPCI destination bank

Steps:

- 1) Pass IFSC code as "ONMG0000001" to e-Mandate application
- 2) Through NPCI, you will be redirected to dummy destination bank webpage.
- 3) Click on Autofill response. Bank res text area will be auto filled
- 4) Click on Submit.

Please note: If you want to check e-Mandate journey other than HDFC bank, you can test through dummy IFSC code of NPCI destination bank.

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Below Account relationships allowed to register e-Mandate with HDFC Bank:

Net-Banking: SOW, JOO, JOF, NRE and NRO

Debit Card: SOW, JOO, JOF, NRE and NRO

Relationship Types	Description
SOW	Single Ownership
JOO	Joint or Others
JOF	Joint or First
NRE	Non-resident External
NRO	Non-resident Ordinary

Request structure details:

Field	Type	Length	Mandatory	Remarks
Checksum	Varchar	500	Y	Below attributes needs to be concatenated with Delimiter sign () for the purpose of generating Checksum: Customer Account Number Customer_StartDate Customer_ExpiryDate Customer_DebitAmount Customer_MaxAmount. We will use SHA-2 as the hash function. Customer_MaxAmount is not mandatory , however you need to pass empty value.
MsgId	Varchar	25	Y	Unique ID from corporate. Each request sent to the e-Mandate application should have unique msgid.
Customer_Name (AES 256)	Varchar	40	Y	Customer's name
Customer_Mobile (AES 256)	Varchar	34	Conditional	Customer's mobile no. At least 1 value is required either customer mobile number or Email id.
Customer_EmailId (AES 256)	Varchar	50	Conditional	Customer's Email id. At least 1 value is required either customer mobile no or email id
Customer_AccountNo (AES 256)	Varchar	35	Y	Customer's account number.

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Customer_StartDate	Varchar	10	Y	(mandate start date) Debit amount's start end. Date format should be in YYYY-MM-DD.
Customer_ExpiryDate	Varchar	10	N	(Mandate end date) Debit amount's end date. Date format should be in YYYY-MM-DD. If no date is provided in this parameter, mandate will be considered as 'Until cancel'.
Customer_DebitAmount	Decimal	13	Conditional	Fixed amount to be deducted. Amount should be in a decimal format. For e.g. 100.00 Or 20000.00 Either Customer_DebitAmount or Customer_MaxAmount is mandatory. Other field should have empty value.
Customer_MaxAmount	Decimal	13	Conditional	Max amount to be deducted (for mandate) should mentioned here. Amount should be in a decimal format. For e.g. 100.00 Or 20000.00 Either Customer_DebitAmount or Customer_MaxAmount is mandatory. Other field should have empty value.
Customer_DebitFrequency	Varchar	4	Y	Allowed Values are: ADHO, INDA, DAIL, WEEK, MNTH, QURT, MIAN, YEAR, BIMN for Mandate Sequence type (Customer_SequenceType) RCUR and for OOFF this parameter should be sent blank.
Customer_InstructedMemberId	Varchar	11	Y	Customer Bank's IFSC code.
Short_Code (AES 256)	Varchar	10	Y	Short_code will be shared by HDFC Bank and will be unique for each application. Purpose of the parameter is to distinguish the requests coming from 2 different applications from a same corporate.

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Customer_SequenceType	Varchar	4	Y	Merchant will pass "RCUR" or "OOFF". Anything other than this, request will be rejected. When the value is "OOFF", the "Customer_DebitFrequency" should have empty value.
Merchant_Category_Code	Varchar	4	Y	Corporate will send the category code.
Customer_Reference1 (AES 256)	Varchar	50	N	Reference_1 (Consumer_Reference_no) No special characters are allowed to enter in this field except "#".
Customer_Reference2 (AES 256)	Varchar	50	N	Corporates can send the Scheme name and the value is sent to NPCI. No special characters are allowed to enter in this field except "#".
Channel	Varchar	6	Y	"Debit" for Debit Card , "Net" for Net-banking.
UtilCode (AES 256)	Varchar	18	Y	Utilcode given by NPCI to the Merchant.
Filler1	Varchar	50	N	No special characters are allowed to entered in this field except "#".
Filler2	Varchar	50	N	No special characters are allowed to enter in this field except "#".
Filler3	Varchar	50	N	No special characters are allowed to enter in this field except "#".
Filler4	Varchar	50	N	Valid PAN Number.
Filler5	Varchar	50	Y	Account Type: Value should be "S" for Savings , "C" for Current or "O" "Other". It cannot be blank.
Filler6	Varchar	50	N	Bank Code. As per circular, you will have to provide an option to customer to select the Bank from list of active banks with e-Mandate option. You will have to sync your Bank master with NPCI Bank Master and as per customer selection send respective bank code to e-Mandate application. If you are passing Bank Code, then e-Mandate application will not validate the IFSC code entered by the customer, corporates need to check the IFSC code is valid or not.

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Filler7	Varchar	50	N	No special characters are allowed to enter in this field except “#”.
Filler8	Varchar	50	N	No special characters are allowed to enter in this field except “#”.
Filler9	Varchar	50	N	To be sent blank as this field is reserved for NPCI Reference Number to be sent in response. If any value is sent in this parameter, application will be rejected by e-Mandate application.
Filler10	Varchar	50	N	To be sent blank as this field is reserved for UMRN to be sent in response. If any value is sent in this parameter, application will be rejected by e-Mandate application.

Response structure details:

Field	Type	Length	Mandatory	Remarks
Checksum	Varchar	500	Y	Below attributes needs to be concatenated with Delimiter sign () for the purpose of generating Checksum: Customer Account Number Customer_StartDate Customer_ExpiryDate Customer_DebitAmount Customer_MaxAmount We will use SHA-2 as the hash function.
MsgId	Varchar	30	Y	Same Msgid will be sent in response which we have received in the request.
MandateReqDoc {				
Status	Varchar	10	Y	“Success” or “Failed”
Error_code	Varchar	5	Y	
Error_message }	Varchar	500	N	Blank if “Success”
RefID	Varchar	50	Y	Generated by HDFC e-mandate Application
Filler1	Varchar	50	N	Value sent in Filler 1 request parameter will be returned in this response parameter.

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Filler2	Varchar	50	N	Value sent in Filler 2 request parameter will be returned in this response parameter.
Filler3	Varchar	50	N	Value sent in Filler 3 request parameter will be returned in this response parameter.
Filler4	Varchar	50	N	Value sent in Filler 4 request parameter will be returned in this response parameter.
Filler5	Varchar	50	N	Value sent in Filler 5 request parameter will be returned in this response parameter.
Filler6	Varchar	50	N	Value sent in Filler 6 request parameter will be returned in this response parameter.
Filler7	Varchar	50	N	Value sent in Filler 7 request parameter will be returned in this response parameter.
Filler8	Varchar	50	N	Value sent in Filler 8 request parameter will be returned in this response parameter.
Filler9	Varchar	50	N	This will be used to send NPCI Reference Number.
Filler10	Varchar	50	N	This will be used to send UMRN.

Below Sequence Types are used in e-Mandate :

Sequence Types	Description
RCUR	Recurring
OOFF	One Off

Below Debit Frequency Types are used in e-Mandate :

Debit Frequency	Description
ADHO	As and when presented
INDA	Intra-day
DAIL	Daily
WEEK	Weekly
MNTH	Monthly
BIMN	Bi-Monthly

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QURT	Quarterly
MIAN	Half yearly
YEAR	Yearly

Below details are required to register the Corporate in UAT setup

1. Util Code
2. Category Code
3. Corporate's Name
4. Response URL (Merchant's application URL, where we will re-direct the customer post authentication)
5. Corporate Account No.

NPCI Bank Master API Details: To fetch the bank details that are active for e-Mandate registration. You need to call NPCI API at 09:30 AM and 09:30 PM to get the bank details. Request the UAT and Production URL in POST method to get the response.

UAT URL : https://enachuat.npci.org.in:8086/apiservices_new/getLiveBankDtIs

Production URL : <https://enach.npci.org.in/apiservices/getLiveBankDtIs>

Sample Response :

```
{"liveBankList":[{"bankId":"ABHY",
"activeFrm":"NULL",
"debitcardFlag":"Active",
"bankName":"ABHYUDAYA CO OP BANK",
"dcActiveFrom":"2019-09-12",
"netbankFlag":"Inactive"},
{"bankId":"ALLA",
"activeFrm":"2019-06-24",
"debitcardFlag":"Active",
"bankName":"ALLAHABAD BANK",
"dcActiveFrom":"NULL",
"netbankFlag":"Active"}]}
```

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Double Verification API for Corporates (To know the status of the drop out cases):

e-Mandate is used for registering mandates digitally. Entire workflow consists of page redirection from Corporate to Sponsor bank, Sponsor bank to NPCI, NPCI to Destination bank (Net Banking, Debit Card), Destination bank to NPCI, NPCI to Sponsor bank and Sponsor bank to Corporate. During this workflow, status of the dropped out cases are not known to Corporates. To resolve this, we have hosted API for corporates to publish the status of dropped out cases.

Please refer the below documents for API integration purpose.

- 1.HDFCBank_UserManual_EMandate – Double verification_API
- 2.HDFC API Banking Customer Onboarding
- 3.HDFCBank_API Integration_TechnicalProcessDocument_(Low)

Sample Request :

```
{
  "mandatmsgIDList":
  [{
    "Utilitycode": "NACH000000000000382",
    "Shortcode": "UAT",
    "Msgid": "testfh689",
    "TransDate": "2020-06-22",
    "TransTime": "11:25"
  }
]
```

Sample Response :

```
{
  "d":{
    "tranStatus": [{
      "Utilitycode": "NACH000000000000382",
      "Shortcode": "UAT",
      "Msgid": "testfh689",
      "NpciRefMsgID": "089b865e02f24c20aa01d2e9f1b8eb73",
      "Accptd": "true",
      "ReasonCode": "000",
```


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"ReasonDesc": "N/A",

"RejectBy": "N/A",

"UMRN": "HDFC7020412200000021",

"trantime": "22-JUN-20 11.29.17.432000 AM"

}}

}

}

Error message List:

Error Message List (Destination Bank)	
Error Code	Error Description
AP01	Account blocked
AP02	Account closed
AP03	Account frozen
AP04	Account Inoperative
AP05	No such account
AP06	Not a CBS act no.or old act no.representwithCBS no
AP07	Refer to the branch_KYC not completed
AP10	Amount Exceeds E mandate Limit
AP11	Authentication Failed
AP14	Invalid User Credentials
AP15	Mandate Not Registered_ not maintaining req balanc
AP16	Mandate Not Registered_Minor Account
AP17	Mandate Not Registered_NRE Account
AP18	Mandate registration not allowed for CC account
AP19	Mandate registration not allowed for PF account
AP20	Mandate registration not allowed for PPF account
AP23	Transaction rejected or cancelled by the customer
AP24	Withdrawal stopped owing to death of account holder
AP28	Mandate registration failed.Please contact your home branch
AP29	Technical errors or connectivity issue at bank end
AP30	Browser closed by the customer in mid transaction
AP31	Mandate registration not allowed for joint account
AP32	Mandate registration not allowed for wallet account
AP33	User rejected the transaction on pre-Login page
AP34	Account number not registered for net-banking facility
AP35	Debit card validation failed due to_Invalid card number
AP36	Debit card validation failed due to_Invalid expiry date
AP37	Debit card validation failed due to_Invalid PIN
AP38	Debit card validation failed due to_Invalid CVV
AP39	OTP invalid
AP40	Maximum tries exceeded for OTP
AP41	Time expired for OTP

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AP42	Debit card not activated
AP43	Debit card blocked
AP44	Debit card hot listed
AP45	Debit card expired
AP46	No response received from customer while performing mandate registration
AP47	Account number registered for only view rights in net-banking facility

Merchant Details Error Messages	
Error Code	Error Description
IM01	Merchant account is not valid
IM02	Merchant IFSC code is not valid
IM03	Merchant category code is not valid
IM04	Merchant category desc is not valid
IM05	Merchant account name is not valid
IM06	Duplicate msgid found

Customer Details Error Messages	
Error Code	Error Description
IC01	All three fields i.e Customer EmailId, Mobile and TelephoneNo can not be empty.
IC04	Expiry date should be greater than Start date.
IC06	InstructedMember Bank is not available.
IC11	Mandate cannot be registered with Inactive account
IC13	Mandate registration is not allowed with relationship type #RelationshipType# and #RelationshipType#
IC14	Mandate registration is not allowed with relationship type #RelationshipType#

Common Error Messages	
Error Code	Error Description
I001	Invalid JSON
I002	Invalid Token
I003	Invalid Merchant
I004	Invalid Account
I005	key is not provided
I006	can not empty
I007	can not greater than the length
I008	can not less than the length
I009	is invalid
I010	Request is not valid
I011	All keys are not provided in the form.
I012	Session expired.

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I013

Request and Response check sum is not matching.

ONMAGS(NPCI) Error Messages	
Error Code	Error Description
151	Merchant Xmlns name empty or incorrect
152	Merchant MsgId empty or incorrect
153	Merchant CreDtTm empty or incorrect
154	Merchant ReqlnitPty Id empty or incorrect
155	Merchant CatCode empty or incorrect
156	Merchant UtilCode empty or incorrect
157	Merchant CatDesc empty or incorrect
158	Merchant ReqlnitPty name empty or incorrect
159	Merchant MndtReqId empty or incorrect
160	Merchant SeqTp empty or incorrect
161	Merchant Frqcy empty or incorrect
162	Merchant FrstColltnDt empty or incorrect
163	Merchant FnlColltnDt empty or incorrect
164	Merchant ColltnAmt ccy type empty or incorrect
165	Merchant ColltnAmt empty or incorrect
166	Merchant MaxAmt ccy type empty or incorrect
167	Merchant MaxAmt empty or incorrect
168	Merchant Creditor name empty or incorrect
169	Merchant Creditor Acc No empty or incorrect
170	Merchant Creditot Mmbld empty or incorrect
171	Merchant MnadateReqId empty or incorrect
172	Merchant Creditor Acc No empty
173	Merchant Info not available
174	Merchant ReqlnitPty not available
175	Merchant Creditor Acc Details not available
176	Merchant GrpHdr not available
177	Merchant Mndt not available
178	Merchant MndtAuthReq empty or not available
179	Merchant CheckSum validation failed
180	Merchant Signature validation failed
181	Error in decrypting Creditor Acc No
182	Error in decrypting FrstColltnDt
183	Error in decrypting FnlColltnDt
184	Error in decrypting ColltnAmt
185	Error in decrpting MaxAmt
186	Merchant Invalid request
187	Merchant Id empty or incorrect

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188	Merchant ManReqDoc incorrect
189	Merchant CheckSum empty or not available
190	Merchant Signature not found
191	Merchant GrpHdr missing some tag
192	Merchant ReqInitPty missing some tag
193	Merchant Mndt missing some tag
194	Merchant CrAccDtl missing some tag
195	Merchant Certificate not found
196	Merchant Signature algorithm incorrect
197	Merchant Signature Digest algorithm incorrect
198	Merchant first date is after final date
199	Merchant CrAccDtl not available
200	Merchant first date not available
201	Merchant final date not available
202	Merchant first date empty
203	Merchant final date empty
204	Merchant ManReqDoc empty not available
205	MerchantId not in approved list"
206	Merchant ColltnAmt and MaxAmt empty
207	Merchant ColltnAmt and MaxAmt exist
208	Merchant Catcode not in approved list
209	Merchant MsgId is duplicate
210	Merchant Frequency type is invalid
211	Merchant Sequence type is invalid
212	Merchant Cat Description is not approved list
213	Merchant UtilCode is not in approved list
214	Merchant Req Pay ID not in approved list
215	Merchant Creditor Acc Details name not in approved list
216	Merchant Occurences is empty
217	Merchant Debtor name empty or incorrect
218	Merchant Debtor Account number empty or incorrect
219	Merchant Debtor is missing some tags
220	Merchant Debtor Acc No empty
221	Merchant Debtor Acc not available
222	Merchant Creditor and Debtor account number is same
251	Bank Request is invalid
252	Bank xmlns is empty or incorrect
253	Bank Response type is not available or empty
254	Bank Check sum is not available or empty
255	Bank Mandate request document is incorrect
256	Bank id not available or empty

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257	Error in decrypting Accepted value
258	Error in decrypting Accepted Ref Number
259	Error in decrypting Reason Code
260	Error in decrypting Reason Discription
261	Error in decrypting Rejected By
262	Bank NPCI Ref id empty or incorrect
263	Error code not available in Error Xml
264	Error description not available in Error Xml
265	Rejected By not available in Error Xml
266	Mandate Error Resp not available in Error Xml
267	Checksum validation failed
268	Bank UndrlygAcptncDtIs not available
269	Bank GrpHdr empty or not available
270	Bank MsgId empty or incorrect
271	Bank CreDtTm empty or incorrect
272	Bank ReqlnitPty empty or incorrect
273	Bank OrgnlMsgInf not available
274	Bank MndtReqlId empty or incorrect
275	Bank UndrlygAcptncDtIs CreDtTm empty or incorrect
276	Bank Acctpd empty
277	Bank AcptRefNo empty or incorrect
278	Bank RjctRsn not available
279	Bank RjctRsn ReasonCode not empty
280	Bank RjctRsn ReasonDesc not empty
281	Bank RjctRsn RejectBy not empty
282	Bank RjctRsn ReasonCode empty or incorrect
283	Bank RjctRsn ReasonDesc empty or incorrect
284	Bank RjctRsn RejectBy empty or incorrect
285	Bank Certificate not found
286	Bank IFSC Code incorrect
287	Bank RespType is incorrect
288	Bank GrpHdr missing some tags
289	Bank UndrlygAcptncDtIs missing some tags
290	Bank OrgnlMsgInf missing some tags
291	Bank IFSC tag is missing
292	Bank DBTR not available
293	Bank AcptncRslt not available
294	Bank RjctRsn missing some tags
295	Bank ManReqDoc not available or empty
296	Bank Acctpd type incorrect
297	Bank Signature not available
298	Bank Signature Digest algorithm incorrect
299	Bank Signature validation failed
300	Bank Signature algorithm incorrect
301	BankId not in approved list

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302	Bank MsgId is duplicate
303	Bank Accepted Ref number is duplicate
305	Bank Response time out
282,283,284	Multiple errors occurred
497	SpnBank not certified for the variant
308	Bank Reason code and description not in approved list
274,275	Bank MndtReqId empty or incorrect, Bank UndrlygAcptncDtIs CreDtTm empty or incorrect
474	Bank Returning Error XML
475	Invalid JSON Structure