



# **Digital Document Execution**

**V 1.5.7**

## **Restful API Integration Document**

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This document has the details of the RESTful API implementation of the Digital Document Execution (DDE) Platform for Demat of Loan agreements.

NeSL-IU provides a Digital Platform for execution of loan contracts. The Loans Appraisal and Processing System of the Bank will be integrated with the DDE Module of NeSL, which will be used by calling the RESTful API published by NeSL.

## **DDE API Request**

Below are the request parameters that need to be passed as part of the https RESTful API header as a POST call:

<b>SI No</b>	<b>API Request Parameter Name</b>	<b>Field Type</b>	<b>Mandatory</b>	<b>Remarks</b>
1	api-key	String	Y	API Key provided by NeSL needs to be passed as part of the request parameter.
2	Authorization	String	Y	This is the basic Authentication. The base 64 value of username and password provided by NeSL needs to be passed as part of the request parameter.
3	clientID	String	Y	Client ID value will be provided by NeSL and needs to be passed as part of the request parameter.
4	resp-url	String	Y	The URL on which the response needs to be sent back to the Client (only in case of face to face request). The resp-url value needs to be provided by the client and should be a https post request. The request parameters that the Response URL should be able to receive are mentioned in the below table.

### Response Parameters Details for “resp-url”

The below parameters will be passed by NeSL as part of the “resp-url” response:

Parameter	Description
txnID	The transaction ID passed as part of the request
status	The status of the transaction. (SUCCESS, ERROR)
rspMsg	In case of success, this will have the base-64 encoded value of eSigned/eStamped document as applicable.  In case of failure, an appropriate Error Code will be passed.

The body of the RESTful API will just contain the encrypted value of the METADATA. Below are the details of the METADATA.

metaData	String	Y	<ul style="list-style-type: none"><li>• A unique session id should be generated with the length of 32 characters for every transaction request, which is the Secret Key, out of which the first 16 characters should be the Initialization Vector (IV) value.</li><li>• The session id is encrypted using the client’s private key or NeSL’s public key with RSA as the algorithm.</li><li>• The json request object should be encrypted using 32 characters session id using AES 256 algorithm. The json field details are described in the table below.</li><li>• The encrypted session id and the encrypted json object should be concatenated with colon (:) as the separator as part of the metadata parameter.</li></ul>
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### Success response :

```
{  
  
    "transid" : "DDETSKK13032025",  
    "statusCode" : "1",  
    "statusMsg" : "SUCCESS"  
}
```

### Failure response:

```
{  
  
    "transid" : "DDETSKK13032025",  
    "statusCode" : "ER00S8",  
    "statusMsg" : "FAILED"  
}
```

### Synchronous Response Parameters Details

The below parameters will be passed by NeSL as part of the response:

Parameter	Description
transid	The transaction ID passed as part of the request
statusCode	In case of success, this will have the value 1. In case of failure, an appropriate error code will be passed.
statusMsg	The status of the transaction. (SUCCESS, ERROR)

### JSON field details

Below are the details of the json request parameters that need to be passed as part of the METADATA request parameter.

Sl. No	Request Parameter Name	Request Parameter Description	Max length	Data Type	Mandatory	Description of the field
1	loanno	Debt/Contract reference number	30	String <i>Allowed Special characters _ / - and space</i>	Conditional Mandatory	Debt/Contract reference number or sanction number is mandatory
2	snctnno	Sanction Number	30	String <i>Allowed Special characters _ / - and space</i>	Conditional Mandatory	Debt/Contract reference number or sanction number is mandatory
3	regType	Registration Type	1	String	M	1 for Individual loan 2 for Non-Individual Loan

4	txnID	Transaction ID	50	String <i>Except for the below characters, all others are allowed</i> [<>?/^ {}]	M	A unique ID should be generated for every API request.
5	signFlag	E-sign Flag	1	String	M	0 – If Esign is not required 1 – If Esign is required
6	estampFlag	E-stamp Flag	1	String	M	Y – If Estamp required N – If Estamp Not required
7	f2f	Face to Face Flag	1	String	M	Y - For an online transaction. N - For an offline transaction
8	state	State	2	String	M	This will be a list of State code values provided by NeSL
9	brname	branch name	50	String	O	This is the branch name details of the sanctioning bank. IFSC code of the branch can also be sent as part of this.
10	braddr	branch address	50	String	O	Branch address of the sanctioning bank.
<b>E-stamp Section - This section needs to be passed only if eStamp facility is to be availed</b>						
11	firstparty	First Party Name	50	String <i>Only space is allowed as special character</i>	M	This is the name of the first party in the debt agreement
12	secondparty	Second Party Name	50	String <i>Only space is allowed as special character</i>	M	This is the name of the second party in the debt agreement
13	stampDutyAmount	Stamp Duty Amount	19	Decimal (16,2)	M	This is the value of the stamp duty amount of the debt agreement. This should be greater than Rs.10/-
14	considerationPrice	Consideration Price	19	Integer	M	The total value of the debt/contract
15	descriptionofDocument	Description of Document	100	String	M	This is the description of the document
16	stampdutyPaidby	Stamp duty Paid by	50	String <i>Only space is allowed as special character</i>	M	This is the name of the person who is paying the stamp duty. Ideally this should have the name of the first party or the second party

17	articleCode	Article Code	10	String	M	The article code based on the type of the debt needs to be passed. The list of article codes for each state will be provided by NeSL
18	articleSubCode	Article Sub Code	10	String	Conditional Mandatory	The article sub code corresponding to the selected article code must be provided and is currently mandatory for the State of Bihar.
19	documentID	Document ID	2	Integer	M	This should have the details of the document ID for which eStamping needs to be carried out
20	firstPartyPin	First Party pincode	6	String	Conditional Mandatory	This is the pincode of the first party in the debt agreement, currently mandatory for West Bengal (WB) & Madhya Pradesh (MP) states.
21	secondPartyPin	Second Party pincode	6	String	Conditional Mandatory	This is the pincode of the second party in the debt agreement, currently mandatory for West Bengal (WB) & Madhya Pradesh (MP) states.
22	firstPartyOVDType	Officially valid document type	16	String <i>This will be a pre-defined list of values.</i>	Conditional Mandatory.	This is the OVD type of the first party in the debt agreement, currently mandatory for West Bengal (WB) <b>Values</b> <ul style="list-style-type: none"> <li>• panno</li> <li>• driving license</li> <li>• voter id</li> <li>• passport</li> <li>• others</li> </ul>
23	firstPartyOVDValue	Officially valid document ID value	Min: 4 Max: 16	String <i>If the OVDType is "others" then the special character / is allowed.</i>	Conditional Mandatory.	The value of the corresponding first party ovd type in the debt agreement, currently mandatory for West Bengal (WB)

24	secondPartyOVDType	Officially valid document type	16	String <i>This will be a pre-defined list of values.</i>	Conditional Mandatory.	This is the OVD type of the second party in the debt agreement, currently mandatory for West Bengal (WB) <b>Values</b> <ul style="list-style-type: none"> <li>• panno</li> <li>• driving license</li> <li>• voter id</li> <li>• passport</li> <li>• others</li> </ul>
25	secondPartyOVDValue	Officially valid document ID value	Min: 4 Max: 16	String <b><i>If the OVDType is "others" then the special character / is allowed.</i></b>	Conditional Mandatory.	The value of the corresponding second party ovd type in the debt agreement, currently mandatory for West Bengal (WB)
<b>Participating Details Section</b>						
26	prtctenttyld	Participant ID	2	Integer	M	This will be a sequence number
27	fulnm	Party name or Entity Name in case of non-individual loan	100	String <i>Allowed Special characters , . / and space</i>	M	This will be the name of the party associated with the debt
28	cntrprtctnm	Contact Person Name or Entity Name in case of non-individual loan	100	String <i>Allowed Special characters , . / and space</i>	O	This will be the name of the party associated with the debt
29	reltctrct	Relationship of the party with the debt/contract reference number	15	String <i>This will be a pre-defined list of values.</i>	M	<b>Values:</b> <ul style="list-style-type: none"> <li>• Debtor</li> <li>• Guarantor</li> <li>• Co-Obligant</li> <li>• Creditor</li> <li>• Beneficiary</li> </ul>
30	emlid	Primary email address of the party	100	String <i>Allowed Special characters _ - .</i>	O	Primary Email address of the party
31	cntrprtctmobno	Primary mobile number of the party	10	String	M	Primary mobile number of the party
32	altemlid	Alternate email address of the party	100	String <i>Allowed Special characters _ - .</i>	O	Alternate email address of the party
33	altmobno	Alternate mobile number of the party	10	String	O	Alternate mobile number of the party

34	panno	PAN number of the party	10	Alphanumeric (as per the pattern mentioned)	Conditional Mandatory. If the ovdid and ovdtype values are provided, panno will be optional	First five characters should be alphabets, next 4 characters should be numeric and the last character should be alphabet
35	ovdtype	Officially valid document type	20	String This will be a pre-defined list of values.	Conditional Mandatory. In absence of PAN number, this field needs to be passed	<b>Values</b> <ul style="list-style-type: none"> <li>• panno</li> <li>• driving license</li> <li>• voter id</li> <li>• passport</li> <li>• others</li> </ul>
36	ovdid	Officially valid document ID value	30	String If the OVDType is "others" then the special character / is allowed.	Conditional Mandatory. In absence of PAN number, this field needs to be passed	The value of the corresponding ovd id needs to be passed
37	cntrprtyaddr	Permanent/Registered address of the party	300	String Allowed special characters !@#\$%~?^&*()_+{} ;:,~?~/- = and space	O	Permanent/Registered address of the party
38	regoffpin	Permanent/Registered address pin code	6	String	O	Permanent/Registered address pin code
39	cntrprtycntdsgn	Contact Person's Designation	50	String	O	Contact Person's Designation
40	comaddr	Communication address of the party	300	String Allowed special characters !@#\$%~?^&*()_+{} ;:,~?~/- = and space	O	Communication address of the party
41	pin	Communication Address pin code	6	String	O	Communication Address pin code
42	doi	Date of Birth of the signatory OR date of incorporation of the company in case of non-individual loan	10	String yyyy-mm-dd	M	Date of Birth of the signatory OR date of incorporation of the company in case of non-individual loan

43	partytyp	Party Type	50	String <i>This will be a pre-defined list of values.</i>	M	<b>Values</b> <ul style="list-style-type: none"> <li>• Indian Entity</li> <li>• Resident Individual</li> <li>• Foreign Entity</li> <li>• NRI/Foreign Individual</li> </ul>
44	lgcnstn	Legal Constitution of the party	50	String <i>This will be a pre-defined list of values.</i>	M	<b>Values:</b> <ul style="list-style-type: none"> <li>• Resident Individual</li> <li>• Public Ltd</li> <li>• Private Ltd</li> <li>• LLP</li> <li>• Proprietorship</li> <li>• Partnership</li> <li>• Entity Created by Statute</li> <li>• Trust</li> <li>• HUF</li> <li>• Co-op Society</li> <li>• Association of Persons</li> <li>• Government</li> <li>• Self Help Group</li> <li>• Non-Resident</li> <li>• Foreign Company</li> </ul>
45	cin	CIN of the entity in case of non-individual loan	30	String	O	CIN of the entity in case of non-individual loan
46	signatoryGender	Gender of the Signatory	1	String	Conditional Mandatory	Gender of the Signatory Possible values: "M", "F". Mandatory for availing Allmatch configuration.
47	kin	CKYC KIN detail	30	String	O	CKYC KIN detail
48	documentID	Document ID details	50	Integer (array)	M	List of document IDs that are passed for execution. This will be a sequential number provided in the document details section of the json
49	seqno	Sequence Number	4	Integer	M	Sequence of the contact person (signatory) for carrying out the execution. Report '9999' if the party is not supposed to sign

50	signatoryAadhar	Last 4 digits of the Signatory Aadhar	4	String	Conditional Mandatory	Last 4 digits of the Signatory Aadhar number. Mandatory for availing Allmatch configuration.
<b>Loan Details Section</b>						
51	dtofsctn	date of sanction of the debt	10	String <i>yyyy-mm-dd</i>	O	date of sanction of the debt
52	emiamt	Instalment amount value	19	Decimal (16,2)	O	Instalment amount value
53	rtofint	Rate of interest	20	String <i>Allowed Special characters . , % _ - and space</i>	M	Rate of interest
54	snctnamt	sanction amount	19	Decimal (16,2)	M	sanction amount
55	tenure	tenure of the debt	20	String <i>Allowed Special characters . , % _ - and space</i>	M	tenure of the debt
56	ntrofcrdt	Type of debt	11	String <i>This will be a pre-defined list of values.</i>	M	<b>Values</b> Financial
57	isacctclosed	Account Closed Flag	8	String <i>This will be a pre-defined list of values.</i>	M	<b>Values</b> • Yes • No • Assigned
58	fundtyp	Funded Type	8	String <i>This will be a pre-defined list of values.</i>	M	<b>Values</b> • Funded • Non-fund
59	currofsanc	Sanction Currency	5	String <i>This will be a pre-defined list of values.</i>	M	<b>Values</b> INR
60	crdtsubtyp	Credit Subtype Facility name of the debt	20	String <i>This will be a pre-defined list of values.</i>	M	<b>Values</b> • Credit Facility • Propertybuyer • NPL • GRNT • MFNL • GOLD • AGRL • JLGL • SHGL

61	fcltynm	Facility name of the debt	300	String	M	Free text of product name as known to debtor to facilitate ease of recognition by concerned party during authentication
62	amtovrdue	Amount Overdue	19	Decimal (16,2)	O	Amount Overdue
63	chgamt	Other Charges amount of any	19	Decimal (16,2)	O	Other Charges amount of any
64	dtofdbrs	debt start date	10	String yyyy-mm-dd	O	Debt start date
65	intamt	Interest amount	19	Decimal (16,2)	O	Interest amount
66	oldaccno	Old Debt Reference No.	30	String	O	Old Debt Reference No.
67	priamt	Principal Outstanding	19	Decimal (16,2)	O	Principal Outstanding
68	remarkparta	Debt Remarks if any	50	String	O	Debt Remarks if any
69	toutstndamt	Total Outstanding Amount	19	Decimal (16,2)	O	Total Outstanding Amount
70	bu	Creditor Business Unit	15	String	O	Creditor Business Unit
71	dp	Drawing Power	19	Decimal (16,2)	O	Drawing Power
72	dpd	Days past due	5	Integer	O	Days past due

**Security section - This is an optional section and required only if there is a security to a loan**

73	dscfscrty	Description of security	300	String	M	Description of security
74	asstyp	Assets type	50	String <i>This will be a pre-defined list of values.</i>	M	<b>Values</b> <ul style="list-style-type: none"> <li>• Movable</li> <li>• Immovable</li> <li>• Intangible</li> <li>• Not Classified</li> </ul>
75	typofchrg	Type of Charge created	50	String <i>This will be a pre-defined list of values.</i>	M	<b>Values</b> <ul style="list-style-type: none"> <li>• Mortgage</li> <li>• Hypothecation</li> <li>• Charge</li> <li>• Assignment</li> <li>• Pledge</li> <li>• Lien</li> <li>• Negative Lien</li> <li>• Guarantee</li> <li>• Others</li> <li>• Not Classified</li> </ul>
76	assetid	Asset ID	20	String	M	Asset ID
77	dtofcrtn	Date of creation of Security Interest	10	String yyyy-mm-dd	O	Date of creation of Security Interest
78	dtofvltn	Date of valuation	10	String yyyy-mm-dd	O	Date of valuation
79	scrtyidcersai	CERSAI Security Interest ID	20	String	O	CERSAI Security Interest ID

80	scrtyidroc	ROC Charge ID	20	String	O	ROC Charge ID
81	vlofscrty	Value of security	19	Decimal (16,2)	O	Value of security
<b>eSign Co-ordinates Section - This is an optional section</b>						
82	prtctenttyld	Participant ID	2	Integer	M	participating ID as mentioned in the participating details section
83	documentID	Document ID	10	Integer	M	Document ID as mentioned in the document details section
84	coordinates[p,x,y]	Coordinate Details where the signature needs to be affixed in the document		String (array)	M	p = Page number x = x co-ordinate of page y = y co-ordinate of page
<b>Document Details Section</b>						
85	documentID	Document ID	10	Integer	M	Sequence number
86	docData	Document data/value		String	M	Base64 encoded value of PDF document

### **DDE API End Point URL for Non Production**

[https://stg.nesl.co.in/DDE\\_IU\\_Registration\\_V3/IUREG\\_API](https://stg.nesl.co.in/DDE_IU_Registration_V3/IUREG_API)

### **Sample Curl:**

```
curl --location 'https://stg.nesl.co.in/DDE_IU_Registration_V3/IUREG_API' \  
--header 'api-key: 88yIX' \  
--header 'clientID: rende' \  
--header 'resp-url: https://abc.co.in/DDE_Demo/response.jsp' \  
--header 'Content-Type: application/json' \  
--header 'Authorization: Basic cmVUA==' \  
--data '{  
  "metaData": "OPe3y45yg==:lBtKG7AdlrU+xAWOAThTMGvvyjrWWetp4FGGKVOckw=="  
}'
```

As part of the Aadhar eSigning process, the following options for matching the signatory fields are available. The fields values submitted as part of the API will be compared against the values returned by Aadhar application.

<b>Sl. No</b>	<b>Config Name</b>	<b>Remarks</b>
1	NYGA	Name (75% or above - Configurable) + YOB 100% + Gender 100% + Aadhaar last 4 digits 100%)
2	NYG	Name (75% or above - Configurable) + YOB 100% + Gender 100%
3	YGA	YOB 100% + Gender 100% + Aadhaar last 4 digits 100%)
4	NY	Name (75% or above - Configurable) + YOB 100%