Krishi Bhawan, New Delhi
Dated: 09th November, 2022

To,

Principal Secretary / Secretary,
Food & Civil Supplies Department,
All State Governments & Administration of UTs

Subject: - Additional Column Provision in NFSA Ration card - Central Repository – reg.

Reference:- This Department's letter of even number dated 19th Oct 2022 regarding seeding of beneficiaries/RC data with LGD.
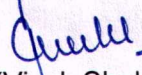
Sir/Ma'am,

This has reference to this Department's letter of even no. dated 19th Oct 2022,to ensure implementation of LGD codes in PDS database, as per the latest LGD master (upto block/panchayat/village level) and to report the action taken report to this office.

In this regard, NIC-HQ team has codified two (2) APIs, i.e. **(i)** Add Ration Card (RC) API and **(ii)** Updated Ration Card (RC) API, to capture the Tehsil LGD Code, Village LGD Code, Panchayat LGD Code, along with separate Flag for Rural/Urban additionally in Central Repository (CR) API. While the remaining APIs are unchanged and Aadhaar encryption algorithm is also same as per previous API. By using existing APIs, States/UTs may share the LGD location details of Tehsil and village for NFSA RC in Central Repository. Copy of API manual for **All API related changes is attached** for your kind perusal and necessary action please. Here, it may be noted that the changes are made in a manner so that the existing process will not be effected, as the aforesaid APIs will work like an additional feature to send extra parameters/data related to LGD codes.

In view of above, it is kindly requested to instruct the concerned official of F&CS Department and NIC/SI, to ensure implementation of LGD codes in PDS database, as per the latest LGD master (upto block/panchayat/village level) and to report the action taken report to this Department via email (cpmu.fpd@nic.in) on confirmation of compliance of said activity. Further, for any query or support the NIC-HQ or CPMU team may be contacted.

Yours faithfully,

9.11.22

(Vivek Shukla)
Director (PD)
Tel: 011-23384653

Copy to,

- Joint Secretary, MoPR, GoI
- Joint Secretary, DBT Mission, Cabinet Secretariat.
- HoD, NIC-HQ, CGO Complex, New Delhi – for necessary instructions to SIOs

Krishi Bhawan, New Delhi
Dated: 19/October/ 2022

To,
Principal Secretary / Secretary,
Food & Civil Supplies Department,
All State Governments & Administration of UTs

Subject: Sharing of ration cards/beneficiaries' data with Central Repository under IM-PDS scheme and seeding with LG directory (LGD) – reg.
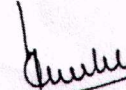
Sir/Madam,

As you are aware that under the scheme on "Integrated Management of PDS (IM-PDS)", the Government has setup a Central Repository (CR) of all ration cards/beneficiaries' data of ration card holders under NFSA to monitor the implementation of various PDS schemes being executed.

The aforesaid Central Repository (CR) contains database of around 80 crore NFSA beneficiaries and various other Ministries/Departments are regularly requesting collaboration for identification of rightful beneficiaries under different Government schemes. In addition to above, DBT Mission, Cabinet Secretariat is also monitoring all the schemes under DBT (*cash/in kind*) and has requested to report LGD compliant data on DBT Bharat Portal. The LGD codes (*unique codes allotted by M/o Panchayati Raj to various administrative units in the country*) are updated regularly as per the requests received from respective States and UTs, which can be accessed via https://lgdirectory.gov.in/.

Subsequently, Ministry of Panchayati Raj (MoPR), GoI has developed e-Gram SWARAJ, a unified tool for effective monitoring & evaluation of works taken up in the panchayats with a vision to usher in digital Panchayats to empower & transform rural India and requested this Department to share the details of beneficiaries & assets created under the PDS schemes at Gram Panchayat (GP)/village level seeded with LG code.

In view of above, it is kindly requested to instruct the concerned official of F&CS department and NIC to ensure implementation of LGD codes in PDS database, as per the latest LGD master (upto block/panchayat/villagelevel) and to report the action taken report to this office via email (cpmu.fpd@nic.in) on confirmation of compliance of said activity. Further, for any query or support the NIC-HQ or CPMU team may be contacted.

Yours faithfully,

19.10.22
(Vivek Shukla)
Director (PD)
Tel: 011-23384653

Copy to,

- Joint Secretary, MoPR, GoI
- Joint Secretary, DBT Mission, Cabinet Secretariat.
- HoD, NIC-HQ, CGO Complex, New Delhi – For necessary instructions to SIOs

IMPDS- Ration Card Incremental Data Collection API

Version 1.2

NATIONAL INFORMATICS CENTRE

Document Control Record

Version	Description of Change	Author	Date
0.1	Initial Draft	NIC	14⁻November -2019
0.1	Second Draft	NIC	19-November -2019
0.1	Third Draft	NIC	22-November -2019
0.1	Fourth Draft	NIC	18-March-2020
1.2	Fifth Draft	NIC	04-Nov-2022

Table of Contents

1. Introduction

IMPDS- Ration Card incremental data collection Rest API will collect all the States and UT ration card beneficiary data with demographic details like name, age, DOB, gender, encrypted UID, etc. Its purpose is to collect all incremental beneficiaries and ration card related data (Addition, Deletion and Updation) to prepare the central repository of ration card data for de-duplication purpose.

2. Objective

Primary aim of Ration Card data collection is to perform thede-duplication activity on following criteria like inter-state, intra-state, district-wise, UID based de-duplication.

Ration Card data collection API follows the below mentioned principals:

1. The RGI 2011 Census codes for district and state code.
2. NFSA schemes arePriority House Hold (PHH) and Antyodaya Anna Yojana (AAY). Hence card type should be PHH or AAY in API data.
3. Gender should be M – Male, F- Female, T- Transgender.
4. All states are requested to maintain the log of all records with requested id, acknowledgement id & timestamp. If acknowledgement id is not received by the states, they are supposed to resend the data again in defined format.
5. It is mandatory to provide the relationship code as per attached master for each beneficiary.
6. State will have to use the same credential to share the incremental data as already given for one time ration card data.
7. Also encrypt the UID with same credential which are used for one time ration card data collection in central repository.
8. If UID is not available then please send blank value and please don't encrypt the blank value.

    ** In single JSON, maximum 10000 records can be sent at a time when the Web-Services called.

** UID is encrypted in bi-directional way using MD5, AES, SHA 256 algorithm. The same UID encryption logic has been explained in the document. (Point Number 6)

** All parameter should be mandatory in Json and blank value is accepted however the value should not be null against any parameter.

3. **Data Preparation**

    Refer templates below as given by D/o FPD to provide the data to central server (From all states and union territories):

3.1 Parameter Template

 1: Provides ration cards and beneficiaries at state and district level for Priority House Hold (PHH) rationcards and Antyodaya Anna Yojana (AAY) ration cards.

State Code	District Code	Ration Card No	Member ID	Encrypted UID	Member Name	Member NameLL	Relationship Code	Mobile Number	Gender

Card Type	FPS Code	Dfso Code	DOB	Age	Address	AddressLL	Father name	Mother Name

Spouse name	Uid auth flag	Nfsa head flag	Flag1	Flag2	Col1	Col2	Col3	Date of Issue Ration Card

Table 1: DATA Preparation

3.2 Web Services Description:

1. **Ration Card Addition:** In ration card addition API, state will have to send the monthly cumulative details for all new created ration card data as per given template. If the details received are correct then, ration card will successfully get inserted in IMPDS, if any details are incorrect like card type or state code etc. then we will send a rejection reason with a total record count having both accept and reject counts.

2. **Ration Card Deletion:** In ration card deletion API, state will have to send the monthly cumulative details for deletion of ration card data with parameters like ration card id, date of deletion etc. If the details received are correct, then ration card will successfully get deleted from IMPDS and if any details are incorrect then we will send appropriate rejection reason like "Ration card ID does not exist "with a total record count having both accept and reject counts.

3. **Ration Card Updation:** In ration card Updation API, state will have to send the monthly cumulative details for Updation of ration card data with parameters -ration card id, fps code, district code, dfso code, card type, address, addressll etc. If the details received are correct, then ration card will successfully get updated in IMPDS and if any details are incorrect then we will send a rejection reason like "Ration card ID does not exist" with a total record count having both accept and reject counts.

4. **Beneficiaries Addition:** In beneficiary's addition API, state will have to send the monthly cumulative details for member addition data in respect of existing ration card in central repository with parameters ration card id , member id, age, mobile number, member name etc. If the details received are correct, then beneficiary details will successfully get added in IMPDS and if any details are incorrect then we will send appropriate rejection reason like "Member ID already exist" or "Ration card ID does not exist"etc. with a total record count having both accept and reject counts.

5. **Beneficiaries Deletion:** In beneficiary's deletion API, state will have to send the monthly cumulative details for member deletion data with parameters like ration card id, member id, date of deletion etc. If received details for member deletionare correct then beneficiary details will successfully get deleted from IMPDS and if any of the details are incorrect then we will send a rejection reason like "Member ID does not exist" with a total record count having both accept and reject counts.

6. **Beneficiaries Updation:**In beneficiary's updation API, state will have to send the monthly cumulative details for member updation data with parameters like member id, age, DOB, member name etc. If the details received for member updationare correct then beneficiary details will successfully get updated in IMPDS against member id and if any details are incorrect then we will send appropriate rejection reason like "Member ID does not exist" or "Ration card does not exist"etc. with a total record count having both accept and reject counts.

   Web Service of beneficiary Updation, any changes in Head of Family member will lead to modification in relationship code of all members. In this case, details of all members shall be sent again along with revised relationship code.

4. **PARAMETERS FOR THE API's:**
   4.1 API Header Same for All Web services–

a) **token**: State will have to send the header with name **token_no** in each API header. Token number header   value format is "**Two digit state code+ ddMMyyyyHHmmss+xxxxx (five digit running sequence)**". Example- "token":"01151120171051200001"
   a. Token No should be unique in all API headers.

b) **userAuthentication:** State will have to send the header with name user Authentication in each API header. userAuthenticationAPI header value format is "username,password". Example- "userAuthentication":"jkadmin,user@123"

c) **totalrecords:** Total No of beneficiaries that exists in the above mentioned FPS code should be equal to the total beneficiary data provided in the API. Example- "totalrecords":"5000"

d) **stateCode:** State Code should be as per RGI 2011 and same is provided in the document. Example- "stateCode":"26"

4.2 Web services For Ration card Addition, Deletion and Updating

4.2.1 Web Service: impds_rationcard_addition
API Live Link: http://impds.nic.in:8080/impdsdeduplication/AddRationCards

4.2.1.1 Input Parameters

SNo.	Output Filed Name	Datatype	Size	Remarks	Mandatory
1.	districtcode	Character Varying	3	District Code should be as per RGI 2011 And same is provided in the document. Also district code should belong to the respective state code.	Y
2.	dfsocode	Character Varying		District Food Supply Officer Code.	N
3.	fpscode	Character Varying		State will have to share the data fair price shop wise	Y
4.	issuedate	Character Varying	8	DDMMYYYY	Y
5.	mobile_no	Character Varying	10	Mobile number pattern uniform in all states	N
6.	rationCardID	Character Varying	25	Length and pattern is not uniform in all states.	Y
7.	memberID	Character Varying	30	Length and pattern is not uniform in all states.	Y
8.	encryptedUID	Character Varying	48	States will have to use common encryption method so that encryption at state level and decryption at central repository level should be same.	N
9.	memberName	Character Varying	150	Name of the member	At least one will be available.
10.	memberNamell	Character Varying	150	Name of the member local language	
11.	relationshipCode	Integer	2	It is mandatory to provide relationship code for each beneficiary and also one head of family should be available for each ration card.	Y
12.	gender	Character Varying	1	Gender should be M – Male, F- Female, T-Transgender	Y
13.	cardType	Character Varying	3	Card type should be PHH,AAY or OTH	Y
14.	dob	Character Varying	8	DDMMYYYY	N
15.	age	Non Negative Integer	3	Member's Age	N
16.	address	Character Varying	250	Member's Address	N
17.	addressll	Character Varying	250	Member's Address local language	N

18.	fatherName	Character Varying	99	Name of Member's Father	N
19.	motherName	Character Varying	99	Name of Member's Mother	N
20.	spouseName	Character Varying	99	Name of Member's Spouse	N
21.	uid_auth_flag	Integer	1	UID auth flag please provide 1 for verified uid and 0 for not verified UID.	Y
22.	nfsa_head_flag	Integer	1	Please mark nfsa head flag 1 when respective member is nfsa head, otherwise 0. if in any state head of family and nfsa head is same then please mark head of family member as nfsa head flag 1.	N
23.	flag1	Integer	1	Extra column added.	N
24.	flag2	Integer	1	Extra column added.	N
25.	col1	Character Varying	99	Extra column added.	N
26.	col2	Character Varying	99	Extra column added.	N
27.	col3	Character Varying	99	Extra column added.	N
28.	lgd_sub_dist_code	Character Varying	5	LGD Tehsil Code as per LGD Master.	N
29.	lgd_village_code	Character Varying	8	LGD Village Code as per LGD Master.	N
30.	pincode	Character Varying	6	Pin Code.	N
31.	rural_urban_flag	Character Varying	1	Flag for Rural- R and Urban – U	N

Table 2: Input: impds_rationcard_addition

Input Json:

```
{"parms":
    [{"rationCardID":"2800000101090023057771891",
      "dfsocode":"548017",
    "address":" Andhra Pradesh ",
      "addressll":" ",
      "cardType":"PHH",
      "fpscode":"0717054",
      "districtcode":"553",
      "issuedate":"03112022",
      "lgd_sub_dist_code": "005310",
      "lgd_village_code": "00594754",
      "pincode":"248341",
      "rural_urban_flag":"t",
```

```
"memberlist":[{

  "memberID":"542281188ST178A91977534",

  "encryptedUID":"ODJLb0djNExUbjJPQkdsNXJHbkNYdz09",

   "fatherName":"",

   "gender":"T",

   "age":69

   "mobile_no":"",

   "motherName":"",

  "memberName":"RAVINDRA",

   "relationshipCode":1,

  "memberNamell":"NA",

   "nfsa_head_flag":0,

   "dob":"01011900",

  "uid_auth_flag":0,

   "spouseName":"",

   "flag1":0,

   "flag2":0,

  "col1":"",

   "col2":"",

  "col3":""

   }]

}]}
```

4.2.1.2 Output Response

SNo.	Input Field Name	Datatype	Remark
1.	Statecode	Character Varying	State Code provided by RGI.
2.	ack_id	Character varying	Requested transaction ID to get the summarized Ration card Addition Data. ACK ID Format : RADDMMYYYYhhmmssxxxxx
			RA - Ration Card addition API
			DD- date, MM- month, YYYY- year, hh- hours, mm- minutes, ss- seconds, xxxxx- running sequence

3.	rejectedList	rationcardid	Character varying	Ration Card Number
		error	Character varying	Reason of Rejection
4.	Totalrecord		Character varying	Total Record count
5.	Acceptrecord		Character varying	Accepted Records count
6.	Rejectrecord		Character varying	Rejected Records count
7.	Token		Character varying	Same as given by state in API header.

Table 3: OUTPUT: impds_rationcard_addition

Response Json :

```
{
        "statecode":"26",
        "ack_id":"RA2101201918015400001",
        "token":"1421012019180626001",
        "totalrecord":"100",
        "acceptrecord":"90",
        "rejectrecord":"10",
        " rejectedList ":
        [
                {
                        "rationcardid" : "141000000001",
                        "error" : "Invalid Card Type"
                },
                {}

        ]
}
```

4.2.2 Web Service: impds_rationcard_updation
API Live Link: http://impds.nic.in:8080/impdsdeduplication/UpdateRationCards

4.2.2.1 Input Parameters

SNo.	Output Filed Name	Data type	Size	Remarks	Mandatory
1.	districtcode	Character Varying	3	District Code should be as per RGI 2011 And same is provided in the document. Also district code should belong to the respective state code.	Y
2.	dfsocode	Character Varying		District Food Supply Officer Code.	N
3.	fpscode	Character Varying		State will have to share the data fair price shop wise.	Y
4.	rationCardID	Character Varying	25	Length and pattern is not uniform in all states.	Y
5.	cardType	Character Varying	3	Card type should be PHH,AAY or OTH	Y
6.	address	Character	250	Member's Address	N

			Varying			
7.	addressll	Character Varying	250	Member's Address local language	N
8.	dateofupdation	Character Varying	8	Date of Updation	Y
9.	lgd_sub_dist_code	Character Varying	5	LGD Tehsil Code as per LGD Master.	N
10.	lgd_village_code	Character Varying	8	LGD Village Code as per LGD Master.	N
11.	pincode	Character Varying	6	Pin Code.	N
12.	rural_urban_flag	Character Varying	1	Flag. (For Rural – R, Urban – U)	N

Table 4 : INPUT: impds_rationcard_updation

Input Json:

```
{
"parms":
[
  {
    "rationCardID": "280000010109023057771891",
    "districtcode": "553",
    "dfsocode": "548017",
    "fpscode": "34564",
    "cardType": "AAY",
    "address": "gbh gg",
    "addressll": "DEHADUN",
    "dateofupdation": "05112022",
    "lgd_sub_dist_code": "005310",
    "lgd_village_code": "00594753",
     "pincode": "234008",
    "rural_urban_flag": "R"


  }
]}
```

4.2.2.2 Output Response

SNo.	Input Field Name	Datatype	Remark

SNo.	Output Filed Name		Data type	Remarks
1.	Statecode		Character Varying	State Code provided by RGI.
2.	ack_id		Character Varying	Requested transaction ID to get the summarized Ration card updation Data. ACK ID Format : RUDDMMYYYYhhmmssxxxxx
				RU - Ration Card updation API
				DD- date, MM- month, YYYY- year, hh- hours, mm- minutes, ss- seconds, xxxxx- running sequence
3.	rejectedList	rationcardid	Character Varying	Ration Card Number
		error	Character Varying	Reason of Rejection
4.	Totalrecord		Character varying	Total Record count
5.	Acceptrecord		Character varying	Acceptrecord count
6.	Rejectrecord		Character varying	Rejected Records count
7.	Token		Character Varying	Same as given by state in API header.

Table 5: OUTPUT: impds_rationcard_updation

Response Json :

```
{
        "statecode":"26",
        "ack_id":"RU2101201918015400001",
        "token":"1421012019180626001",
        "totalrecord":"100",
        "acceptrecord":"90",
        "rejectrecord":"10",
        " rejectedList ":
        [
                {
                        "rationcardid" : "141000000001",
                        "error" : "Ration card does not exists"
                },
                {}

        ]
}
```

4.2.3 Web Service: impds_rationcard_deletion
API Live Link: http://impds.nic.in:8080/impdsdeduplication/DeleteRationCards

4.2.3.1 Input Parameters

SNo.	Output Filed Name	Data type	Size	Remarks	Mandatory

1.	rationCardID	Character Varying	25	Length and pattern is not uniform in all states.	Y
2.	Dateofdeletion	Character Varying	8	DDMMYYYY	Y
3.	Reasonofdeletion	Character Varying	99	Reason of deletion provided in this column	N

Table 6 : INPUT: impds_rationcard_deletion

Input Json:
```
    {
{"parms":
[
  {
    "rationCardID": "280000010109023057771891",
    "dateofdeletion": "11102022",
    "reasonofdeletion": "death"
  }
]}
```

4.2.3.2 Output Response

SNo.	Input Field Name		Datatype	Remark
1.	Statecode		Character Varying	State Code provided by RGI.
2.	ack_id		Character Varying	Requested transaction ID to get the summarized Ration card updation Data. ACK ID Format : RUDDMMYYYYhhmmssxxxxx
				RU - Ration Card updation API
				DD- date, MM- month, YYYY- year, hh- hours, mm- minutes, ss- seconds, xxxxx- running sequence
3.	rejectedList	Rationcardid	Character Varying	Ration Card Number
		Error	Character Varying	Reason of Rejection
4.	Totalrecord		Character varying	Total Record count
5.	Acceptrecord		Character varying	Accepted Records count
6.	Rejectrecord		Character varying	Rejected Records count
7.	Token		Character Varying	Same as given by state in API header.

Table 7: OUTPUT: impds_rationcard_deletion

Response Json :

```
{
        "statecode":"26",
        "ack_id":"RU2101201918015400001",
        "token":"2621012019180626001",
        "totalrecord":"100",
        "acceptrecord":"90",
        "rejectrecord":"10",
        " rejectedLists ":
        [
                {
                        "rationcardid" : "141000000001",
                        "error" : "Ration Card does not Exists"
                },
                {}

        ]
}
```

4.3 Web services For Beneficiaries Addition, Deletion and Updation in Existing Ration card

4.3.1 Web Service: impds_add_member_details_in existing_ration_card
API Live Link: http://impds.nic.in:8080/impdsdeduplication/AddMember

4.3.1.1Input Parameters

S.No.	Output Filed Name	Datatype	Size	Remarks	Mandatory
1.	mobile_no	Character Varying	10	Mobile number pattern uniform in all states	N
2.	rationCardID	Character Varying	25	Length and pattern is not uniform in all states.	Y
3.	memberID	Character Varying	30	Length and pattern is not uniform in all states.	Y
4.	encryptedUID	Character Varying	48	States will have to use common encryption method so that encryption at state level and decryption at central repository level should be same.	N
5.	memberName	Character Varying	150	Name of the member	Atleast one will be available.
6.	memberNamell	Character Varying	150	Name of the member local language	
7.	relationshipCode	Integer	2	It is mandatory to provide relationship code for each beneficiary and also one head of family should be available for each ration card.	Y
8.	gender	Character Varying	1	Gender should be M – Male, F- Female, T-Transgender	Y
9.	dob	Character Varying	8	DDMMYYYY	N

10.	age	Non Negative Integer	3	Member's Age	N
11.	fatherName	Character Varying	99	Name of Member's Father	N
12.	motherName	Character Varying	99	Name of Member's Mother	N
13.	spouseName	Character Varying	99	Name of Member's Spouse	N
14.	uid_auth_flag	Integer	1	UID auth flag please provide 1 for verified uid and 0 for not verified UID.	Y
15.	nfsa_head_flag	Integer	1	Please mark nfsa head flag 1 when respective member is nfsa head, otherwise 0. if in any state head of family and nfsa head is same then please mark head of family member as nfsa head flag 1.	N
16.	flag1	Integer	1	Extra column added.	N
17.	flag2	Integer	1	Extra column added.	N
18.	col1	Character Varying	99	Extra column added.	N
19.	col2	Character Varying	99	Extra column added.	N
20.	col3	Character Varying	99	Extra column added.	N
21.	dateofaddition	Character Varying	8	DDMMYYYY	Y

Table 8: INPUT:impds_add_member_details

Input Json:

```
{
    "parms":[
    {
        "age": "4",
        "col1": "0",
        "col2": "0",
        "col3": "0",
        "dateofaddition": "18022021",
        "dob": "",
        "encryptedUID": "ODJLb0djNExUbjJPQkdsNXJHbkNYdz09",
        "fatherName": "",
        "flag1": "0",
        "flag2": "0",
        "gender": "F",
        "memberID": "545281098021112",
```

```
        "memberName": "AAAAAAD DEVI",

        "memberNamell": "0",

        "mobile_no": "0",

        "motherName": "0",

        "nfsa_head_flag": "0",

        "rationCardID": "280000010109023057771891",

        "relationshipCode": "0",

        "spouseName": "0",

        "uid_auth_flag": "0"


    }
]
}
```

4.3.1.2 Output Response

SNo.	Input Field Name		Datatype	Remark
1.	Statecode		Character Varying	State Code provided by RGI.
2.	ack_id		Character Varying	Requested transaction ID to get the summarized Beneficiary Addition Data. ACK ID Format : BADDMMYYYYhhmmssxxxxx
				BA – Beneficiary Addition in Existing ration card
				DD- date, MM- month, YYYY- year, hh- hours, mm- minutes, ss- seconds, xxxxx- running sequence
3.	rejectedList	memberid	Character Varying	Member ID
4.		rationcardid	Character Varying	Ration card ID
		error	Character Varying	Reason of Rejection
5.	Totalrecord		Character varying	Total Record count
6.	acceptrecord		Character varying	Accepted Records count
7.	Rejectrecord		Character varying	Rejected Records count
8.	Token		Character Varying	Same as given by state in API header.

Table 9: OUTPUT:impds_add_member_details

Response Json :

```
{
        "statecode":"26",
        "ack_id":"BA21012019918015400001",
        "token":"1421012019180626001",
        "totalrecord":"100",
        "acceptrecord":"90",
        "rejectrecord":"10",
        " rejectedList ":
        [
                {
                        "rationcardid": "",
                        "memberid" : "14100000000101",
                        "error" : "Ration card does not exist in IMPDS"
                },
                {}

        ]
}
```

4.3.2 Web Service: impds_delete_member_details_in existing_ration_card
API Live Link:http://impds.nic.in:8080/impdsdeduplication/DeleteMember

4.3.2.1 Input Parameters

S.No.	Output Filed Name	Datatype	Size	Remarks	Mandatory
1.	rationCardID	Character Varying	25	Length and pattern is not uniform in all states.	Y
2.	memberID	Character Varying	30	Length and pattern is not uniform in all states.	Y
3.	dateofdeletion	Character Varying	8	DDMMYYYY	Y
4.	reasonofdeletion	Character Varying	99	Reason of deletion provided in this column	N

Table 10: INPUT: impds_delete_member_details

Input Json:

```
{"parms":[{
"rationCardID":"280000010109023057771891",
"memberID":"545281098021112",
"dateofdeletion":"11102022",
"reasonofdeletion":""
}]}
```

4.3.2.2 Output Response

SNo.	Input Field Name		Datatype	Remark
1.	statecode		Character Varying	State Code provided by RGI.
2.	ack_id		Character Varying	Requested transaction ID to get the summarized Beneficiary Deletion Data. ACK ID Format : BDDDMMYYYYhhmmssxxxxx
				BD – Beneficiary Deletion in Existing ration card
				DD- date, MM- month, YYYY- year, hh- hours, mm- minutes, ss- seconds, xxxxx- running sequence
3.	rejectedList	memberid	Character Varying	Member ID
4.		rationcardid	Character Varying	Ration card ID
		error	Character Varying	Reason of Rejection
5.	totalrecord		Character varying	Total Record count
6.	acceptrecord		Character varying	Accepted Records count
7.	rejectrecord		Character varying	Rejected Records count
8.	token		Character Varying	Same as given by state in API header.

Table 11: Output: impds_delete_member_details

Response Json :

```
{
        "statecode":"26",
        "ack_id":"BD21012019180154000 01",
        "token":"1421012019180626001",
        "totalrecord":"100",
        "acceptrecord":"90",
        "rejectrecord":"10",
        " rejectedLists ":
        [
                {
                        "rationcardid": "141000000001",
                        "memberid" : "14100000000101",
                        "error" : "Beneficiary ID does not exist in IMPDS"
                },
                {}

        ]
}
```

4.3.3 Web Service: impds_update_member_details_in existing_ration_card
API Live Link:http://impds.nic.in:8080/impdsdeduplication/UpdateMember

4.3.3.1 Input Parameters

SNo.	Output Filed Name	Datatype	Size	Remarks	Mandatory
1.	rationCardID	Character Varying	25	Length and pattern is not uniform in all states.	Y
2.	memberID	Character Varying	30	Length and pattern is not uniform in all states.	Y
3.	encryptedUID	Character Varying	48	States will have to use common encryption method so that encryption at state level and decryption at central repository level should be same.	N
4.	mobile_no	Character Varying	10	Mobile number pattern uniform in all states	N
5.	memberName	Character Varying	150	Name of the member	Atleast one will be available.
6.	memberNamell	Character Varying	150	Name of the member local language	
7.	relationshipCode	Integer	2	It is mandatory to provide relationship code for each beneficiary and also one head of family should be available for each ration card.	Y
8.	gender	Character Varying	1	Gender should be M – Male, F- Female, T-Transgender	Y
9.	dob	Character Varying	8	DDMMYYYY	N
10	age	Non Negative Integer	3	Member's Age	N
11	fatherName	Character Varying	99	Name of Member's Father	N
12	motherName	Character Varying	99	Name of Member's Mother	N
13	spouseName	Character Varying	99	Name of Member's Spouse	N
14	uid_auth_flag	Integer	1	UID auth flag please provide 1 for verified uid and 0 for not verified UID.	Y
15	nfsa_head_flag	Integer	1	Please mark nfsa head flag 1 when respective member is nfsa head, otherwise 0. if in any state head of family and nfsa head is same then please mark head of family member as nfsa head flag 1.	N
16	dateofupdation	Character Varying	8	DDMMYYYY- Date of member updation	Y
17	flag1	Integer	1	Extra column added.	N
18	flag2	Integer	1	Extra column added.	N
19	col1	Character	99	Extra column added.	N

		Varying			
20	col2	Character Varying	99	Extra column added.	N
21	col3	Character Varying	99	Extra column added.	N

Table 12: Input: impds_update_member_details

Input Json:

```
{

    "parms":[

    {

        "age": "0",

        "col1": "0",

        "col2": "0",

        "col3": "0",

        "dateofupdation": "12102022",

        "dob": "",

        "encryptedUID": "ODJLb0djNExUbjJPQkdsNXJHbkNYdz09",

        "fatherName": "",

        "flag1": "0",

        "flag2": "0",

        "gender": "F",

        "memberID": "545281098114",

        "memberName": "REKHA SHRIVASTAV",

        "memberNamell": "0",

        "mobile_no": "0",

        "motherName": "0",

        "nfsa_head_flag": "0",

        "rationCardID": "280000010109023057771891",

        "relationshipCode": "0",

        "spouseName": "0",

        "uid_auth_flag": "0"


    }

]

}
```

4.3.2.2 Output Response

SNo.	Input Field Name		Datatype	Remark
1.	statecode		Character Varying	State Code provided by RGI.
2.	ack_id		Character Varying	Requested transaction ID to get the summarized Beneficiary Updation Data. ACK ID Format : BUDDMMYYYYhhmmssxxxxx
				BU – Beneficiary Updation in Existing ration card
				DD- date, MM- month, YYYY- year, hh- hours, mm- minutes, ss- seconds, xxxxx- running sequence
3.	rejectedList	memberid	Character Varying	Member ID
4.		rationcardid	Character Varying	Ration card ID
		error	Character Varying	Reason of Rejection
5.	totalrecord		Character varying	Total Record count
6.	acceptrecord		Character varying	Accepted Records count
7.	rejectrecord		Character varying	Rejected Records count
8.	token		Character Varying	Same as given by state in API header.

Table 13: Output: impds_update_member_details

Response Json :

```
{
        "statecode":"26",
        "ack_id":"BU21012019180015400001",
        "token":"1421012019180626001",
        "totalrecord":"100",
        "acceptrecord":"90",
        "rejectrecord":"10",
        " rejectedList":
        [
                {
                        "rationcardid": "141000000001",
                        "memberid" : "14100000000101",
                        "error" : "Beneficiary ID does not exist in IMPDS"
                },
                {}

        ]
}
```

5. PARAMETERS FOR THE OTHERS API's:

5.1 API Header for Duplicate check on Aadhaar Number –

a) **token**: State will have to send the header with name **token_no** in each API header. Token number header   value format is "**Two digit state code+ ddMMyyyyHHmmss+xxxxx (five digit running sequence)**". Example- "token":"011511201710512200001"
    a. Token No should be unique in all API headers.

b) **userAuthentication:** State will have to send the header with name userAuthentication in each API header. userAuthenticationAPI header value format is "username,password".
Example- "userAuthentication":"jkadmin,user@123"

c) **stateCode:** State Code should be as per RGI 2011 and same is provided in the document.
Example- "stateCode":"26"

5.2Real Time duplicate checkon Aadhaar Number(Duplicate UID checked in inter and intra state on central Repository)–
API Link: http://impds.nic.in:8080/impdsdeduplication/DuplicateUidCheck

5.2.1 Input Parameters

SNo.	Output Filed Name	Datatype	Size	Remarks	Mandatory
1.	encryptedUID	Character Varying	48	States will have to use common encryption method so that encryption at state level and decryption at central repository level should be same.	Y
2.	remarks	Character Varying	99	Remarks sent by state	N

Table 14: UID Checked Inter and Intra state

Input Json:
{
"parms":
[

{
"encryptedUID":"SzBkeTFsOElzekxxMjVNTDhKNFZkdz09",
"remarks":""
},
{..}
]
}

5.2.2 Output Response

SNo.	Input Field Name	Datatype	Remark
1.	statecode	Character Varying	State Code provided by RGI.
2.	ack_id	Character Varying	Requested transaction ID to get the summarized Duplicate UID checked. ACK ID Format : DUPUIDDDMMYYYYhhmmssxxxxx
			DUPUID – Duplicate UID checked
			DD- date, MM- month, YYYY- year, hh- hours, mm- minutes, ss- seconds, xxxxx- running sequence
3.	remark	Character varying	"Y" or "N"
4.	token	Character varying	Same as given by state in API header.

Table 15: Output:UID Checked Inter and Intra state

Response Json :

```
{
"statecode":"04",
"remark":"Y/N",
"ackid":"DUPUID2101201918015400001",
"token":"1421012019180626001"}
```

5.3 Real Time duplicate check on beneficiary details (Duplicate beneficiary checked in inter and intra state on central Repository)–

API Link: http://impds.nic.in:8080/impdsdeduplication/downloadduplicatebeneficiarylist

5.3.1 Header

a) **token**: State will have to send the header with name **token_no** in each API header. Token number header   value format is "**Two digit state code+ ddMMyyyyHHmmss+xxxxx (five digit running sequence)**". Example- "token":"011511201710512200001"

    a. Token No should be unique in all API headers.

b) **userAuthentication:** State will have to send the header with name userAuthentication in each API header. userAuthenticationAPI header value format is "username,password".
Example- "userAuthentication":"jkadmin,user@123"

c) **stateCode:** State Code should be as per RGI 2011 and same is provided in the document.
Example- "stateCode":"26"

d) **districtCode:**Distirct Code should be as per RGI 2011 and same is provided in the document.
Example- "districtCode":"496"

Input Json:
{
}

5.3.2Output Parameters

S.No.	Input Field Name	Datatype	Remark
1.	statecode	Character varying	State Code provided by RGI.
2.	response	Character varying	"Y" or "N"
3.	districtcode	Character varying	District code is be belong to the duplicate UID
4.	state_name_en	Character varying	State Name is be belong to the duplicate UID
5.	district_name_en	Character varying	District Name is be belong to the duplicate UID
6.	fpscode	Character varying	FPS code is be belong to the duplicate UID
7.	rationcardID	Character varying	Ration card ID is be belong to the duplicate UID
8.	memberID	Character varying	Member id is be belong to the duplicate UID
9.	memberName	Character varying	Member Name is be belong to the duplicate UID
10.	fatherName	Character varying	Father Name is be belong to the duplicate UID
11.	motherName	Character varying	Mother Name is be belong to the duplicate UID
12.	spouseName	Character varying	Spouse Name is be belong to the duplicate UID
13.	cardType	Character varying	Card Type is be belong to the duplicate UID
14.	address	Character varying	Address is be belong to the duplicate UID
15.	encryptedUID	Character varying	Encrypted UID is be belong to the duplicate UID
16.	duplicate_uid_ref_no	Character varying	Duplicate UID reference number is be belong to the duplicate UID
17.	gender	Character varying	Gender is be belong to the duplicate UID
18.	relationshipCode	Integer	Relationship code is be belong to the duplicate UID
19.	deduplication_report_date	DDMMYYYY	Deduplication Report Date
20.	token	Character varying	Same as given by state in API header.

Table 16: Output:Beneficiary Checked Inter and Intra state

Response Json :

{
"statecode":"04",
"response":"Y/N",

"districtcode":"055",
"state_name_en":"chandigarh",
"district_name_en":"chandigarh",
"fpscode":"105500000001",
"rationcardID":"044000000001",
"memberID":"04400000000101",
"memberName":"Sumit",
"fatherName":"Ramesh",
"motherName":"Sunita",
"spouseName":"Sunita",
"cardType":"PHH",
"address":"",
"encryptedUID":"SzBkeTFsOElzekxxMjVNTDhKNFZkdz09",
"duplicate_uid_ref_no":"",
"gender":"M",
"relationshipCode":"5",
"deduplication_report_date":"",
"token":"1421012019180626001"}

5.4 List of eligible ration cards for Inter-State Portability under central Repository(Capture Ration Card ID, date of last Aadhaar authenticated transaction, member_Id of last Aadhaar authenticated transaction)-
API Link: http://impds.nic.in:8080/impdsdeduplication/Date_Last_Aadhaar_Authentication

5.4.1Header
   a) **token**: State will have to send the header with name **token_no** in each API header. Token number header   value format is "**Two digit state code+ ddMMyyyyHHmmss+xxxxx (five digit running sequence)**". Example- "token":"011511201710512200001"
      a. Token No should be unique in all API headers.

   b) **userAuthentication:** State will have to send the header with name userAuthentication in each API header. userAuthenticationAPI header value format is "username,password".
      Example- "userAuthentication":"jkadmin,user@123"

   c) **stateCode:** State Code should be as per RGI 2011 and same is provided in the document.
      Example- "stateCode":"26"

5.4.2 Input Parameters

SNo.	Output Filed Name	Data type	Size	Remarks	Mandatory
1.	rationCardID	Character Varying	25	Length and pattern is not uniform in all states.	Y
2.	memberID	Character Varying	14	Member ID	Y
3.	dateofauthentication	DDMMYYYY	8	Date of last Aadhaar authentication	Y
4.	remarks	Character Varying	99	Remarks	N

Table 17: Input:Eligible ration cards for Inter-State Portability

Input Json:
{
"parms":
[
{
"rationCardID":"141000000001"
"memberID":"",
"dateofauthentication":"",
},
{..}
]
}

5.4.3Output Parameters

SNo.	Input Field Name		Datatype	Remark
1.	statecode		Character Varying	State Code provided by RGI.
2.	ack_id		Character Varying	Requested ack ID to get the summarized Date of last Aadhaar authentication. ACK ID Format : AUTHDDMMYYYYhhmmssxxxxx
				Auth – Date of last Aadhaar authentication
				DD- date, MM- month, YYYY- year, hh- hours, mm- minutes, ss- seconds, xxxxx- running sequence
3.	rejectedList	memberid	Character Varying	Member ID
4.		rationcardid	Character Varying	Ration card ID
		error	Character Varying	Reason of Rejection
5.	totalrecord		Character varying	Total Record count
6.	acceptrecord		Character varying	Accepted Records count
7.	rejectrecord		Character varying	Rejected Records count
8.	token		Character Varying	Same as given by state in API header.

Table 18: Output:Eligible ration cards for Inter-State Portability

Response Json:

```
{
        "statecode":"26",
        "ack_id":"AUTH2101201918015400001",
        "token":"1421012019180626001",
        "totalrecord":"100",
        "acceptrecord":"90",
        "rejectrecord":"10",
        " rejectedList":
        [
                {
                        "rationcardid": "141000000001",
                         "memberid" : "14100000000101",
                        "error" : "Beneficiary ID does not exist in IMPDS"
                },
                {}

        ]
}
```

6. **Error Response Code for Ration Card and Fair Price Shop API:**

S No	Case Type (API Name)	rule checks	Respo nse Type	Response Message	Remarks
1.	impds_add_member_details impds_delete_member_details impds_update_member_details	State code invalid means state is not correct according to state master.	Fail	Invalid Token (StateCode is invalid)	
2.	impds_new_raton_card _details impds_delete_raton_card _detailsimpds_update_raton_card _details	Token date validation means Token Date is not matched with server date	Fail	Token Date is not matched with server date.	
3.		Token no validation means each token no is be unique.	Fail	Duplicate Token.	
4.		Token validation.	Fail	Invalid Token	
5.		User Authentication – valid username and password has to be entered	Fail	User And Password Invalid.	
6.		Total records and total no of records in parameter is be same.	Fail	Total number of records is different.	
7.		Fps code is not be repeated.	Fail	FPS Code already exist	
8.		State code is be according to RGI 2011.	Fail	State Code Invalid	
9.		District code is be according to RGI 2011.	Fail	District Code Invalid	
10.		User and other Validation.	Fail	Authentication failed.	
11.		Relationship Code is be available as per attached master.	Fail	Relationship Code is not given or not exist in master table.	
12.		UID decryption checks.	Fail	Invalid UID decryption	
13.	impds_add_member_details	Ration card not exist	Fail	Ration card does not exist in IMPDS	
14.	impds_delete_member_details	Ration card not exist	Fail	1. Ration card does not exist in IMPDS 2. Beneficiary does not exist in ration card	
15.	impds_update_member_details	Ration card not exist	Fail	Beneficiary does not exist in ration card	
16.	impds_new_rc_add_details	Ration card not exist	Fail	Ration card already exist	
17.	impds_delete_rc__details	Ration card not exist	Fail	Ration card does not exist	
18.	impds_update_rc_details	Ration card not exist	Fail	Ration card does not exist	

Table 14: Error Codes

7. Method to encrypt UID:-

Please use the password (password will be shared over mail) to prepare the md5 salt of pwd.

Step to encrypt UID-

Step 1 – make salt by using password. First convert the password using md5.

For example:

```
String saltedPassword = convertToMD5(password);
public static String convertToMD5(String text) throws NoSuchAlgorithmException, UnsupportedEncodingException  {

MessageDigest md = MessageDigest.getInstance("MD5");
md.update(text.getBytes("iso-8859-1"), 0, text.length());
byte[] md5hash = md.digest();
StringBuffer buf = new StringBuffer();
for (int i = 0; i < md5hash.length; i++) {
int halfbyte = (md5hash[i] > 4) & 0x0F;
int two_halfs = 0;
do {
if ((0 <= halfbyte) && (halfbyte <= 9))          buf.append((char) ('0' + halfbyte));
else  buf.append((char) ('a' + (halfbyte - 10)));
halfbyte = md5hash[i] & 0x0F;
} while(two_halfs++ < 1);
}
return buf.toString();  }
```

Step 2: Encrypt the UID with salted password and encryption method

```
String uidEnc = encrypt(uid, saltedPassword, pwd);
For example (encryption method):-
public static SecretKeySpec setKey(String myKey) throws UnsupportedEncodingException, NoSuchAlgorithmException
{
    byte[] key = myKey.getBytes("UTF-8");
    MessageDigest sha = MessageDigest.getInstance("SHA-256");
    key = sha.digest(key);
    key = Arrays.copyOf(key, 16);
    SecretKeySpec secretKey = new SecretKeySpec(key, "AES");
    return secretKey;
    }

    public static String encrypt(String uid, String salt,String pwd) throws NoSuchAlgorithmException,
NoSuchPaddingException, UnsupportedEncodingException, InvalidKeyException,
InvalidAlgorithmParameterException, IllegalBlockSizeException, BadPaddingException {
            Cipher ciper = Cipher.getInstance("AES/CBC/PKCS5Padding");
            SecretKeySpec skKey=setKey(salt);
            IvParameterSpec iv = new IvParameterSpec(pwd.getBytes(), 0, ciper.getBlockSize());
            ciper.init(Cipher.ENCRYPT_MODE, skKey, iv);
            byte[] encValue = ciper.doFinal(uid.getBytes());
            byte[] encodedBytes = Base64.encodeBase64(Base64.encodeBase64(encValue));
     return new String(encodedBytes);
    }
```

8. Step to Consume Web service:

(i)   First prepare the JSON data as given in web service description.
          List<MemberInfo> minfo = new ArrayList<>();
          MemberInfo m = new MemberInfo();

(ii)   Sample Java Code to consume the web service:

```
JSONObject json = new JSONObject();
json.put("parms", minfo);
URL url = new URL(url_text);
HttpURLConnection httpCon = (HttpURLConnection) url.openConnection();
httpCon.setDoOutput(true);
httpCon.setRequestMethod("POST");
httpCon.setFixedLengthStreamingMode(json.toString().getBytes().length);
httpCon.setRequestProperty("Content-Type", "application/json;charset=utf-8");
httpCon.setRequestProperty("totalrecords", "");
httpCon.setRequestProperty("userAuthentication", "");
httpCon.setRequestProperty("stateCode", "");
httpCon.setRequestProperty("token", "");

OutputStream os = new BufferedOutputStream(httpCon.getOutputStream());
os.write(json.toString().getBytes());
os.flush();

int status = httpCon.getResponseCode();
System.out.println("status is " + status);
BufferedReader in = new BufferedReader(new InputStreamReader(httpCon.getInputStream()));
String inputLine;
StringBuffer content = new StringBuffer();
while ((inputLine = in.readLine()) != null) {
   content.append(inputLine);
   }
System.out.println("Response is " + content);
in.close();
```

- **url_text : Web service API URL as given in document.**
- **json: JSON data String (Prepared as per document)**
- **output : JSON response from impds server in JSON format.**

9. Testing URL of Web service:

1. **http://impds.nic.in:8080/impdsdeduplicationtest/AddRationCards**
2. **http://impds.nic.in:8080/impdsdeduplicationtest/UpdateRationCards**
3. **http://impds.nic.in:8080/impdsdeduplicationtest/DeleteRationCards**
4. **http://impds.nic.in:8080/impdsdeduplicationtest/AddMember**
5. **http://impds.nic.in:8080/impdsdeduplicationtest/DeleteMember**
6. **http://impds.nic.in:8080/impdsdeduplicationtest/UpdateMember**

Annexure 1: State Code Master (As per RGI 2011)

state_code	State_Short_name	state_name_en
01	JK	JAMMU AND KASHMIR
02	HP	HIMACHAL PRADESH
03	PJ	PUNJAB
04	CH	CHANDIGARH
05	UK	UTTARAKHAND
06	HR	HARYANA
07	DL	DELHI
08	RJ	RAJASTHAN
09	UP	UTTAR PRADESH
10	BH	BIHAR
11	SK	SIKKIM
12	AR	ARUNACHAL PRADESH
13	NL	NAGALAND
14	MN	MANIPUR
15	MZ	MIZORAM
16	TR	TRIPURA
17	ML	MEGHALAYA
18	AS	ASSAM
19	WB	WEST BENGAL
20	JH	JHARKHAND
21	OR	ORISSA
22	CG	CHHATISGARH
23	MP	MADHYA PRADESH
24	GJ	GUJARAT
25	DD	DAMAN & DIU
26	DH	DADRA & NAGAR HAVELI
27	MH	MAHARASHTRA
28	AP	ANDHRA PRADESH
29	KA	KARNATAKA
30	GA	GOA
31	LD	LAKSHADWEEP
32	KL	KERALA
33	TN	TAMIL NADU
34	PY	PUDUCHERRY
35	AN	ANDAMAN & NICOBAR ISLANDS
36	TS	TELANGANA
37	LH	LEH &LADAKH

Annexure 2: District Code Master (As per RGI 2011)

State Code	District Code	District Name	State Code	District Code	District Name

01	001	Kupwara		20	346	Garhwa
01	002	Badgam		20	347	Chatra
01	003	Leh(Ladakh)		20	348	Kodarma
01	004	Kargil		20	349	Giridih
01	005	Punch		20	350	Deoghar
01	006	Rajouri		20	351	Godda
01	007	Kathua		20	352	Sahibganj
01	008	Baramula		20	353	Pakaur
01	009	Bandipore		20	354	Dhanbad
01	010	Srinagar		20	355	Bokaro
01	011	Ganderbal		20	356	Lohardaga
01	012	Pulwama		20	357	Purbi Singhbhum
01	013	Shupiyan		20	358	Palamu
01	014	Anantnag		20	359	Latehar
01	015	Kulgam		20	360	Hazaribagh
01	016	Doda		20	361	Ramgarh
01	017	Ramban		20	362	Dumka
01	018	Kishtwar		20	363	Jamtara
01	019	Udhampur		20	364	Ranchi
01	020	Reasi		20	365	Khunti
01	021	Jammu		20	366	Gumla
01	022	Samba		20	367	Simdega
02	023	CHAMBA		20	368	Pashchimi Singhbhum
02	024	KANGRA		20	369	Saraikela-Kharswana
02	025	LAHUL & SPITI		21	370	Bargarh
02	026	KULLU		21	371	Jharsuguda
02	027	MANDI		21	372	Sambalpur
02	028	HAMIRPUR		21	373	Debagarh
02	029	UNA		21	374	Sundargarh
02	030	BILASPUR		21	375	Kendujhar
02	031	SOLAN		21	376	Mayurbhanj
02	032	SIRMAUR		21	377	Baleshwar
02	033	SHIMLA		21	378	Bhadrak
02	034	KINNAUR		21	379	Kendrapara
03	035	Gurdaspur		21	380	Jagatsinghapur
03	036	Kapurthala		21	381	Cuttack
03	037	Jalandhar		21	382	Jajapur
03	038	Hoshiarpur		21	383	Dhenkanal
03	039	Shahid Bhagat Singh Nagar		21	384	Anugul
03	040	Fatehgarh Sahib		21	385	Nayagarh
03	041	Ludhiana		21	386	Khordha
03	042	Moga		21	387	Puri
03	043	Ferozepur		21	388	Ganjam
03	044	Sri Muktsar Sahib		21	389	Gajapati
03	045	Faridkot		21	390	Kandhamal
03	046	Bathinda		21	391	Baudh

03	047	Mansa		21	392	Subarnapur
03	048	Patiala		21	393	Balangir
03	049	Amritsar		21	394	Nuapada
03	050	Tarn Taran		21	395	Kalahandi
03	051	Rupnagar		21	396	Rayagada
03	052	Sahibzada Ajit Singh Nagar		21	397	Nabarangapur
03	053	Sangrur		21	398	Koraput
03	054	Barnala		21	399	Malkangiri
03	647	Pathankot		22	400	Koriya
03	648	Fazilka		22	401	Surguja
04	055	Chandigarh		22	402	Jashpur
05	056	Uttarkashi		22	403	Raigarh
05	057	Chamoli		22	404	Korba
05	058	Rudraprayag		22	405	Janjgir - Champa
05	059	Tehri Garhwal		22	406	Bilaspur
05	060	Dehradun		22	407	Kabeerdham
05	061	Garhwal		22	408	Rajnandgaon
05	062	Pithoragarh		22	409	Durg
05	063	Bageshwar		22	410	Raipur
05	064	Almora		22	411	Mahasamund
05	065	Champawat		22	412	Dhamtari
05	066	Nainital		22	413	Uttar Bastar Kanker
05	067	Udham Singh Nagar		22	414	Bastar
05	068	Hardwar		22	415	Narayanpur
06	069	Panchkula		22	416	Dakshin Bastar Dantewada
06	070	Ambala		22	417	Bijapur
06	071	Yamunanagar		22	671	Surajpur
06	072	Kurukshetra		22	672	Balrampur
06	073	Kaithal		22	673	Sukma
06	074	Karnal		22	674	Kondagaon
06	075	Panipat		22	675	Balod
06	076	Sonipat		22	676	Bemetra
06	077	Jind		22	677	Gariaband
06	078	Fatehabad		22	678	Balodabazar
06	079	Sirsa		22	679	Mungeli
06	080	Hisar		23	418	Sheopur
06	081	Bhiwani		23	419	Morena
06	082	Rohtak		23	420	Bhind
06	083	Jhajjar		23	421	Gwalior
06	084	Mahendragarh		23	422	Datia
06	085	Rewari		23	423	Shivpuri
06	086	Gurgaon		23	424	Tikamgarh
06	087	Mewat		23	425	Chhatarpur
06	088	Faridabad		23	426	Panna
06	089	Palwal		23	427	Sagar

07	090	North West		23	428	Damoh
07	091	North		23	429	Satna
07	092	North East		23	430	Rewa
07	093	East		23	431	Umaria
07	094	New Delhi		23	432	Neemuch
07	095	Central		23	433	Mandsaur
07	096	West		23	434	Ratlam
07	097	South West		23	435	Ujjain
07	098	South		23	436	Shajapur
08	099	Ganganagar		23	437	Dewas
08	100	Hanumangarh		23	438	Dhar
08	101	Bikaner		23	439	Indore
08	102	Churu		23	440	West Nimar
08	103	Jhunjhunun		23	441	Barwani
08	104	Alwar		23	442	Rajgarh
08	105	Bharatpur		23	443	Vidisha
08	106	Dhaulpur		23	444	Bhopal
08	107	Karauli		23	445	Sehore
08	108	Sawai Madhopur		23	446	Raisen
08	109	Dausa		23	447	Betul
08	110	Jaipur		23	448	Harda
08	111	Sikar		23	449	Hoshangabad
08	112	Nagaur		23	450	Katni
08	113	Jodhpur		23	451	Jabalpur
08	114	Jaisalmer		23	452	Narsimhapur
08	115	Barmer		23	453	Dindori
08	116	Jalor		23	454	Mandla
08	117	Sirohi		23	455	Chhindwara
08	118	Pali		23	456	Seoni
08	119	Ajmer		23	457	Balaghat
08	120	Tonk		23	458	Guna
08	121	Bundi		23	459	Ashoknagar
08	122	Bhilwara		23	460	Shahdol
08	123	Rajsamand		23	461	Anuppur
08	124	Dungarpur		23	462	Sidhi
08	125	Banswara		23	463	Singrauli
08	126	Chittaurgarh		23	464	Jhabua
08	127	Kota		23	465	Alirajpur
08	128	Baran		23	466	East Nimar
08	129	Jhalawar		23	467	Burhanpur
08	130	Udaipur		23	856	Agar
08	131	Pratapgarh		24	468	Kutch
09	132	Saharanpur		24	469	Banaskantha
09	133	Muzaffarnagar		24	470	Patan
09	134	Bijnor		24	471	Mehsana
09	135	Moradabad		24	472	Sabarkantha

09	136	Rampur		24	473	Gandhinagar
09	137	Jyotiba Phule Nagar		24	474	Ahmedabad
09	138	Meerut		24	475	Surendranagar
09	139	Baghpat		24	476	Rajkot
09	140	Ghaziabad		24	477	Jamnagar
09	141	Gautam Buddha Nagar		24	478	Porbandar
09	142	Bulandshahr		24	479	Junagadh
09	143	Aligarh		24	480	Amreli
09	144	Mahamaya Nagar		24	481	Bhavanagar
09	145	Mathura		24	482	Anand
09	146	Agra		24	483	Kheda
09	147	Firozabad		24	484	Panchmahal
09	148	Mainpuri		24	485	Dahod
09	149	Budaun		24	486	Baroda
09	150	Bareilly		24	487	Narmada
09	151	Pilibhit		24	488	Bharuch
09	152	Shahjahanpur		24	489	Dang
09	153	Kheri		24	490	Navasari
09	154	Sitapur		24	491	Valsad
09	155	Hardoi		24	492	Surat
09	156	Unnao		24	493	Tapi
09	157	Lucknow		24	942	Ahmedabad City
09	158	Rae Bareli		24	943	Morbi
09	159	Farrukhabad		24	944	Gir Somnath
09	160	Kannauj		24	945	Botad
09	161	Etawah		24	946	Arvalli
09	162	Auraiya		24	947	Mahisagar
09	163	Kanpur Dehat		24	948	Chottaudepur
09	164	Kanpur Nagar		24	949	Devbhumi Dwarka
09	165	Jalaun		25	494	Diu
09	166	Jhansi		25	495	Daman
09	167	Lalitpur		26	496	Dadra and Nagar Haveli
09	168	Hamirpur		27	497	NANDURBAR
09	169	Mahoba		27	498	DHULE
09	170	Banda		27	499	JALGAON
09	171	Chitrakoot		27	500	BULDANA
09	172	Fatehpur		27	501	AKOLA
09	173	Pratapgarh		27	502	WASHIM
09	174	Kaushambi		27	503	AMRAVATI
09	175	Allahabad		27	504	WARDHA
09	176	Bara Banki		27	505	NAGPUR
09	177	Faizabad		27	506	BHANDARA
09	178	Ambedkar Nagar		27	507	GONDIYA
09	179	Sultanpur		27	508	GADCHIROLI
09	180	Bahraich		27	509	CHANDRAPUR
09	181	Shrawasti		27	510	YAVATMAL

09	182	Balrampur		27	511	NANDED
09	183	Gonda		27	512	HINGOLI
09	184	Siddharthnagar		27	513	PARBHANI
09	185	Basti		27	514	JALNA
09	186	Sant Kabir Nagar		27	515	AURANGABAD
09	187	Mahrajganj		27	516	NASHIK
09	188	Gorakhpur		27	517	THANE
09	189	Kushinagar		27	518	MUMBAI SUBURBAN
09	190	Deoria		27	519	MUMBAI
09	191	Azamgarh		27	520	RAIGARH
09	192	Mau		27	521	PUNE
09	193	Ballia		27	522	AHMADNAGAR
09	194	Jaunpur		27	523	BID
09	195	Ghazipur		27	524	LATUR
09	196	Chandauli		27	525	OSMANABAD
09	197	Varanasi		27	526	SOLAPUR
09	198	Sant Ravidas Nagar (Bhadohi)		27	527	SATARA
09	199	Mirzapur		27	528	RATNAGIRI
09	200	Sonbhadra		27	529	SINDHUDURG
09	201	Etah		27	530	KOLHAPUR
09	202	Kanshiram Nagar		27	531	SANGLI
09	751	Amethi		27	641	PAREL ZONE-A
09	752	Hapur		27	642	ANDHERI ZONE-D
09	753	Sambhal		27	643	WADALA ZONE-E
09	754	Shamli		27	644	KANDIVALI ZONE-G
10	203	Pashchim Champaran		27	645	THANE ZONE-F
10	204	Purba Champaran		27	646	PALGHAR
10	205	Sheohar		28	542	Srikakulam
10	206	Sitamarhi		28	543	Vizianagaram
10	207	Madhubani		28	544	Visakhapatnam
10	208	Supaul		28	545	East Godavari
10	209	Araria		28	546	West Godavari
10	210	Kishanganj		28	547	Krishna
10	211	Purnia		28	548	Guntur
10	212	Katihar		28	549	Prakasam
10	213	Madhepura		28	550	Sri Potti Sriramulu Nellore
10	214	Saharsa		28	551	Y.S.R.
10	215	Darbhanga		28	552	Kurnool
10	216	Muzaffarpur		28	553	Anantapur
10	217	Gopalganj		28	554	Chittoor
10	218	Siwan		29	555	BELAGAVI
10	219	Saran		29	556	BAGALKOTE
10	220	Vaishali		29	557	VIJAYAPURA
10	221	Samastipur		29	558	BIDAR
10	222	Begusarai		29	559	RAICHUR
10	223	Khagaria		29	560	KOPPAL

10	224	Bhagalpur		29	561	GADAG
10	225	Banka		29	562	DHARWAR
10	226	Munger		29	563	UTTARA KANNADA
10	227	Lakhisarai		29	564	HAVERI
10	228	Sheikhpura		29	565	BALLARI
10	229	Nalanda		29	566	CHITRADURGA
10	230	Patna		29	567	DAVANAGERE
10	231	Bhojpur		29	568	SHIVAMOGGA
10	232	Buxar		29	569	UDUPI
10	233	Kaimur (Bhabua)		29	570	CHIKKAMAGALURU
10	234	Rohtas		29	571	TUMAKURU
10	235	Jehanabad		29	572	BENGALURU
10	236	Arwal		29	573	MANDYA
10	237	Aurangabad		29	574	HASSAN
10	238	Gaya		29	575	DAKSHINA KANNADA
10	239	Nawada		29	576	KODAGU
10	240	Jamui		29	577	MYSURU
11	241	North District		29	578	CHAMARAJANAGARA
11	242	West District		29	579	KALABURAGI
11	243	South District		29	580	YADGIR
11	244	East District		29	581	KOLAR
12	245	Tawang		29	582	CHIKKABALLAPURA
12	246	West Kameng		29	583	BENGALURU RURAL
12	247	East Kameng		29	584	RAMANAGARA
12	248	Papum Pare		29	956	BANGALORE EAST
12	249	Lower Subansiri		29	957	BANGALORE NORTH
12	250	Kurung Kumey		29	958	BANGALORE SOUTH
12	251	Upper Subansiri		29	959	BANGALORE WEST
12	252	West Siang		30	585	North Goa
12	253	East Siang		30	586	South Goa
12	254	Upper Siang		31	587	LAKSHADWEEP
12	255	Dibang Valley		32	588	Kasargodu
12	256	Lower Dibang Valley		32	589	Kannur
12	257	Lohit		32	590	Wayanad
12	258	Anjaw		32	591	Kozhikkodu
12	259	Changlang		32	592	Malappuram
12	260	Tirap		32	593	Palakkad
13	261	Mon		32	594	Thrissur
13	262	Tuensang		32	595	Ernakulam
13	263	Longleng		32	596	Idukki
13	264	Kiphire		32	597	Kottayam
13	265	Mokokchung		32	598	Alappuzha
13	266	Zunheboto		32	599	Pathanamthitta
13	267	Wokha		32	600	Kollam
13	268	Dimapur		32	601	Thiruvananthapuram
13	269	Kohima		33	602	Thiruvallur

13	270	Peren		33	603	Chennai
13	271	Phek		33	604	Kancheepuram
14	272	Senapati		33	605	Vellore
14	273	Tamenglong		33	606	Dharmapuri
14	274	Churachandpur		33	607	Krishnagiri
14	275	Bishnupur		33	608	Tiruvannamalai
14	276	Thoubal		33	609	Viluppuram
14	277	Imphal West		33	610	Salem
14	278	Imphal East		33	611	Namakkal
14	279	Ukhrul		33	612	Erode
14	280	Chandel		33	613	The Nilgiris
15	281	Mamit		33	614	Coimbatore
15	282	Kolasib		33	615	Tiruppur
15	283	Aizawl		33	616	Dindigul
15	284	Champhai		33	617	Karur
15	285	Serchhip		33	618	Tiruchirappalli
15	286	Lunglei		33	619	Perambalur
15	287	Lawngtlai		33	620	Ariyalur
15	288	Saiha		33	621	Cuddalore
16	289	West Tripura		33	622	Nagapattinam
16	290	South Tripura		33	623	Thiruvarur
16	291	Dhalai		33	624	Thanjavur
16	292	North Tripura		33	625	Pudukkottai
16	901	GOMATI		33	626	Sivaganga
16	902	KHOWAI		33	627	Madurai
16	903	SEPAHIJALA		33	628	Theni
16	904	UNAKOTI		33	629	Virudhunagar
17	293	West Garo Hills		33	630	Ramanathapuram
17	294	East Garo Hills		33	631	Thoothukkudi
17	295	South Garo Hills		33	632	Tirunelveli
17	296	West Khasi Hills		33	633	Kanniyakumari
17	297	Ribhoi		34	**634**	**Yanam**
17	298	East Khasi Hills		34	635	Puducherry
17	299	Jaintia Hills		34	636	Mahe
17	801	South West Garo Hills		34	637	Karaikal
17	802	North Garo Hills		35	638	Nicobars
17	803	East Jaintia Hills		35	639	North & Middle Andaman
17	804	South West Khasi Hills		35	640	South Andaman
18	300	Kokrajhar		36	532	Adilabad
18	301	Dhubri		36	533	Nizamabad
18	302	Goalpara		36	534	Karimnagar
18	303	Barpeta		36	535	Medak
18	304	Morigaon		36	536	Hyderabad
18	305	Nagaon		36	537	Ranga Reddy
18	306	Sonitpur		36	538	Mahbubnagar

18	307	Lakhimpur		36	539	Nalgonda
18	308	Dhemaji		36	540	Warangal
18	309	Tinsukia		36	541	Khammam
18	310	Dibrugarh		36	921	Kumarambheem Asifabad
18	311	Sivasagar		36	922	Jayashankar Bhupalpalli
18	312	Jorhat		36	923	Jogulamba Gadwal
18	313	Golaghat		36	924	Jagityal
18	314	Karbi Anglong		36	925	Janagaon
18	315	Dima Hasao		36	926	Kamareddy
18	316	Cachar		36	927	Bhadrdri Kothagudem
18	317	Karimganj		36	928	Mahabubabad
18	318	Hailakandi		36	929	Manchiryala
18	319	Bongaigaon		36	930	Medchal
18	320	Chirang		36	931	Nagarkarnool
18	321	Kamrup		36	932	Nirmal
18	322	Kamrup Metropolitan		36	933	Peddapalli
18	323	Nalbari		36	934	Sangareddy
18	324	Baksa		36	935	Siddipet
18	325	Darrang		36	936	Rajanna Siricilla
18	326	Udalguri		36	937	Suryapet
19	327	DARJEELING		36	938	Vikarabad
19	328	JALPAIGURI		36	939	Wanaparthy
19	329	COOCH BEHAR		36	940	Warangal Rural
19	330	UTTAR DINAJPUR		36	941	Yadadri Bhuvanagiri
19	331	DAKSHIN DINAJPUR				
19	332	MALDAH				
19	333	MURSHIDABAD				
19	334	BIRBHUM				
19	335	PURBA BARDHAMAN				
19	336	NADIA				
19	337	NORTH TWENTY FOUR PARGANAS				
19	338	HOOGHLY				
19	339	BANKURA				
19	340	PURULIA				
19	341	HOWRAH				
19	342	KOLKATA				
19	343	SOUTH TWENTY FOUR PARGANAS				
19	344	PASCHIM MIDNAPORE				
19	345	PURBA MIDNAPORE				
19	966	ALIPURDUAR				
19	967	PASCHIM BARDHAMAN				

Annexure 3: Relationship Code Master

sno	relationship_code	relationship_name
1	1	SELF
2	2	SISTER
3	3	BROTHER
4	4	MOTHER
5	5	FATHER
6	6	WIFE
7	7	HUSBAND
8	8	SON
9	9	DAUGHTER
10	10	SISTER'S HUSBAND
11	11	BROTHER'S WIFE
12	12	WIFE'S SISTER
13	13	WIFE'S BROTHER
14	14	HUSBAND'S SISTER
15	15	HUSBAND'S YOUNGER BROTHER
16	16	HUSBAND'S ELDER BROTHER
17	17	MOTHER IN LAW
18	18	FATHER IN LAW
19	19	FATHER OF CHILD'S SPOUSE
20	20	MOTHER OF CHILD'S SPOUSE
21	21	AUNT(MOTHER'S SISTER)
22	22	AUNT(FATHER'S SISTER)
23	23	AUNT(WIFE OF MOTHER'S BROTHER)
24	24	AUNT(WIFE OF FATHER'S ELDER BROTHER)
25	25	AUNT(WIFE OF FATHER'S YOUNGER BROTHER)
26	26	UNCLE(FATHER ELDER BROTHER)
27	27	UNCLE(FATHER'S YOUNGER BROTHER)
28	28	UNCLE(MOTHER'S BROTHER)
29	29	NIECE(SISTER'S DAUGHTER)
30	30	NIECE(BROTHER'S DAUGHTER)
31	31	NEPHEW(SISTER' SON)
32	32	NEPHEW(BROTHER'S SON)
33	33	GRAND DAUGHTER
34	34	GRAND SON
35	35	GRAND MOTHER(MOTHER'S SIDE)
36	36	GRAND MOTHER(FATHER'S SIDE)
37	37	GRANDFATHER(MOTHER'S SIDE)
38	38	GRANDFATHER(FATHER'S SIDE)
39	39	GREAT-GRANDMOTHER(MOTHER'S SIDE)
40	40	GREAT-GRANDMOTHER(FATHER'S SIDE)
41	41	GREAT-GRANDFATHER(MOTHER'S SIDE)

42	42	GREAT-GRANDFATHER(FATHER'S SIDE)
43	43	HUSBAND OF WIFE'S SISTER
44	44	HUSBAND OF HUSBAND'S SISTER
45	45	WIFE OF WIFE'S BROTHER
46	46	WIFE OF HUSBAND'S ELDER BROTHER
47	47	WIFE OF HUSBAND'S YOUNGER BROTHER
48	48	DAUGHTER IN LAW
49	49	SON IN LAW
50	50	NOT AVAILABLE
51	51	OTHER