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Report on
Aadhaar Enabled
De-duplication
&
Verification Exercise

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1. Terms of Reference.....	5
2. Abbreviations	6
3. Definitions	7
Authentication	7
AUA	7
ASA	7
CIDR.....	7
De-Duplication	7
Direct Benefits Transfer (DBT)	7
Seeding.....	8
Number of Records Received at NIC Server.....	8
Number of Records with valid Aadhaar	8
Number of Records where Aadhaar number occurs ONCE/MULTIPLE times	8
Records sent for Demographic Authentication	9
PART A: Introduction.....	10
3.1 About Aadhaar & Aadhaar-enabled Services.....	10
3.1.1 Aadhaar Enrolment	10
3.1.2 Properties of Aadhaar	11
3.1.2.1 Uniqueness.....	11
3.1.2.2 Aadhaar Authentication Service	11
3.1.2.3 e – Know Your Customer (e-KYC) Service	11
3.1.2.4 Aadhaar as Financial Address	11
3.2 What is Aadhaar Seeding?	12
4. PART B: De-Duplication Exercise.....	14
4.1 Aadhaar-enabled De-Duplication vs. Demographic De-Duplication.....	14
4.1.1 Approach adopted for exercise.....	16
4.1.1.1 Approach adopted for Seeded Data	17
4.1.1.2 Approach adopted for Non-Seeded Data	18
4.1.2 Pre-Data Processing Observations.....	19
4.2 Summary of data received Scheme-wise.....	20
Summary of data received State-wise	21
5.3.1 Public Distribution System (PDS)	22
5.3.1.1 PDS - Aadhaar-enabled De-Duplication	22

5.3.1.2	PDS - Aadhaar-enabled Verification.....	23
5.3.2	National Social Assistance Program (NSAP).....	23
5.3.2.1	Aadhaar-enabled de-duplication (IGNDPS).....	24
5.3.2.2	Aadhaar-enabled Verification (IGNDPS)	25
5.3.2.3	Aadhaar-enabled de-duplication (IGNOAPS)	25
5.3.2.4	Aadhaar-enabled Verification (IGNOAPS).....	26
5.3.2.5	Aadhaar-enabled de-duplication (IGNWPS)	27
5.3.2.6	Aadhaar-enabled Verification (IGNWPS)	27
5.3.3	Scholarship Schemes (Scheduled Caste, Scheduled Tribe & Minorities).....	28
5.3.3.1	Aadhaar-enabled De-Duplication (SC Scholarship).....	29
5.3.3.2	Aadhaar-enabled Verification (SC Scholarship)	30
5.3.3.3	Aadhaar-enabled De-Duplication (ST Scholarship)	30
5.3.3.4	Aadhaar-enabled Verification (ST Scholarship)	31
5.3.3.5	Aadhaar-enabled De-Duplication (Minorities Scholarship)	32
5.3.3.6	Aadhaar-enabled Verification (Minorities Scholarship).....	33
5.3.4	LPG	34
5.3.4.1	Aadhaar-enabled De-Duplication.....	35
5.3.4.2	Aadhaar-enabled De-Duplication.....	35
5.3.5	Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS).....	36
5.3.5.1	Aadhaar-enabled De-Duplication.....	36
5.3.5.2	Aadhaar-enabled Verification	37
6	PART C: Conclusion	38
7	Annexures	39
	Annexure I - Aadhaar Saturation in 300 districts (State-wise, district-wise)	39
	Annexure II – Technology architecture adopted for the exercise	47
	Annexure III - Reject Codes with Reasons.....	49

Figure 1 - Pre-requisites to Aadhaar Seeding	12
Figure 2 - Scheme wise Summary	21
Figure 3 - State wise Summary.....	21
Figure 4- PDS State wise De-duplication.....	22
Figure 5 - PDS State wise Verification	23
Figure 6 - IGNDPS De-Duplication	24
Figure 7 - IGNOAPS De-Duplication	26
Figure 8 - IGNOAPS Verification	26
Figure 9 - IGNWPS De-Duplication.....	27
Figure 10 - IGNWPS Verification	28
Figure 11 - SC Scholarship De-Duplication.....	29
Figure 12 - SC Scholarship Verification	30
Figure 13 - ST Scholarship De-Duplication	31
Figure 14 - ST Scholarship Verification	32
Figure 15 - Minorities Scholarship De-duplication.....	33
Figure 16 - Minorities Scholarship Verification.....	34
Figure 17 - LPG De-Duplication	35
Figure 18 - LPG Verification.....	35
Figure 19 - MGNREGS De-Duplication	36
Figure 20 - MGNREGS Verification.....	37
Table 1 – Abbreviations	6
Table 2 - PDS Summary	22
Table 3 - IGDNPS Summary	23
Table 4 - IGNOAPS Summary	24
Table 5 - SC Scholarship Summary	28
Table 6 - ST Scholarship Summary	28
Table 7 - Minorities Scholarship Summary	29
Table 8 - LPG Summary	34
Table 9 - MGNREGS Summary.....	36

1. Terms of Reference

There are approximately over 14 crore Aadhaar numbers currently seeded in various Service Delivery databases. In this regard, the **Prime Minister Office (PMO)** directed the Planning Commission and the UIDAI with the following Term of Reference:

- a. UIDAI to give a list of 300 districts where Aadhaar penetration is over 70%. The number of districts could vary +/-10%;
- b. In these 300 districts, use the existing data for verification and de-duplication of beneficiaries/consumers in the following schemes:
 - a. MGNREGA;
 - b. LPG;
 - c. PDS;
 - d. Scholarships (SC, ST & Minorities);
 - e. NSAP;
- c. Collect beneficiary data with Aadhaar numbers, where available and provide it to the UIDAI;
- d. UIDAI will authenticate the data, de-duplicate any if needed, and certify whatever details are provided plus a list of beneficiaries/consumer with no Aadhaar number;
- e. The unverified group will need to be checked in the field physically and enrolled in Aadhaar if they are not found to be fake;
- f. By 15th August 2014, UIDAI to submit a report to the Hon'ble Prime Minister indicating the results of the de-duplication/verification exercise including the number of fakes/ghosts identified;

2. Abbreviations

Abbreviations	Definition
AEBA	Aadhaar-enabled Bank Account
ASA	Authentication Service Agency
ASDVS	Aadhaar Seeded Data Verification System
AUA	Authentication User Agency
CIDR	Central ID Data Repository
IGNDPS	Indira Gandhi National Disability Pension Scheme
IGNOAPS/NOAPS	Indira Gandhi National Old Age Pension Scheme
LPG	Liquefied Petroleum Gas
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
MPLS	Multi-Protocol Label Switching
MS	Minorities Scheme
NIC	National Informatics Center
NPCI	National Payment Corporation of India
OTP	One Time PIN/Password
PDS	Public Distribution System
SCS	Scheduled Caste Scholarship
SRDH	State Resident Data Hub
STS	Scheduled Tribe Scholarship
UEBA	UID-enabled Bank Account

Table 1 – Abbreviations

3. Definitions

Authentication

The process of establishing the identity of an Aadhaar holder by comparing his/her any single biometrics captured on an authentication device (either fingerprint or iris) with his/her biometrics captured at the time of enrolment is called authentication.

AUA

AUA stands for Authentication User Agency. The process of authentication takes place through a valid AUA – wherein the agency is registered with the UIDAI as AUA by way of signing of an agreement.

ASA

ASA stands for Authentication Service Agency. ASA provides the connectivity for the AUA to link with the CIDR of the UIDAI to perform authentication.

CIDR

CIDR stands for Central Identities Data Repository. All the data of the residents who have enrolled for Aadhaar is contained in CIDR. This data is protected in a secure environment and used by UIDAI for its operations of de-duplication and authentication based services.

De-Duplication

The process of establishing the identity of a person who has enrolled for an Aadhaar number through the enrolment process wherein his/her data (demographics and biometrics) is compared against the entire gallery of residents who have been enrolled thus far is called de-duplication. De-duplication, hence, involves 1:n comparisons where 'n' represents the total gallery size.

Direct Benefits Transfer (DBT)

Direct Benefits Transfer is a program launched by Government of India on 1st January 2013. The intention of the program was to transfer monetary benefits directly to beneficiaries'

bank account using either the Aadhaar Payments Bridge (APB) channel or any other traditional channel, thus enhancing the targeting of beneficiary, transparency and accountability within the subsidies disbursement eco-system.

Seeding

The process of entering the Aadhaar number of the beneficiary into the benefit scheme database is referred to as seeding. The linking of Aadhaar in databases can be done in two ways viz. **Organic Seeding and Inorganic seeding**. Organic seeding is a method of linking Aadhaar numbers by collecting the Aadhaar numbers through either door-to-door campaigns or through remote methods like SMS/ Internet. **Inorganic (Algorithmic) Seeding** is the process whereby a State Government can deploy software tools to match their digitised database with the UIDAI database.

Number of Records Received at NIC Server

The de-duplication and verification exercise is to be undertaken for beneficiary records of 5 schemes in 300 districts. For the process, the beneficiary records with and without Aadhaar have been uploaded at a central NIC server.

Number of Records with valid Aadhaar

Generation of Aadhaar number follows three key principles:

- Aadhaar Number is a 12 digit number;
- Aadhaar Number cannot start with 0 and 1;
- Generation of Aadhaar Number is compliant with Verhoeff algorithm;
- Aadhaar number has been ISSUED by UIDAI

In order to ensure an Aadhaar number is a valid number, it has to pass all the above four conditions.

Number of Records where Aadhaar number occurs ONCE/MULTIPLE times

Through the process of seeding, a beneficiary record is attached with a valid Aadhaar number. However, there are probabilities that in the process, the Aadhaar number is either:



- Seeded with the same beneficiary record, multiple times;
- Seeded with different beneficiaries;

Records sent for Demographic Authentication

Demographic authentication is a process of comparing a record with Aadhaar number in Service Delivery database against the CIDR. In the process Aadhaar number (mandatory) along with other identification fields such as Name, Gender, Date of Birth, Pin code, etc. is sent to the UIDAI and in return UIDAI responds with a Yes/No

PART A: Introduction

3.1 About Aadhaar & Aadhaar-enabled Services

3.1.1 Aadhaar Enrolment

The Unique Identification Authority of India (UIDAI) was established in January 2009, as an attached office to the Planning Commission. The purpose of the UIDAI is to issue a unique identification number (Aadhaar) to all Indian residents that is (a) robust enough to eliminate duplicate and fake identities, and (b) can be verified and authenticated in an easy, cost-effective way.

Aadhaar is built in partnership with Registrars, wherein registrars are primarily State Governments, Public Sector Banks, National Population Registrar (NPR), etc. All the registrars in the ecosystem have signed Memorandum of Understanding (MoU) with UIDAI.

As recommended by the Demographic Data Standards and Verification Committee Report (DDSV) and Biometric Standards Committee, the UIDAI is collecting bare minimum demographic information from the residents such as Name, Age, Gender, Address and relationship details (in case of minors) along-with biometric information such as photograph, ten fingerprints and two iris for issue of a 12 digit randomly generated unique identity number.

As of August 3, 2014, more than 74 cr. residents have been enrolled for UIDAI and 65.32 crore Aadhaar numbers have been generated with more than 8.7 crore enrollments rejected due to duplicate enrollments and/ or process errors. In the 300 focus districts taken up for the purposes of this exercise, the population is 60 crore of which 48.19 crore (79.8%) have already been issued Aadhaar numbers as on date.

The district-wise Aadhaar saturation is provided in Annexure I.

3.1.2 Properties of Aadhaar

3.1.2.1 Uniqueness

Any individual, irrespective of age and gender, who is a resident in India and satisfies the verification process down by the UIDAI, can enroll for Aadhaar. An individual is required to enroll only once which is free of cost. In case, the resident enrolls more than once, ONLY ONE Aadhaar number shall be generated, as the **Uniqueness** is achieved through the de-duplication process involving the biometrics.

3.1.2.2 Aadhaar Authentication Service

Aadhaar authentication is the process wherein Aadhaar number, along with other attributes (demographic/biometrics/OTP) is submitted to UIDAI's Central Server for verification; the Central server verifies whether the data submitted matches the data available in the server and responds with a “Yes/No”. No personal identity information is returned as part of the response. The purpose of Authentication is to enable residents to prove their identity and for service providers to confirm that the residents are ‘who they say they are’ in order to supply services and give access to benefits.

3.1.2.3 e – Know Your Customer (e-KYC) Service

With the consent / authorization by the resident, the Aadhaar e-KYC service provides an instant, electronic, non-repudiable proof of identity and proof of address along with date of birth and gender. In addition, it also provides the resident’s mobile number and email address to the service provider, which helps in further streamlining the process of service delivery. A typical use case for e-KYC service would be “Opening of a bank account”.

3.1.2.4 Aadhaar as Financial Address

As Aadhaar number is unique and does not change over the lifecycle of an individual, the 12-digit Aadhaar number is sufficient enough to transfer any payments to an individual. Today, in order to transfer money to a beneficiary, the Government/ Institution needs to know the bank account, IFSC Code, and bank branch details etc. which is prone to change. However, Aadhaar offers the possibility of sending money

by just using the 12-digit number for life without bothering about any changes in the bank account of the individuals.

3.2 What is Aadhaar Seeding?

Aadhaar seeding is a process by which UIDs of residents are included in the service delivery database of service providers for enabling Aadhaar based authentication during service delivery. As an example, MNREGA will require authentication before payout of wages. In such a scenario, it will be essential to map UID of the resident with MNREGA Job Card number and other demographic information. Similarly, banks and insurance companies may want to map Aadhaar numbers of all their customers. The objective is not to replace the currently used unique identifier of the customers/ residents/ beneficiaries with Aadhaar but the objective is to seamlessly enable Aadhaar authentication without impacting any other interface that the service providers maintain with their customers.

Pre-requisites to Aadhaar Seeding

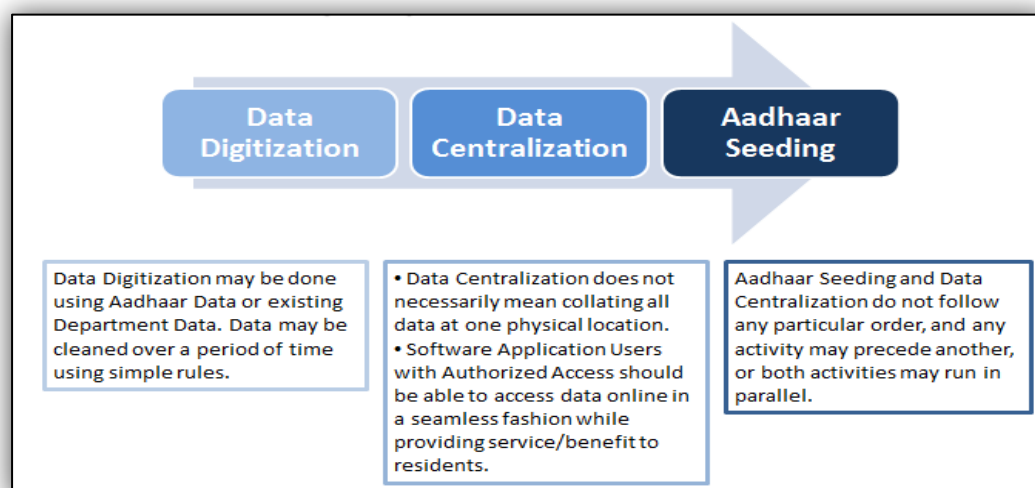


Figure 1 - Pre-requisites to Aadhaar Seeding

Channels for Seeding

Seeding initiatives could be of many types referred to here as ‘channels’ which provide the source of seeding such as SMS or Online based resident/ assisted self-seeding, manual seeding at point of service, algorithmic seeding etc. Below, is a brief overview of the most prevalent channels:

- a. **Organic Seeding** - Organic seeding is a method where the residents voluntarily or in response to service provider's call initiate inclusion of their UID in service delivery databases. Organic seeding could be done using a variety of channels including door to door campaigns, special camps, SMS or Online based resident self-seeding, manual seeding functionality of State Resident Data Hub (SRDH) (which could be made available to say CSCs) etc.

Inorganic (Algorithmic) Seeding - In States where access to a production quality as well as access to digitized service delivery program beneficiary data is available, tools (such as the batch seeding utility of SRDH) can be used for inorganic (also known as top-down or algorithmic) seeding. This is a method by which one or more KYR fields in State Resident Data Hub (SRDH) database are compared with the equivalent fields in service delivery database in order to find a suitable match. Upon finding a match Aadhaar number from SRDH database is seeded into the service delivery database.

Common Challenges during Seeding

- Complete data is not captured in service delivery database;
- Similar information across different data sources do not have exact match between them;
- Data in service delivery database is in a local language;
- Mobilization of residents;

4. PART B: De-Duplication Exercise

4.1 Aadhaar-enabled De-Duplication vs. Demographic De-Duplication

One of the biggest challenges faced by various Ministries/State Government departments is the existence of duplicate beneficiary records in the Service Delivery database. This challenge has primarily stemmed for the following reasons:

- a. Lack of standardized processes while collecting applications. For instance, some departments may have segregated fields for First Name, Middle Name and Surname, while other department may just have a Name field;
- b. Poor data validation procedure;
- c. Data Completeness;

In order to clean such databases, Ministries/Department concerned will have to adopt the De-duplication processes. This process involving cleaning up of databases using a combination of common unique identifiers such as UID, Name, Father's Name, Address, Gender, Date of Birth, etc. is known as the De-Duplication process. The de-duplication process can be done either by using demographics or by using biometrics as explained below:

Demographic De-Duplication

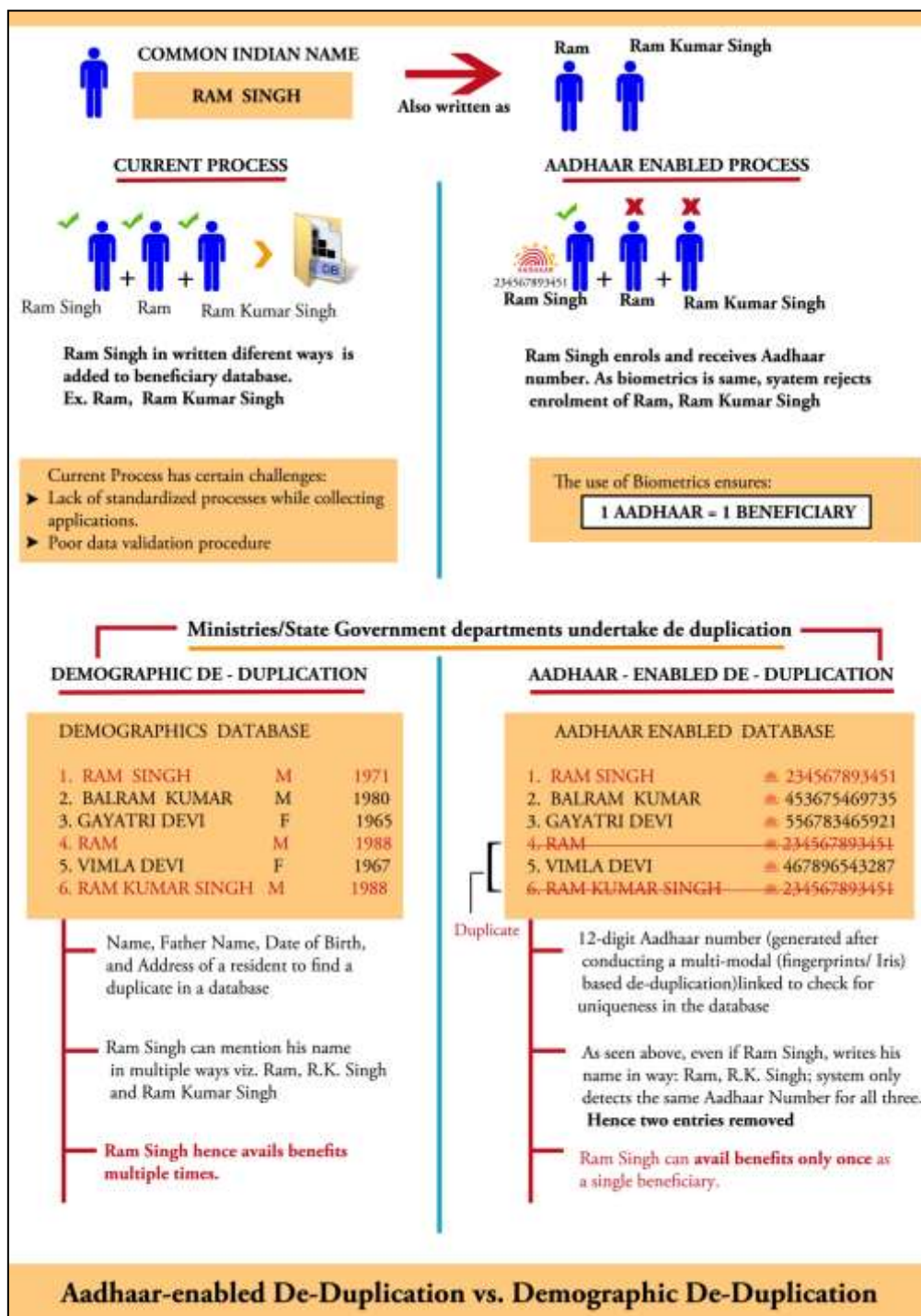
At outset, it appears that using Name, Father Name, Date of Birth, and Address of a resident to find a duplicate in a database is a fairly simple process. However, due to lack of naming and address standards, demographic information obtained from different sources may have large variations that increase the possibilities of skipping a duplicate in the database. For e.g. a person may mention his name in multiple ways viz. Ram, R.K. Singh and Ram Kumar Singh and thus avail the government benefits multiple times.

Aadhaar-enabled De-Duplication

As the 12-digit Aadhaar number is generated after conducting a multi-modal (fingerprints/Iris) based de-duplication, the use of the UNIQUE 12-digit Aadhaar number in the database provides a standard method of de-duplicating various databases in the country.

Hence, if the Unique 12-digit number (Aadhaar) is linked to the beneficiary database and a check is available for uniqueness in the database, the same person as given above viz. Ram, R.K. Singh and Ram Kumar Singh would have the same Aadhaar number and hence he would not be able to avail of multiple benefits from the government .

The same is explained graphically below:



Approach adopted for exercise

The mandate to the UIDAI was to perform Aadhaar-based de-duplication and verification for all the data across five specific benefit schemes that have been uploaded / shared by the States and provide actionable inputs for the 300 districts. For the purpose of the exercise, National Informatics Centre set up a central server in which the beneficiary data was collected. The Technology architecture is enclosed in Annexure II. The scheme-wise status of the number of districts for which the data was uploaded to the Central server is given below:

SCHEMES	TOTAL NUMBER OF DISTRICTS TARGET	NUMBER OF DISTRICTS WITH DATA UPLOAD COMPLETED	BALANCE NUMBER OF DISTRICTS	REMARKS
Pension programmes (including old age, disabled and widows)	300	273	27	27 districts of Tamil Nadu- Approval of Chief Minister awaited
Post-matric scholarships - SC, ST, minorities	300	272	28	27 districts of Tamil Nadu -Approval of Chief Minister awaited
				Data Not Digitized for
				1 District of Andaman and Nicobar Islands and hence not amenable to verification.
NREGA beneficiaries	300	263	37	27 districts of Tamil Nadu -Approval of Chief Minister awaited.
				No NREGA scheme in
				8 Districts of Delhi
				1 District of Maharashtra (Mumbai)
				1 District of Telangana (Hyderabad)
PDS ration card holders	300	244	56	27 districts of Tamil Nadu -Approval of Chief Minister awaited- In any case, data is in Tamil and not in Unicode and hence not amenable to verification against UIDAI database.
				Data Not Digitized for
				16 districts of Haryana,
				8 districts of Odisha,
				5 districts of Tripura
LPG	300	300	0	

(Source: Planning Commission)

4.1.1.1 Approach adopted for Seeded Data

As there could be errors of various kinds while entering the 12-digit Aadhaar number in the database for seeding/ linking, the UIDAI recommends that biometric authentication involving the fingerprint + 12 –digit number should be carried out for entering the 12-digit number in the database. However, in the current exercise, as the respective scheme owners had already seeded/ linked the Aadhaar number to the beneficiary database in some cases, the approach of demographic authentication (wherein Aadhaar number + Name/ Gender/ Date of Birth etc. are send to UIDAI for matching) was chosen due to the ability to do bulk authentication in a short time. The step-by-step process followed is enumerated below:

1. A Proof of Concept (PoC) was done to check whether the solution/approach being adopted was practical, workable and quick. The PoC conducted established that the exercise of demographic authentication could be performed successfully. It also provided vital inputs regarding the number of machines (and instances) that need to be deployed to generate authentication requests. The ability of UIDAI authentication system was already benchmarked.
2. Based on the PoC a tool for bulk demographic authentication viz. Aadhaar Seeded Data Verification System (ASDV) was developed
3. A massive exercise for data cleaning was done to prepare the data in the right format for ASDV. The tool was programmed to read cleaned data files and send authentication requests to UIDAI from the NIC server.
4. The software tool separated the Aadhaar seeded/ linked data and the non-Aadhaar linked data.
5. In case of Aadhaar seeded/ linked data, the tool checked whether the
 - a. Seeded Aadhaar consists of 12 digits
 - b. Aadhaar number does not start with a 0 or 1 and confirms to the Vorhoeff algorithm (check digit)

- c. Whether it is valid Aadhaar issued by UIDAI and
 - d. Whether it was seeded more than once.
6. The valid data was sent for demographic authentication.
7. The authentication responses were standardized and analyzed.

4.1.1.2 Approach adopted for Non-Seeded Data

As highlighted in section 4.1 (Aadhaar-based de-duplication vs. Demographic de-duplication), Demographic de-duplication is not as effective, due to lack of standardization, combination of different types of algorithms (Double Metaphone, Lavenstine, Soundex, etc) and above all incompleteness of data. However, in the spirit of the exercise, UIDAI developed a tool to analyze non-seeded data of 1500 beneficiary records with combination of different Schemes and Districts were selected and following were our observations:

- a. The processing required an enormous amount of computing power, as name and other field normalization have to be undertaken. For instance, a name can be written in following manner:
 - i. Ram Singh
 - ii. Ram
 - iii. Ram Kumar Singh
- b. There were plenty of records where only Year of Birth was mentioned
- c. Most of the Service Delivery Databases like MGNREGS do not capture Pin code. Due to which if a de-duplication algorithm yields a 1:N result. This essentially means that each and every record which has matched will have to be verified.

The key findings in this sample are given below:

- A sample of 61,856 non-Aadhaar seeded/ linked records were subjected to the demographic de-duplication as per the approach detailed above.

- 47% match success rate was noticed after the review of the results. This means that of the 61,856 non-Aadhaar sample data received, 47% of the people may have an Aadhaar issued and the probable Aadhaar could be found.
- Data quality and capture format plays a major role in this kind of matching.

It may be concluded that this method is not a preferred mode over the Aadhaar- based authentication mechanism in view of the vast variance among various databases - vintage, format, quality etc.

The summary of the non-Aadhaar seeded data is given below:

State Name	Schema Name	Un-seeded Records	Sample Size of Un-seeded	Match Success	Estimated Seeding Potential
Delhi	IGNWPS	115,691	7,039	5,371	76%
Himachal Pradesh	NREGA	1,183,099	13,500	7,619	56%
Jharkhand	NREGA	6,170,128	21,000	7,176	34%
Lakshadweep	STS	2,143	1,500	431	29%
Telangana	MS	3,311	1,306	377	29%
Karnataka	MS	913	912	438	48%
Karnataka	STS	68,023	9,443	3,630	38%
Sikkim	PDS	262,053	3,000	1,870	62%
West Bengal	SCS	29,372	1,500	858	57%
West Bengal	STS	4,632	2,656	1,387	52%
Total		7,839,365	61,856	29,157	47.14

4.1.2 Pre-Data Processing Observations

The Raw data received from NIC for the various States schemes were not as per the shared standard format. This resulted in a lot of manual intervention in cleaning and getting the data in the desired form to perform de-duplication and verification.

Some of the data quality issues are highlighted below:

- Right shifted column values;

- ii. Space and/or hyphens in Aadhaar number;
- iii. Enrollment Identity numbers (EIDs) of Aadhaar instead of Aadhaar;
- iv. Aadhaar mentioned as zero;
- v. Only local language names provided, where English name was mandated;
- vi. Age is randomly put; records showing that a 1 year old person is getting pensions and 114 years old getting scholarship;
- vii. Multiple data formats exists in the same file;
- viii. Majority of data doesn't have UID number;
- ix. Unable to connect NIC servers because of frequent N/W disconnect issue;

4.2 Summary of data received Scheme-wise

In total, 54.21 crore records were received of which the maximum number of records received were for PDS scheme (30.03 cr) followed by MGNREGS with 12.18 crore records. Of these, the number of records where the Aadhaar number field was filled in were 11.55 cr records. The match success is seen to be highest in case of Scholarship schemes at an average of 88% (which could be due to the standard procedure adopted) and lowest for the IGNOAPS Scheme at 64.83% (could be due to the data vintage).

State-wise data analysis reveals that the highest number of records submitted were by the state of Maharashtra (10.54 cr) followed by A.P. (6.88 cr) and then M.P. (6.76 cr.). The match percentage is higher for the Govt. of NCT of Delhi (98%), West Bengal (95%), (Haryana (94%), Odisha (90%) but is very low in Madhya Pradesh (39%) which could be attributed to data quality issues/ legacy data issues. A summary snapshot scheme-wise and State-wise is shown below:

Aadhaar-based De-duplication & Verification



S.No.	No. of records received at NIC server	No. of records with Aadhaar field populated	No. of records with Valid Aadhaar numbers	No. of Distinct Aadhaar numbers	No. of records sent for demo auth	No. of matched records in demo auth	Match %
IGNDPS	12,26,846	4,30,669	3,19,524	3,18,359	3,15,631	2,06,904	65.55
IGNOAPS	1,25,26,426	18,91,447	12,79,998	12,69,724	12,17,411	7,89,212	64.83
IGNWPS	49,20,727	14,13,433	7,57,567	7,47,013	7,30,888	5,07,843	69.48
MGNREGA	12,18,55,410	1,75,87,841	74,72,518	73,92,887	70,45,818	52,73,324	74.84
Minorities	6,27,115	3,47,786	2,20,031	2,19,577	2,13,634	1,88,946	88.44
PDS	30,03,05,511	5,34,88,058	5,28,25,284	5,08,21,178	4,96,08,799	3,91,49,208	78.92
SCS	23,57,449	5,78,098	3,36,851	3,20,810	2,44,248	2,11,921	86.76
STS	11,68,456	2,26,333	1,12,817	1,09,675	1,11,244	95,475	85.82
All India - LPG	9,71,63,551	3,95,83,061	3,95,83,061	3,92,87,825	3,92,27,293	3,17,29,430	80.89
Grand Total	54,21,51,491	11,55,46,726	10,29,07,651	10,04,87,048	9,87,14,966	7,81,52,263	79.17

Figure 2 - Scheme wise Summary

Summary of data received State-wise

S.No.	State Name (All States in alphabetical order)	No. of records received at NIC	No. of records with Aadhaar	No. of records with Valid	No. of Distinct Aadhaar	No. of records in which Aadhaar no. occurs				No. of records	No. of matched	Match %
						Once Only	2 < 5	6 < 10	> 10			
1	Andaman and Nicobar Island	61,349	0	0	0	0	0	0	0	0	0	
2	Andhra Pradesh	6,88,43,323	3,00,02,480	2,37,17,308	2,29,70,723	2,23,75,059	5,88,339	6,366	959	2,34,10,514	1,77,95,853	76.02
3	Chandigarh	3,57,525	36,039	12,194	12,183	12,172	11	0	0	7,583	6,110	80.57
4	Chhatisgarh	35,86,486	55	0	0	0	0	0	0	0	0	
5	Dadra and Nagar Haveli	2,11,116	0	0	0	0	0	0	0	0	0	
6	Daman and Diu	63,073	28,446	25,546	25,383	25,222	161	0	0	23,272	17,516	75.27
7	Delhi	84,23,947	33,59,849	32,46,629	32,46,614	32,46,599	15	0	0	32,42,844	31,77,607	97.99
8	Goa	17,08,724	1,59,143	1,25,538	1,25,162	1,24,787	375	0	0	1,15,946	1,02,030	88.00
9	Gujarat	30,49,013	79,224	39,983	39,841	39,707	134	0	0	38,340	23,389	61.00
10	Haryana	49,74,259	8,74,630	8,16,267	8,16,092	8,00,246	45	0	0	8,10,232	7,61,156	93.94
11	Himachal Pradesh	47,29,346	27,50,393	27,07,671	22,70,569	19,75,946	2,92,171	1,591	551	17,32,881	15,37,426	88.72
12	Jharkhand	82,76,708	21,04,097	20,92,364	20,92,364	20,92,364	0	0	0	20,80,983	14,32,251	68.83
13	Karnataka	10,56,251	39,844	39,745	39,726	39,707	19	0	0	39,599	29,374	74.18
14	Kerala	4,14,03,510	36,01,405	4,55,026	4,55,026	4,55,026	0	0	0	4,49,553	3,26,637	72.66
15	Lakshadweep	91,188	0	0	0	0	0	0	0	0	0	
16	Madhya Pradesh	6,76,21,068	1,17,385	1,12,840	1,12,622	1,12,040	582	0	0	47,065	18,399	39.09
17	Maharashtra	10,54,23,304	6,62,851	5,99,762	5,73,489	5,52,018	21,389	82	0	95,198	55,992	58.82
18	Odisha	50,14,158	13,612	1,342	1,338	1,336	2	0	0	1,254	1,133	90.35
19	Puducherry	17,75,973	7,22,437	87,801	87,801	87,801	0	0	0	73,555	63,373	86.16
20	Punjab	3,25,96,366	62,54,677	57,63,177	52,05,728	46,84,528	5,20,744	356	100	56,72,276	49,94,393	88.05
21	Rajasthan	28,70,902	1,37,291	47,189	47,016	46,843	173	0	0	44,982	34,177	75.98
22	Sikkim	5,63,621	2,63,107	1,33,551	1,31,432	1,29,351	2,081	0	0	1,27,116	1,10,039	86.57
23	Tamil Nadu	66,016	0	0	0	0	0	0	0	0	0	
24	Telangana	5,33,20,615	2,42,84,239	2,28,29,018	2,25,54,820	2,23,00,435	2,53,274	798	313	2,13,95,239	1,58,68,659	74.17
25	Tripura	15,45,855	4,34,816	4,42,517	3,62,192	2,93,917	68,262	10	3	50,381	39,902	79.20
26	West Bengal	2,73,54,244	37,645	29,122	29,102	29,082	20	0	0	28,860	27,417	95.00
27	All - India LPG	9,71,63,551	3,95,83,061	3,95,83,061	3,92,87,825	3,91,61,903	1,24,586	1,065	1	3,92,27,293	3,17,29,430	80.89
	Grand Total	54,21,51,491	11,55,46,726	10,29,07,651	10,04,87,048	9,85,86,089	18,72,383	10,268	1,927	9,87,14,966	7,81,52,263	79.17

Figure 3 - State wise Summary

5.3.1 Public Distribution System (PDS)

Following is our observation after Aadhaar-based de-duplication and verification exercise:

Public Distribution System	
Total records received with/without Aadhaar number	30,03,05,511
Total records received with valid and distinct UIDs	5,08,21,178
UIDs occurring more than ONCE	16,51,218
UIDs Requiring Field Verification	1,04,59,591

Table 2 - PDS Summary

5.3.1.1 PDS - Aadhaar-enabled De-Duplication

As shown in **figure 4** below, of the **30,03,05,511** records received from NIC from the states, there were **5,34,88,058** records where Aadhaar number data field was filled in. Of these, **5,28,25,284** number of Aadhaars were found to be valid. Of these **5,28,25,284** valid Aadhaar numbers, **4,91,69,960** Aadhaar numbers were attached to only one beneficiary, whereas **16,51,218** Aadhaar numbers were attached to more than one beneficiary/ same beneficiary in the database.

S.No.	State Name (All States in alphabetical order)	No. of records received at NIC server	No. of records with Aadhaar field populated	No. of records with Valid Aadhaar	No. of Distinct Aadhaar numbers	No. of records in which Aadhaar no. occurs more			
						Once Only	2 < 5	6 < 10	> 10
1	Andaman and Nicobar Islands	58,603	-	-	-	-	-	-	-
2	Andhra Pradesh	47,190,522	22,520,162	22,520,162	21,791,718	21,212,854	571,633	6,288	943
3	Chandigarh	349,862	28,376	4,543	4,532	4,521	11	-	-
4	Chhatisgarh	2,289,051	-	-	-	-	-	-	-
5	Dadra and Nagar Haveli	197,534	-	-	-	-	-	-	-
6	Daman and Diu	59,720	25,960	25,544	25,381	25,220	161	-	-
7	Delhi	7,896,626	3,240,023	3,240,023	3,240,023	3,240,023	-	-	-
8	Goa	1,658,790	151,654	118,067	117,696	117,326	370	-	-
9	Gujarat	-	-	-	-	-	-	-	-
10	Haryana	583,126	543,166	543,157	543,157	543,157	-	-	-
11	Himachal Pradesh	2,325,034	1,645,419	1,645,419	1,227,300	951,811	273,347	1,591	551
12	Jharkhand	-	-	-	-	-	-	-	-
13	Karnataka	-	-	-	-	-	-	-	-
14	Kerala	35,733,032	-	-	-	-	-	-	-
15	Lakshadweep	70,379	-	-	-	-	-	-	-
16	Madhya Pradesh	17,537,703	61,151	61,151	60,933	60,716	217	-	-
17	Maharashtra	97,237,411	541,615	541,615	516,298	495,634	20,585	79	-
18	Odisha	-	-	-	-	-	-	-	-
19	Puducherry	1,329,199	523,170	32,606	32,606	32,606	-	-	-
20	Punjab	30,410,881	5,700,102	5,635,221	5,078,044	4,557,115	520,473	356	100
21	Rajasthan	-	-	-	-	-	-	-	-
22	Sikkim	445,088	183,035	133,551	131,432	129,351	2,081	-	-
23	Tamil Nadu	-	-	-	-	-	-	-	-
24	Telangana	34,633,999	18,324,225	18,324,225	18,052,058	17,799,626	251,330	789	313
25	Tripura	-	-	-	-	-	-	-	-
26	West Bengal	20,298,951	-	-	-	-	-	-	-
	Grand Total	300,305,511	53,488,058	52,825,284	50,821,178	49,169,960	1,640,208	9,103	1,907

Figure 4- PDS State wise De-duplication

5.3.1.2 PDS - Aadhaar-enabled Verificatio

As shown in **figure 5** below, of the **30,03,05,511** records received from NIC from the states, there were **5,34,88,058** records where Aadhaar number data field was filled in. Of these, **5,28,25,284** number of Aadhaars were found to be valid. Of these **5,28,25,284** valid Aadhaar numbers, **1,04,59,591** Aadhaar numbers could not be verified with the UIDAI CIDR.

S.No.	State Name (All States in alphabetical order)	No. of records received at NIC server	No. of records with Aadhaar field populated	No. of records with Valid Aadhaar	No. of Distinct Aadhaar numbers	No. of records sent for demo auth	No. of matched records in demo auth	Match %
1	Andaman and Nicobar Islands	58,603	-	-	-	-	-	
2	Andhra Pradesh	47,190,522	22,520,162	22,520,162	21,791,718	22,266,599	17,035,560	77
3	Chandigarh	349,862	28,376	4,543	4,532	-	-	
4	Chhatisgarh	2,289,051	-	-	-	-	-	
5	Dadra and Nagar Haveli	197,534	-	-	-	-	-	
6	Daman and Diu	59,720	25,960	25,544	25,381	23,270	17,516	75
7	Delhi	7,896,626	3,240,023	3,240,023	3,240,023	3,240,023	3,175,222	98
8	Goa	1,658,790	151,654	118,067	117,696	108,477	95,265	88
9	Gujarat	-	-	-	-	-	-	
10	Haryana	583,126	543,166	543,157	543,157	539,766	527,138	98
11	Himachal Pradesh	2,325,034	1,645,419	1,645,419	1,227,300	674,751	664,105	98
12	Jharkhand	-	-	-	-	-	-	
13	Karnataka	-	-	-	-	-	-	
14	Kerala	35,733,032	-	-	-	-	-	
15	Lakshadweep	70,379	-	-	-	-	-	
16	Madhya Pradesh	17,537,703	61,151	61,151	60,933	-	-	
17	Maharashtra	97,237,411	541,615	541,615	516,298	37,051	24,596	66
18	Odisha	-	-	-	-	-	-	
19	Puducherry	1,329,199	523,170	32,606	32,606	32,381	31,237	96
20	Punjab	30,410,881	5,700,102	5,635,221	5,078,044	5,635,221	4,958,994	88
21	Rajasthan	-	-	-	-	-	-	
22	Sikkim	445,088	183,035	133,551	131,432	127,116	110,039	87
23	Tamil Nadu	-	-	-	-	-	-	
24	Telangana	34,633,999	18,324,225	18,324,225	18,052,058	16,924,144	12,509,536	74
25	Tripura	-	-	-	-	-	-	
26	West Bengal	20,298,951	-	-	-	-	-	
	Grand Total	300,305,511	53,488,058	52,825,284	50,821,178	49,608,799	39,149,208	79

Figure 5 - PDS State wise Verification

5.3.2 National Social Assistance Program (NSAP)

Following is our observation after Aadhaar-based de-duplication and verification exercise:

IGDNPS	
Total records received with/without Aadhaar number	12,26,846
Total records received with valid and distinct Aadhaar numbers	3,18,359
UIDs occurring more than ONCE	1,102
UIDs Require Field Verification	1,08,727

Table 3 - IGDNPS Summary

IGNOAPS	
Total records received with/without Aadhaar number	1,25,26,426
Total records received with valid and distinct Aadhaar numbers	12,69,724
UIDs occurring more than ONCE	9,046
UIDs Require Field Verification	4,28,199

Table 4 - IGNOAPS Summary

IGNWPS	
Total records received with/without Aadhaar number	49,20,727
Total records received with valid and distinct Aadhaar numbers	7,47,013
UIDs occurring more than ONCE	10,221
UIDs Require Field Verification	2,23,045

5.3.2.1 Aadhaar-enabled de-duplication (IGNDPS)

As shown in **figure 6** below, of the **12,26,846** records received from NIC from the states, there were **4,30,669** records where Aadhaar number data field was filled in. Of these, **3,18,359** number of Aadhaars were found to be valid. Of these **3,18,359** valid Aadhaar numbers, **3,17,257** Aadhaar numbers were attached to only one beneficiary, whereas **1,102** Aadhaar numbers were attached to more than one beneficiary/ same beneficiary in the database.

S.No.	State Name (All States in alphabetical order)	No. of records received at NIC server	No. of records with Aadhaar field populated	No. of records with Valid Aadhaar numbers	No. of Distinct Aadhaar numbers	No. of records in which Aadhaar no.			
						Once Only	2 < 5	6 < 10	> 10
1	Andaman and Nicobar Islands	-	-	-	-	-	-	-	-
2	Andhra Pradesh	224,567	224,567	113,452	112,489	111,584	899	6	-
3	Chandigarh	88	88	88	88	88	-	-	-
4	Chhatisgarh	-	-	-	-	-	-	-	-
5	Dadra and Nagar Haveli	-	-	-	-	-	-	-	-
6	Daman and Diu	-	-	-	-	-	-	-	-
7	Delhi	-	-	-	-	-	-	-	-
8	Goa	-	-	-	-	-	-	-	-
9	Gujarat	1,206	4	-	-	-	-	-	-
10	Haryana	139,936	542	509	508	507	1	-	-
11	Himachal Pradesh	-	-	-	-	-	-	-	-
12	Jharkhand	-	-	-	-	-	-	-	-
13	Karnataka	641,612	-	-	-	-	-	-	-
14	Kerala	117,070	117,070	117,070	117,070	117,070	-	-	-
15	Lakshadweep	-	-	-	-	-	-	-	-
16	Madhya Pradesh	5,864	5,232	5,232	5,232	5,232	-	-	-
17	Maharashtra	-	-	-	-	-	-	-	-
18	Odisha	-	-	-	-	-	-	-	-
19	Puducherry	-	-	-	-	-	-	-	-
20	Punjab	161	160	161	160	159	1	-	-
21	Rajasthan	1,580	1,574	1,580	1,574	1,568	6	-	-
22	Sikkim	-	-	-	-	-	-	-	-
23	Tamil Nadu	-	-	-	-	-	-	-	-
24	Telangana	80,895	80,895	80,895	80,702	80,514	183	5	-
25	Tripura	537	537	537	536	535	1	-	-
26	West Bengal	13,330	-	-	-	-	-	-	-
	Grand Total	1,226,846	430,669	319,524	318,359	317,257	1,091	11	-

Figure 6 - IGNDPS De-Duplication

5.3.2.2 Aadhaar-enabled Verification (IGNDPS)

As shown in **figure 7** below, of the **12,26,846** records received from NIC from the states, there were **4,30,669** records where Aadhaar number data field was filled in. Of these, **3,18,359** number of Aadhaars were found to be valid. Of these **3,18,359** valid Aadhaar numbers, **1,08,727** Aadhaar numbers could not be verified with the UIDAI CIDR.

S.No.	State Name (All States in alphabetical order)	No. of records received at NIC server	No. of records with Aadhaar field populated	No. of records with Valid Aadhaar numbers	No. of Distinct Aadhaar numbers	No. of records sent for demo auth	No. of matched records in demo auth	Match %
1	Andaman and Nicobar Islands	-	-	-	-	0	0	-
2	Andhra Pradesh	224,567	224,567	113,452	112,489	113452	72609	63.999753
3	Chandigarh	88	88	88	88	88	71	80.68
4	Chhatisgarh	-	-	-	-	0	0	-
5	Dadra and Nagar Haveli	-	-	-	-	0	0	-
6	Daman and Diu	-	-	-	-	0	0	-
7	Delhi	-	-	-	-	0	0	-
8	Goa	-	-	-	-	0	0	-
9	Gujarat	1,206	4	-	-	0	0	-
10	Haryana	139,936	542	509	508	508	460	90.55
11	Himachal Pradesh	-	-	-	-	0	0	-
12	Jharkhand	-	-	-	-	0	0	-
13	Karnataka	641,612	-	-	-	0	0	-
14	Kerala	117,070	117,070	117,070	117,070	115564	79964	69.19
15	Lakshadweep	-	-	-	-	0	0	-
16	Madhya Pradesh	5,864	5,232	5,232	5,232	5232	1904	36.39
17	Maharashtra	-	-	-	-	0	0	-
18	Odisha	-	-	-	-	0	0	-
19	Puducherry	-	-	-	-	0	0	-
20	Punjab	161	160	161	160	154	128	83.12
21	Rajasthan	1,580	1,574	1,580	1,574	1540	1191	77.34
22	Sikkim	-	-	-	-	0	0	-
23	Tamil Nadu	-	-	-	-	0	0	-
24	Telangana	80,895	80,895	80,895	80,702	78583	50182	63.86
25	Tripura	537	537	537	536	510	395	77.45
26	West Bengal	13,330	-	-	-	0	0	-
	Grand Total	1,226,846	430,669	319,524	318,359	315,631	206,904	66

Figure 7 - IGNDPS Verification

5.3.2.3 Aadhaar-enabled de-duplication (IGNOAPS)

As shown in **figure 8** below, of the **1,25,26,426** records received from NIC from the states, there were **18,91,447** records where Aadhaar number data field was filled in. Of these, **12,69,724** number of Aadhaars were found to be valid. Of these **12,69,724** valid Aadhaar numbers, **12,60,678** Aadhaar numbers were attached to only one beneficiary, whereas **9,046** Aadhaar numbers were attached to more than one beneficiary/ same beneficiary in the database.

Aadhaar-based De-duplication & Verification



S.No.	State Name (All States in alphabetical order)	No. of records received at NIC server	No. of records with Aadhaar field populated	No. of records with Valid Aadhaar numbers	No. of Distinct Aadhaar numbers	No. of records in which Aadhaar no.			
						Once Only	2 < 5	6 < 10	> 10
1	Andaman and Nicobar Islands	-	-	-	-	-	-	-	-
2	Andhra Pradesh	2,071,206	687,890	658,042	650,734	644,400	6,268	54	12
3	Chandigarh	2,887	2,887	2,875	2,875	2,875	-	-	-
4	Chhatisgarh	11,638	-	-	-	-	-	-	-
5	Dadra and Nagar Haveli	8,206	-	-	-	-	-	-	-
6	Daman and Diu	1,601	1,070	-	-	-	-	-	-
7	Delhi	381,698	90,494	-	-	-	-	-	-
8	Goa	1,657	-	-	-	-	-	-	-
9	Gujarat	61,432	13,748	5,908	5,908	5,908	-	-	-
10	Haryana	1,469,202	6,112	3,956	3,924	3,892	32	-	-
11	Himachal Pradesh	91,954	-	-	-	-	-	-	-
12	Jharkhand	-	-	-	-	-	-	-	-
13	Karnataka	-	-	-	-	-	-	-	-
14	Kerala	456,411	277,113	132,817	132,817	132,817	-	-	-
15	Lakshadweep	330	-	-	-	-	-	-	-
16	Madhya Pradesh	2,156,163	23,901	21,286	21,286	21,286	-	-	-
17	Maharashtra	1,049,268	121,236	58,147	57,191	56,384	804	3	-
18	Odisha	476,191	643	-	-	-	-	-	-
19	Puducherry	80,345	52,926	52,926	52,926	52,926	-	-	-
20	Punjab	134,037	7,250	2,517	2,510	2,503	7	-	-
21	Rajasthan	2,313,824	27,079	26,314	26,174	26,034	140	-	-
22	Sikkim	17,128	17,128	-	-	-	-	-	-
23	Tamil Nadu	202	-	-	-	-	-	-	-
24	Telangana	1,471,436	526,813	280,053	278,808	277,612	1,194	2	-
25	Tripura	35,157	35,157	35,157	34,571	34,041	529	1	-
26	West Bengal	234,453	-	-	-	-	-	-	-
Grand Total		12,526,426	1,891,447	1,279,998	1,269,724	1,260,678	8,974	60	12

Figure 8 - IGNOAPS De-Duplication

5.3.2.4 Aadhaar-enabled Verification (IGNOAPS)

As shown in **figure 9** below, of the **1,25,26,426** records received from NIC from the states, there were **18,91,447** records where Aadhaar number data field was filled in. Of these, **12,69,724** number of Aadhaars were found to be valid. Of these **12,69,724** valid Aadhaar numbers, **4,28,199** Aadhaar numbers could not be verified with UIDAI CIDR.

S.No.	State Name (All States in alphabetical order)	No. of records received at NIC server	No. of records with Aadhaar field populated	No. of records with Valid Aadhaar numbers	No. of Distinct Aadhaar numbers	No. of records sent for demo auth	No. of matched records in demo auth	Match %
1	Andaman and Nicobar Islands	-	-	-	-	-	-	-
2	Andhra Pradesh	2,071,206	687,890	658,042	650,734	620,538	399,347	64.35
3	Chandigarh	2,887	2,887	2,875	2,875	2,875	2,109	73.36
4	Chhatisgarh	11,638	-	-	-	-	-	-
5	Dadra and Nagar Haveli	8,206	-	-	-	-	-	-
6	Daman and Diu	1,601	1,070	-	-	-	-	-
7	Delhi	381,698	90,494	-	-	-	-	-
8	Goa	1,657	-	-	-	-	-	-
9	Gujarat	61,432	13,748	5,908	5,908	5,908	2,778	47.02
10	Haryana	1,469,202	6,112	3,956	3,924	2,463	1,896	76.98
11	Himachal Pradesh	91,954	-	-	-	-	-	-
12	Jharkhand	-	-	-	-	-	-	-
13	Karnataka	-	-	-	-	-	-	-
14	Kerala	456,411	277,113	132,817	132,817	131,035	93,187	71.12
15	Lakshadweep	330	-	-	-	-	-	-
16	Madhya Pradesh	2,156,163	23,901	21,286	21,286	21,286	8,388	39.41
17	Maharashtra	1,049,268	121,236	58,147	57,191	58,147	31,396	53.99
18	Odisha	476,191	643	-	-	-	-	-
19	Puducherry	80,345	52,926	52,926	52,926	40,814	31,835	78.00
20	Punjab	134,037	7,250	2,517	2,510	2,157	1,581	73.30
21	Rajasthan	2,313,824	27,079	26,314	26,174	25,444	18,300	71.92
22	Sikkim	17,128	17,128	-	-	-	-	-
23	Tamil Nadu	202	-	-	-	-	-	-
24	Telangana	1,471,436	526,813	280,053	278,808	271,587	172,470	63.50
25	Tripura	35,157	35,157	35,157	34,571	35,157	25,925	73.74
26	West Bengal	234,453	-	-	-	-	-	-
Grand Total		12,526,426	1,891,447	1,279,998	1,269,724	1,217,411	789,212	64.83

Figure 9 - IGNOAPS Verification

5.3.2.5 Aadhaar-enabled de-duplication (IGNWPS)

As shown in **figure 10** below, of the **49,20,727** records received from NIC from the states, there were **14,13,433** records where Aadhaar number data field was filled in. Of these, **7,47,013** number of Aadhaars were found to be valid. Of these **7,47,013** valid Aadhaar numbers, **7,36,792** Aadhaar numbers were attached to only one beneficiary, whereas **10,221** Aadhaar numbers were attached to more than one beneficiary/ same beneficiary in the database.

S.No.	State Name (All States in alphabetical order)	No. of records received at NIC server	No. of records with Aadhaar field populated	No. of records with Valid Aadhaar numbers	No. of Distinct Aadhaar numbers	No. of records in which Aadhaar no.			
						Once Only	2 < 5	6 < 10	> 10
1	Andaman and Nicobar Islands	2,746	-	-	-	-	-	-	-
2	Andhra Pradesh	425,652	425,652	425,652	415,782	406,221	9,539	18	4
3	Chandigarh	2,714	2,714	2,714	2,714	2,714	-	-	-
4	Chhatisgarh	3,078	-	-	-	-	-	-	-
5	Dadra and Nagar Haveli	2,123	-	-	-	-	-	-	-
6	Daman and Diu	1,695	1,359	-	-	-	-	-	-
7	Delhi	130,426	14,735	6,606	6,591	6,576	15	-	-
8	Goa	344	-	-	-	-	-	-	-
9	Gujarat	641	148	148	148	148	-	-	-
10	Haryana	601,836	2,718	2,654	2,642	2,630	12	-	-
11	Himachal Pradesh	23,253	-	-	-	-	-	-	-
12	Jharkhand	-	-	-	-	-	-	-	-
13	Karnataka	109,341	-	-	-	-	-	-	-
14	Kerala	885,312	575,723	165,671	165,671	165,671	-	-	-
15	Lakshadweep	330	-	-	-	-	-	-	-
16	Madhya Pradesh	724,368	20547	20547	20547	20547	-	-	-
17	Maharashtra	-	-	-	-	-	-	-	-
18	Odisha	55,419	-	-	-	-	-	-	-
19	Puducherry	41,302	30,303	345	345	345	-	-	-
20	Punjab	14,589	607	607	603	599	4	-	-
21	Rajasthan	393,597	4,870	4,655	4,633	4,611	22	-	-
22	Sikkim	697	-	-	-	-	-	-	-
23	Tamil Nadu	202	-	-	-	-	-	-	-
24	Telangana	910,417	328,541	122,452	121,859	121,290	567	2	-
25	Tripura	416,520	5,516	5,516	5,478	5,440	38	-	-
26	West Bengal	174,125	-	-	-	-	-	-	-
Grand Total		4,920,727	1,413,433	757,567	747,013	736,792	10,197	20	4

Figure 10 - IGNWPS De-Duplication

5.3.2.6 Aadhaar-enabled Verification (IGNWPS)

As shown in **figure 11** below, of the **49,20,727** records received from NIC from the states, there were **14,13,433** records where Aadhaar number data field was filled in. Of these, **7,47,013** number of Aadhaars were found to be valid. Of these **7,47,013** valid Aadhaar numbers, **2,23,045** records could not be verified with the UIDAI CIDR.

Aadhaar-based De-duplication & Verification



S.No.	State Name (All States in alphabetical order)	No. of records received at NIC server	No. of records with Aadhaar field populated	No. of records with Valid Aadhaar numbers	No. of Distinct Aadhaar numbers	No. of records sent for demo auth	No. of matched records in demo auth	Match %
1	Andaman and Nicobar Islands	2,746	-	-	-	0	0	
2	Andhra Pradesh	425,652	425,652	425,652	415,782	409925	288337	70.34
3	Chandigarh	2,714	2,714	2,714	2,714	2707	2183	80.64
4	Chhatisgarh	3,078	-	-	-	0	0	
5	Dadra and Nagar Haveli	2,123	-	-	-	0	0	
6	Daman and Diu	1,695	1,359	-	-	0	0	
7	Delhi	130,426	14,735	6,606	6,591	2821	2385	84.54
8	Goa	344	-	-	-	0	0	
9	Gujarat	641	148	148	148	108	68	62.96
10	Haryana	601,836	2,718	2,654	2,642	2631	2276	86.51
11	Himachal Pradesh	23,253	-	-	-	0	0	
12	Jharkhand	-	-	-	-	0	0	
13	Karnataka	109,341	-	-	-	0	0	
14	Kerala	885,312	575,723	165,671	165,671	163486	116972	71.55
15	Lakshadweep	330	-	-	-	0	0	
16	Madhya Pradesh	724,368	20547	20547	20547	20547	8107	39.46
17	Maharashtra	-	-	-	-	0	0	
18	Odisha	55,419	-	-	-	0	0	
19	Puducherry	41,302	30,303	345	345	330	280	84.85
20	Punjab	14,589	607	607	603	577	479	83.02
21	Rajasthan	393,597	4,870	4,655	4,633	3455	2471	71.52
22	Sikkim	697	-	-	-	0	0	
23	Tamil Nadu	202	-	-	-	0	0	
24	Telangana	910,417	328,541	122,452	121,859	119330	80446	67.41
25	Tripura	416,520	5,516	5,516	5,478	4971	3839	77.23
26	West Bengal	174,125	-	-	-	0	0	
	Grand Total	4,920,727	1,413,433	757,567	747,013	730,888	507,843	69

Figure 11 - IGWPS Verification

5.3.3 Scholarship Schemes (Scheduled Caste, Scheduled Tribe & Minorities)

Following is our observation after Aadhaar-based de-duplication and verification exercise:

Scheduled Caste Scholarship	
Total records received with/without Aadhaar number	23,57,449
Total records received with valid and distinct UIDs	3,20,810
UIDs occurring more than ONCE	15,923
UIDs Requiring Field Verification	32,327

Table 5 - SC Scholarship Summary

Scheduled Tribe Scholarship	
Total records received with/without Aadhaar number	11,68,456
Total records received with valid and distinct UIDs	1,09,675
UIDs occurring more than ONCE	3,153
UIDs Requiring Field Verification	15,769

Table 6 - ST Scholarship Summary

Minorities Scholarship	
Total records received with/without Aadhaar number	6,27,115
Total records received with valid and distinct UIDs	2,19,577
UIDs occurring more than ONCE	626
UIDs Requiring Field Verification	24,688

Table 7 - Minorities Scholarship Summary

5.3.3.1 Aadhaar-enabled De-Duplication (SC Scholarship)

As shown in **figure 12** below, of the **23,57,449** records received from NIC from the states, there were **5,78,098** records where Aadhaar number data field was filled in. Of these, **3,36,851** number of Aadhaars were found to be valid. Of these **3,36,851** valid Aadhaar numbers, **2,89,086** Aadhaar numbers were attached to only one beneficiary, whereas **15,923** Aadhaar numbers were attached to more than one beneficiary/ same beneficiary in the database.

S.No.	State Name (All States in alphabetical order)	No. of records received at NIC server	No. of records with Aadhaar field	No. of records with Valid Aadhaar numbers	No. of Distinct Aadhaar numbers	No. of records in which Aadhaar no.			
						Once Only	2 < 5	6 < 10	> 10
1	Andaman and Nicobar Islands	-	-	-	-	-	-	-	-
2	Andhra Pradesh	-	-	-	-	-	-	-	-
3	Chandigarh	1,684	1,684	1,684	1,684	1,684	-	-	-
4	Chhatisgarh	2,609	-	-	-	-	-	-	-
5	Dadra and Nagar Haveli	53	-	-	-	-	-	-	-
6	Daman and Diu	49	49	-	-	-	-	-	-
7	Delhi	15,197	14,597	-	-	-	-	-	-
8	Goa	321	160	146	145	144	1	-	-
9	Gujarat	19,359	11,660	2,084	2,009	1,940	69	-	-
10	Haryana	623,124	24,535	15,931	15,801	-	-	-	-
11	Himachal Pradesh	32,569	31,790	31,366	15,692	-	15,692	-	-
12	Jharkhand	-	-	-	-	-	-	-	-
13	Karnataka	223,843	27,325	27,268	27,255	27,242	13	-	-
14	Kerala	-	-	-	-	-	-	-	-
15	Lakshadweep	-	-	-	-	-	-	-	-
16	Madhya Pradesh	175,980	-	-	-	-	-	-	-
17	Maharashtra	596,273	-	-	-	-	-	-	-
18	Odisha	59,427	6,146	540	540	540	-	-	-
19	Puducherry	2,374	1,704	1,893	1,893	1,893	-	-	-
20	Punjab	197,155	105,575	83,553	83,495	83,437	58	-	-
21	Rajasthan	94,320	61,882	8,164	8,162	8,160	2	-	-
22	Sikkim	211	-	-	-	-	-	-	-
23	Tamil Nadu	30	-	-	-	-	-	-	-
24	Telangana	273,061	269,733	135,617	135,617	135,617	-	-	-
25	Tripura	10,438	-	7,701	7,632	7,563	69	-	-
26	West Bengal	29,372	21,258	20,904	20,885	20,866	19	-	-
	Grand Total	2,357,449	578,098	336,851	320,810	289,086	15,923	-	-

Figure 12 - SC Scholarship De-Duplication

5.3.3.2 Aadhaar-enabled Verification (SC Scholarship)

As shown in **figure 13** below, of the **23,57,449** records received from NIC from the states, there were **5,78,098** records where Aadhaar number data field was filled in. Of these, **3,36,851** number of Aadhaars were found to be valid. Of these **3,36,851** valid Aadhaar numbers, **32,327** records could not be verified with the UIDAI CIDR.

S.No.	State Name (All States in alphabetical order)	No. of records received at NIC server	No. of records with Aadhaar	No. of records with Valid Aadhaar	No. of Distinct Aadhaar numbers	No. of records sent for demo auth	No. of matched records in demo	Match %
1	Andaman and Nicobar Islands	-	-	-	-	0	0	
2	Andhra Pradesh	-	-	-	-	0	0	
3	Chandigarh	1,684	1,684	1,684	1,684	1636	1500	91.69
4	Chhatishgarh	2,609	-	-	-	0	0	
5	Dadra and Nagar Haveli	53	-	-	-	0	0	
6	Daman and Diu	49	49	-	-	0	0	
7	Delhi	15,197	14,597	-	-	0	0	
8	Goa	321	160	146	145	190	176	92.63
9	Gujarat	19,359	11,660	2,084	2,009	1978	1106	55.92
10	Haryana	623,124	24,535	15,931	15,801	15931	15931	100.00
11	Himachal Pradesh	32,569	31,790	31,366	15,692	31366	28543	91.00
12	Jharkhand	-	-	-	-	0	0	
13	Karnataka	223,843	27,325	27,268	27,255	27177	20216	74.39
14	Kerala	-	-	-	-	0	0	
15	Lakshadweep	-	-	-	-	0	0	
16	Madhya Pradesh	175,980	-	-	-	0	0	
17	Maharashtra	596,273	-	-	-	0	0	
18	Odisha	59,427	6,146	540	540	518	470	90.73
19	Puducherry	2,374	1,704	1,893	1,893	0	0	
20	Punjab	197,155	105,575	83,553	83,495	0	0	
21	Rajasthan	94,320	61,882	8,164	8,162	8164	6862	84.05
22	Sikkim	211	-	-	-	0	0	
23	Tamil Nadu	30	-	-	-	0	0	
24	Telangana	273,061	269,733	135,617	135,617	135092	115471	85.48
25	Tripura	10,438	-	7,701	7,632	1541	1541	100.00
26	West Bengal	29,372	21,258	20,904	20,885	20655	20105	97.34
	Grand Total	2,357,449	578,098	336,851	320,810	244,248	211,921	87

Figure 13 - SC Scholarship Verification

5.3.3.3 Aadhaar-enabled De-Duplication (ST Scholarship)

As shown in **figure 14** below, of the **11,68,456** records received from NIC from the states, there were **2,26,333** records where Aadhaar number data field was filled in. Of these, **1,12,817** number of Aadhaars were found to be valid. Of these **1,12,817** valid Aadhaar

numbers, **1,06,522** Aadhaar numbers were attached to only one beneficiary, whereas **3153** Aadhaar numbers were attached to more than one beneficiary/ same beneficiary in the database.

S.No.	State Name (All States in alphabetical order)	No. of records received at NIC server	No. of records with Aadhaar	No. of records with Valid Aadhaar	No. of Distinct Aadhaar numbers	No. of records in which Aadhaar no.			
						Once Only	2 < 5	6 < 10	> 10
1	Andaman and Nicobar Islands	-	-	-	-	-	-	-	-
2	Andhra Pradesh	-	-	-	-	-	-	-	-
3	Chandigarh	-	-	-	-	-	-	-	-
4	Chhatisgarh	7,606	-	-	-	-	-	-	-
5	Dadra and Nagar Haveli	1,707	-	-	-	-	-	-	-
6	Daman and Diu	8	8	2	2	2	-	-	-
7	Delhi	-	-	-	-	-	-	-	-
8	Goa	3,176	2,857	2,857	2,853	2,849	4	-	-
9	Gujarat	47,076	22,330	1,840	1,832	1,824	8	-	-
10	Haryana	-	-	-	-	-	-	-	-
11	Himachal Pradesh	6,677	6,478	6,253	3,132	-	3,132	-	-
12	Jharkhand	-	-	-	-	-	-	-	-
13	Karnataka	80,183	12,160	12,123	12,118	12,113	5	-	-
14	Kerala	-	-	-	-	-	-	-	-
15	Lakshadweep	2,143	-	-	-	-	-	-	-
16	Madhya Pradesh	165,159	-	-	-	-	-	-	-
17	Maharashtra	394,475	-	-	-	-	-	-	-
18	Odisha	30,874	2,123	413	413	413	-	-	-
19	Puducherry	-	-	-	-	-	-	-	-
20	Punjab	-	-	-	-	-	-	-	-
21	Rajasthan	58,775	36,982	6,476	6,473	6,470	3	-	-
22	Sikkim	1,976	-	-	-	-	-	-	-
23	Tamil Nadu	29	-	-	-	-	-	-	-
24	Telangana	137,125	134,696	74,164	74,164	74,164	-	-	-
25	Tripura	226,835	8,366	8,366	8,366	8,366	-	-	-
26	West Bengal	4,632	333	323	322	321	1	-	-
	Grand Total	1,168,456	226,333	112,817	109,675	106,522	3,153	-	-

Figure 14 - ST Scholarship De-Duplication

5.3.3.4 Aadhaar-enabled Verification (ST Scholarship)

As shown in **figure 15** below, of the **11,68,456** records received from NIC from the states, there were **2,26,333** records where Aadhaar number data field was filled in. Of these, **1,12,817** number of Aadhaars were found to be valid. Of these **1,12,817** valid Aadhaar numbers **15,769** records could not be verified with the UIDAI CIDR.

S.No.	State Name (All States in alphabetical order)	No. of records received at NIC server	No. of records with Aadhaar field populated	No. of records with Valid Aadhaar numbers	No. of Distinct Aadhaar numbers	No. of records sent for demo auth	No. of matched records in demo auth	Match %
1	Andaman and Nicobar Islands	-	-	-	-	0	0	
2	Andhra Pradesh	-	-	-	-	0	0	
3	Chandigarh	-	-	-	-	0	0	
4	Chhatisgarh	7,606	-	-	-	0	0	
5	Dadra and Nagar Haveli	1,707	-	-	-	0	0	
6	Daman and Diu	8	8	2	2	2	0	0.00
7	Delhi	-	-	-	-	0	0	
8	Goa	3,176	2,857	2,857	2,853	2830	2665	94.17
9	Gujarat	47,076	22,330	1,840	1,832	964	685	71.06
10	Haryana	-	-	-	-	0	0	
11	Himachal Pradesh	6,677	6,478	6,253	3,132	6253	5884	94.10
12	Jharkhand	-	-	-	-	0	0	
13	Karnataka	80,183	12,160	12,123	12,118	12072	8923	73.91
14	Kerala	-	-	-	-	0	0	
15	Lakshadweep	2,143	-	-	-	0	0	
16	Madhya Pradesh	165,159	-	-	-	0	0	
17	Maharashtra	394,475	-	-	-	0	0	
18	Odisha	30,874	2,123	413	413	394	352	89.34
19	Puducherry	-	-	-	-	0	0	
20	Punjab	-	-	-	-	0	0	
21	Rajasthan	58,775	36,982	6,476	6,473	6379	5353	83.92
22	Sikkim	1,976	-	-	-	0	0	
23	Tamil Nadu	29	-	-	-	0	0	
24	Telangana	137,125	134,696	74,164	74,164	73827	63102	85.47
25	Tripura	226,835	8,366	8,366	8,366	8202	8202	100.00
26	West Bengal	4,632	333	323	322	321	309	96.26
	Grand Total	1,168,456	226,333	112,817	109,675	111,244	95,475	86

Figure 15 - ST Scholarship Verification

5.3.3.5 Aadhaar-enabled De-Duplication (Minorities Scholarship)

As shown in **figure 16** below, of the **6,27,115** records received from NIC from the states, there were **3,47,786** records where Aadhaar number data field was filled in. Of these, **2,20,031** number of Aadhaars were found to be valid. Of these **2,20,031** valid Aadhaar numbers, **2,18,641** Aadhaar numbers were attached to only one beneficiary, whereas **626** Aadhaar numbers were attached to more than one beneficiary/ same beneficiary in the database.

S.No.	State Name (All States in alphabetical order)	No. of records received at NIC server	No. of records with Aadhaar field populated	No. of records with Valid Aadhaar numbers	No. of Distinct Aadhaar numbers	No. of records in which Aadhaar no. occurs			
						Once Only	2 < 5	6 < 10	> 10
1	Andaman and Nicobar Islands	-	-	-	-	-	-	-	-
2	Andhra Pradesh	-	-	-	-	-	-	-	-
3	Chandigarh	290	290	290	290	290	-	-	-
4	Chhatisgarh	61	55	-	-	-	-	-	-
5	Dadra and Nagar Haveli	26	-	-	-	-	-	-	-
6	Daman and Diu	-	-	-	-	-	-	-	-
7	Delhi	-	-	-	-	-	-	-	-
8	Goa	115	114	110	110	110	-	-	-
9	Gujarat	13,325	4,886	3,555	3,496	3,439	57	-	-
10	Haryana	1,109	357	320	320	320	-	-	-
11	Himachal Pradesh	594	540	498	310	-	-	-	-
12	Jharkhand	11,007	8,524	-	-	-	-	-	-
13	Karnataka	1,272	359	354	353	352	1	-	-
14	Kerala	59,182	39,468	39,468	39,468	39,468	-	-	-
15	Lakshadweep	-	-	-	-	-	-	-	-
16	Madhya Pradesh	21,236	6,554	4,624	4,624	4,259	365	-	-
17	Maharashtra	60,311	-	-	-	-	-	-	-
18	Odisha	937	458	389	385	383	2	-	-
19	Puducherry	68	58	31	31	31	-	-	-
20	Punjab	76,583	11,495	34,776	34,574	34,373	201	-	-
21	Rajasthan	8,806	4,904	-	-	-	-	-	-
22	Sikkim	367	-	-	-	-	-	-	-
23	Tamil Nadu	19	-	-	-	-	-	-	-
24	Telangana	273,035	269,724	135,616	135,616	135,616	-	-	-
25	Tripura	388	-	-	-	-	-	-	-
26	West Bengal	98,384	-	-	-	-	-	-	-
	Grand Total	627,115	347,786	220,031	219,577	218,641	626	-	-

Figure 16 - Minorities Scholarship De-duplication

5.3.3.6 Aadhaar-enabled Verification (Minorities Scholarship)

As shown in **figure 17** below, of the **6,27,115** records received from NIC from the states, there were **3,47,786** records where Aadhaar number data field was filled in. Of these, **2,20,031** number of Aadhaars were found to be valid. Of these **2,20,031** valid Aadhaar numbers, **24,688** records could not be verified with the UIDAI CIDR.

S.No.	State Name (All States in alphabetical order)	No. of records received at NIC server	No. of records with Aadhaar field populate	No. of records with Valid Aadhaar numbers	No. of Distinct Aadhaar numbers	No. of records sent for demo auth	No. of matched records in demo auth	Match %
1	Andaman and Nicobar Islands	-	-	-	-	0	0	
2	Andhra Pradesh	-	-	-	-	0	0	
3	Chandigarh	290	290	290	290	277	247	89.17
4	Chhatisgarh	61	55	-	-	0	0	
5	Dadra and Nagar Haveli	26	-	-	-	0	0	
6	Daman and Diu	-	-	-	-	0	0	
7	Delhi	-	-	-	-	0	0	
8	Goa	115	114	110	110	109	104	95.41
9	Gujarat	13,325	4,886	3,555	3,496	3010	2068	68.70
10	Haryana	1,109	357	320	320	297	288	96.97
11	Himachal Pradesh	594	540	498	310	494	476	96.36
12	Jharkhand	11,007	8,524	-	-	0	0	
13	Karnataka	1,272	359	354	353	350	235	67.14
14	Kerala	59,182	39468	39468	39468	39468	36514	92.52
15	Lakshadweep	-	-	-	-	0	0	
16	Madhya Pradesh	21,236	6,554	4,624	4,624	0	0	
17	Maharashtra	60,311	-	-	-	-	0	
18	Odisha	937	458	389	385	342	311	90.94
19	Puducherry	68	58	31	31	30	21	70.00
20	Punjab	76,583	11,495	34,776	34,574	34167	33211	97.20
21	Rajasthan	8,806	4,904	-	-	0	0	
22	Sikkim	367	-	-	-	0	0	
23	Tamil Nadu	19	-	-	-	0	0	
24	Telangana	273,035	269,724	135,616	135,616	135090	115471	85.48
25	Tripura	388	-	-	-	0	0	
26	West Bengal	98,384	-	-	-	0	0	
	Grand Total	627,115	347,786	220,031	219,577	213,634	188,946	88

Figure 17 - Minorities Scholarship Verification

5.3.4 LPG

LPG	
Total records received with/without Aadhaar number	9,71,63,551
Total records received with valid and distinct UIDs	3,92,87,825
UIDs occurring more than ONCE	1,25,922*
UIDs Requiring Field Verification	74,97,863

Table 8 - LPG Summary

* After discussion with Ministry of Petroleum, it is learnt that these records were uploaded more than once due to technical errors.

5.3.4.1 Aadhaar-enabled De-Duplication

As shown in **figure 18** below, of the **9,71,63,551** records received from NIC from the states, there were **3,95,83,061** records where Aadhaar number data field was filled in. Of these, **3,95,83,061** number of Aadhaars were found to be valid. Of these **3,95,83,061** valid Aadhaar numbers, **3,91,61,903** Aadhaar numbers were attached to only one beneficiary, whereas **1,25,922** Aadhaar numbers were attached to more than one beneficiary/ same beneficiary in the database.

S.No.	OMC wise	No. of records received at NIC server	No. of records with Aadhaar field populated	No. of records with Valid Aadhaar numbers	No. of Distinct Aadhaar numbers	No. of records in which Aadhaar no. occurs more			
						Once Only	2 < 5	6 < 10	> 10
1	BPCL	26,350,164	11,566,744	11,566,744	11,566,743	11,566,743	0	0	0
2	HPCL	27,482,855	11,941,183	11,941,183	11,645,948	11,520,026	124,856	1,065	1
3	IOCL	43,330,532	16,075,134	16,075,134	16,075,134	16,075,134	0	0	0
S.No.	OMC wise	No. of records received at NIC server	No. of records with Aadhaar field populated	No. of records with Valid Aadhaar	No. of Distinct Aadhaar	No. of records in which Aadhaar no. occurs more			
						Once Only	2	3	> 10
1	Combined / Across OMC	97,163,551	39,583,061	39,583,061	39,287,825	39,161,903	124,856	1,065	1

Figure 18 - LPG De-Duplication

5.3.4.2 Aadhaar-enabled De-Duplication

As shown in **figure 19** below, of the **9,71,63,551** records received from NIC from the states, there were **3,95,83,061** records where Aadhaar number data field was filled in. Of these, **3,95,83,061** number of Aadhaars were found to be valid. Of these **3,95,83,061** valid Aadhaar numbers, **74,97,863** records could not be verified with the UIDAI CIDR.

S.No.	OMC wise	No. of records received at NIC server	No. of records with Aadhaar field populated	No. of records with Valid Aadhaar numbers	No. of Distinct Aadhaar numbers	No. of records sent for demo auth	No. of matched records in demo auth	Match %
1	BPCL	26,350,164	11,566,744	11,566,744	11,566,743	11,432,359	9,294,639	81%
2	HPCL	27,482,855	11,941,183	11,941,183	11,645,948	12,024,333	9,735,234	81%
3	IOCL	43,330,532	16,075,134	16,075,134	16,075,134	15,770,601	12,699,557	81%
S.No.	OMC wise	No. of records received at NIC server	No. of records with Aadhaar field populated	No. of records with Valid Aadhaar numbers	No. of Distinct Aadhaar numbers	No. of records sent for demo auth	No. of matched records in demo auth	Match %
1	Combined / Across OMC	97,163,551	39,583,061	39,583,061	39,287,825	39,227,293	31,729,430	80.89

Figure 19 - LPG Verification

5.3.5 Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)

Following is our observation after Aadhaar-based de-duplication and verification exercise:

MGNREGS	
Total records received with/without Aadhaar number	12,18,55,410
Total records received with valid and distinct UIDs	73,92,887
UIDs occurring more than ONCE	67,637
UIDs Requiring Field Verification	17,72,494

Table 9 - MGNREGS Summary

5.3.5.1 Aadhaar-enabled De-Duplication

As shown in **figure 20** below, of the **12,18,55,410** records received from NIC from the states, there were **1,75,87,841** records where Aadhaar number data field was filled in. Of these, **74,72,518** number of Aadhaars were found to be valid. Of these **74,72,518** valid Aadhaar numbers, **73,25,250** Aadhaar numbers were attached to only one beneficiary, whereas **67,637** Aadhaar numbers were attached to more than one beneficiary/ same beneficiary in the database.

S.No.	State Name (All States in alphabetical order)	No. of records received at NIC server	No. of records with Aadhaar field populated	No. of records with Valid Aadhaar numbers	No. of Distinct Aadhaar numbers	No. of records in which Aadhaar no. occurs			
						Once Only	2 < 5	6 < 10	> 10
1	Andaman and Nicobar Islands	-	-	-	-	-	-	-	-
2	Andhra Pradesh	18,931,376	6,144,209	-	-	-	-	-	-
3	Chandigarh	-	-	-	-	-	-	-	-
4	Chhatisgarh	1,272,443	-	-	-	-	-	-	-
5	Dadra and Nagar Haveli	1,467	-	-	-	-	-	-	-
6	Daman and Diu	-	-	-	-	-	-	-	-
7	Delhi	-	-	-	-	-	-	-	-
8	Goa	44,321	4,358	4,358	4,358	4,358	-	-	-
9	Gujarat	2,905,974	26,448	26,448	26,448	26,448	-	-	-
10	Haryana	1,555,926	297,200	249,740	249,740	249,740	-	-	-
11	Himachal Pradesh	2,249,265	1,066,166	1,024,135	1,024,135	1,024,135	-	-	-
12	Jharkhand	8,265,701	2,095,573	2,092,364	2,092,364	2,092,364	-	-	-
13	Karnataka	-	-	-	-	-	-	-	-
14	Kerala	4,152,503	2,592,031	-	-	-	-	-	-
15	Lakshadweep	18,006	-	-	-	-	-	-	-
16	Madhya Pradesh	46,834,595	-	-	-	-	-	-	-
17	Maharashtra	6,085,566	-	-	-	-	-	-	-
18	Odisha	4,391,310	4,242	-	-	-	-	-	-
19	Puducherry	322,685	114,276	-	-	-	-	-	-
20	Punjab	1,762,960	429,488	6,342	6,342	6,342	-	-	-
21	Rajasthan	-	-	-	-	-	-	-	-
22	Sikkim	98,154	62,944	-	-	-	-	-	-
23	Tamil Nadu	65,534	-	-	-	-	-	-	-
24	Telangana	15,540,647	4,349,612	3,675,996	3,675,996	3,675,996	-	-	-
25	Tripura	855,980	385,240	385,240	305,609	237,972	67,625	9	3
26	West Bengal	6,500,997	16,054	7,895	7,895	7,895	-	-	-
	Grand Total	121,855,410	17,587,841	7,472,518	7,392,887	7,325,250	67,625	9	3

Figure 20 - MGNREGS De-Duplication

5.3.5.2 Aadhaar-enabled Verification

As shown in **figure 21** below, of the **12,18,55,410** records received from NIC from the states, there were **1,75,87,841** records where Aadhaar number data field was filled in. Of these, **74,72,518** number of Aadhaars were found to be valid. Of these **74,72,518** valid Aadhaar numbers, **17,72,494** records could not be verified with the UIDAI CIDR.

S.No.	State Name (All States in alphabetical order)	No. of records received at NIC server	No. of records with Aadhaar field	No. of records with Valid Aadhaar	No. of Distinct Aadhaar numbers	No. of records sent for demo auth	No. of matched records in demo auth	Match %
1	Andaman and Nicobar Islands	-	-	-	-	-	-	-
2	Andhra Pradesh	18,931,376	6,144,209	-	-	-	-	-
3	Chandigarh	-	-	-	-	-	-	-
4	Chhatisgarh	1,272,443	-	-	-	-	-	-
5	Dadra and Nagar Haveli	1,467	-	-	-	-	-	-
6	Daman and Diu	-	-	-	-	-	-	-
7	Delhi	-	-	-	-	-	-	-
8	Goa	44,321	4,358	4,358	4,358	4,340	3,820	88
9	Gujarat	2,905,974	26,448	26,448	26,448	26,372	16,684	63
10	Haryana	1,555,926	297,200	249,740	249,740	248,636	213,167	86
11	Himachal Pradesh	2,249,265	1,066,166	1,024,135	1,024,135	1,020,017	838,418	82
12	Jharkhand	8,265,701	2,095,573	2,092,364	2,092,364	2,080,983	1,432,251	69
13	Karnataka	-	-	-	-	-	-	-
14	Kerala	4,152,503	2,592,031	-	-	-	-	-
15	Lakshadweep	18,006	-	-	-	-	-	-
16	Madhya Pradesh	46,834,595	-	-	-	-	-	-
17	Maharashtra	6,085,566	-	-	-	-	-	-
18	Odisha	4,391,310	4,242	-	-	-	-	-
19	Puducherry	322,685	114,276	-	-	-	-	-
20	Punjab	1,762,960	429,488	6,342	6,342	-	-	-
21	Rajasthan	-	-	-	-	-	-	-
22	Sikkim	98,154	62,944	-	-	-	-	-
23	Tamil Nadu	65,534	-	-	-	-	-	-
24	Telangana	15,540,647	4,349,612	3,675,996	3,675,996	3,657,586	2,761,981	76
25	Tripura	855,980	385,240	385,240	305,609	-	-	-
26	West Bengal	6,500,997	16,054	7,895	7,895	7,884	7,003	89
	Grand Total	121,855,410	17,587,841	7,472,518	7,392,887	7,045,818	5,273,324	75

Figure 21 - MGNREGS Verification

6 PART C: Conclusion

The exercise of verification of data from the states pertaining to various benefit schemes has been completed in record time. This has been made possible due to the concerted efforts of the Planning Commission, the State Governments, the NIC and the UIDAI and various other stake holders.

Based on the verification exercise the following conclusions can be drawn:

- Demographic authentication provides acceptable results for verification of data at the first level as screening process.
- An average success rate of 79.17 % (Range of 64% - 88%) across schemes and states is a positive start to a hitherto untested method
- Success in demographic authentication is dependent on the quality of data collection; even a small error can result in a false reject.
- Data quality for demographic authentication demands uniformity of the format for data collection, fields included in the data and the order in which the data is presented and stored. It was noticed during the exercise that the data quality and presentation were inconsistent resulting in huge manual intervention to clean up the data before processing for verification.
- Further enhancement of verification on completion of the first level of demographic authentication can be achieved through biometric authentication/verification of the residents whose demographic authentication has failed.
- The PoC of the Non-seeded data indicates that there are significant percentage of people among the non-seeded data who have valid Aadhaar. States/Departments may target these groups of people and get seeding their Aadhaar numbers done into the schemes' databases.

7 Annexures

Annexure I - Aadhaar Saturation in 300 districts (State-wise, district-wise)

Aadhaar saturation District wise(Descending order)					
S.No	State	District	Population	Aadhaar saturation no.	% Aadhaar Saturation*
1	Andaman & Nicobar Islands	North& Middle Andaman	1,05,539	1,17,642	111.5%
2	Andhra_Pradesh	Srikakulam	26,99,471	26,81,518	99.3%
3	Andhra_Pradesh	East_Godavari	51,51,549	50,11,305	97.3%
4	Andhra_Pradesh	Anantapur	40,83,315	39,62,909	97.1%
5	Andhra_Pradesh	Chittoor	41,70,468	39,64,962	95.1%
6	Andhra_Pradesh	Guntur	48,89,230	45,68,966	93.4%
7	Andhra_Pradesh	West_Godavari	39,34,782	36,62,623	93.1%
8	Andhra_Pradesh	Krishna	45,29,009	41,72,279	92.1%
9	Andhra_Pradesh	Prakasam	33,92,764	31,32,531	92.3%
10	Andhra_Pradesh	Visakhapatnam	42,88,113	39,02,513	91.0%
11	Andhra_Pradesh	Cuddapah	28,84,524	26,19,125	90.8%
12	Andhra_Pradesh	Kurnool	40,46,601	35,65,146	88.1%
13	Andhra_Pradesh	Nellore	29,66,082	26,17,589	88.3%
14	Andhra_Pradesh	Vizianagaram	23,42,868	20,56,920	87.8%
15	Chandigarh	Chandigarh	10,54,686	9,50,265	90.1%
16	Chhattisgarh	Dhamtari	7,99,199	5,72,341	71.6%
17	Chhattisgarh	Koriya	6,59,039	4,66,162	70.7%
18	Dadra & Nagar Haveli	Dadra & Nagar Haveli	3,42,853	2,08,432	60.8%
19	Daman_and_Diu	Diu	52,056	50,607	97.2%
20	Delhi	Central_Delhi	5,78,671	8,46,417	146.3%
21	Delhi	East_Delhi	17,07,725	20,42,302	119.6%
22	Delhi	North_West_Delhi	36,51,261	38,92,587	106.6%
23	Delhi	North_Delhi	8,83,418	9,29,097	105.2%
24	Delhi	South_Delhi	27,33,752	27,26,745	99.7%
25	Delhi	South West Delhi	22,92,363	22,10,203	96.4%
26	Delhi	West_Delhi	27,33,752	24,96,976	91.3%
27	Delhi	North_East	22,40,749	19,65,503	87.7%
28	Goa	South_Goa	6,39,962	5,74,453	89.8%
29	Gujarat	Junagadh	27,42,291	20,77,852	75.8%
30	Gujarat	Valsad	17,03,068	12,36,011	72.6%

31	Gujarat	Navsari	13,30,711	9,62,928	72.4%
32	Gujarat	Mahesana	20,27,727	14,32,937	70.7%
33	Gujarat	Rajkot	37,99,770	26,31,417	69.3%
34	Gujarat	Porbandar	5,86,062	3,90,101	66.6%
35	Gujarat	Bharuch	15,50,822	9,65,308	62.2%
36	Gujarat	Anand	20,90,276	12,72,788	60.9%
37	Gujarat	Jamnagar	21,59,130	13,32,393	61.7%
38	Gujarat	Surendranagar	17,55,873	10,68,787	60.9%
39	Haryana	Faridabad	17,98,954	17,22,870	95.8%
40	Haryana	Ambala	11,36,784	10,17,721	89.5%
41	Haryana	Kurukshetra	9,64,231	8,24,765	85.5%
42	Haryana	Karnal	15,06,323	12,67,272	84.1%
43	Haryana	Panchkula	5,58,890	4,66,630	83.5%
44	Haryana	Yamuna_Nagar	12,14,162	10,06,123	82.9%
45	Haryana	Sonipat	14,80,080	11,89,201	80.3%
46	Haryana	Panipat	12,02,811	9,67,059	80.4%
47	Haryana	Sirsa	12,95,114	10,25,827	79.2%
48	Haryana	Kaithal	10,72,861	8,43,773	78.6%
49	Haryana	Fatehabad	9,41,522	7,34,192	78.0%
50	Haryana	Rewari	8,96,129	6,90,653	77.1%
51	Haryana	Bhiwani	16,29,109	12,26,554	75.3%
52	Haryana	Hisar	17,42,815	12,95,423	74.3%
53	Haryana	Gurgaon	15,14,085	10,87,436	71.8%
54	Haryana	Rohtak	10,58,683	7,51,164	71.0%
55	Haryana	Jhajjar	9,56,907	6,78,193	70.9%
56	Haryana	Mahendragarh	9,21,680	6,47,595	70.3%
57	Haryana	Jind	13,32,042	9,03,348	67.8%
58	Haryana	Palwal	10,40,493	6,75,648	64.9%
59	Himachal_Pradesh	Hamirpur	4,54,293	4,92,979	108.5%
60	Himachal_Pradesh	Una	5,21,057	5,34,946	102.7%
61	Himachal_Pradesh	Bilaspur	3,82,056	3,84,240	100.6%
62	Himachal_Pradesh	Mandi	9,99,518	9,83,759	98.4%
63	Himachal_Pradesh	Kangra	15,07,223	14,81,004	98.3%
64	Himachal_Pradesh	Chamba	5,18,844	4,84,235	93.3%
65	Himachal_Pradesh	Kullu	4,37,474	3,96,602	90.7%
66	Himachal_Pradesh	Lahul_and_Spiti	31,528	27,339	86.7%
67	Himachal_Pradesh	Sirmaur	5,30,164	4,54,202	85.7%
68	Himachal_Pradesh	Shimla	8,13,384	6,93,852	85.3%
69	Himachal_Pradesh	Solan	5,76,670	4,79,737	83.2%
70	Himachal_Pradesh	Kinnaur	84,298	68,446	81.2%
71	Jharkhand	Lohardaga	4,61,738	4,26,074	92.3%

72	Jharkhand	Simdega	5,99,813	5,28,705	88.1%
73	Jharkhand	Sahibganj	11,50,038	10,09,360	87.8%
74	Jharkhand	Pakur	8,99,200	7,66,255	85.2%
75	Jharkhand	Gumla	10,25,656	8,70,137	84.8%
76	Jharkhand	Khunti	5,30,299	4,49,571	84.8%
77	Jharkhand	Hazaribag	17,34,005	14,66,653	84.6%
78	Jharkhand	Ramgarh	9,49,159	7,99,893	84.3%
79	Jharkhand	Jamtara	7,90,207	6,64,676	84.1%
80	Jharkhand	Ranchi	29,12,022	23,97,311	82.3%
81	Jharkhand	West_Singhbhum	15,01,619	12,32,907	82.1%
82	Jharkhand	Dumka	13,21,096	10,84,408	82.1%
83	Jharkhand	Garhwa	13,22,387	10,86,193	82.1%
84	Jharkhand	Koderma	7,17,169	5,83,769	81.4%
85	Jharkhand	Latehar	7,25,673	5,90,501	81.4%
86	Jharkhand	Seraikela-Kharsawan	10,63,458	8,59,776	80.8%
87	Jharkhand	Godda	13,11,382	10,59,145	80.8%
88	Jharkhand	Palamu	19,36,319	15,59,278	80.5%
89	Jharkhand	East_Singhbhum	22,91,032	18,20,556	79.5%
90	Jharkhand	Giridih	24,45,203	19,07,543	78.0%
91	Jharkhand	Bokaro	20,61,918	16,00,057	77.6%
92	Jharkhand	Dhanbad	26,82,662	20,35,366	75.9%
93	Jharkhand	Chatra	10,42,304	7,73,811	74.2%
94	Jharkhand	Deoghar	14,91,879	11,03,362	74.0%
95	Karnataka	Tumkur	26,81,449	25,10,106	93.6%
96	Karnataka	Mysore	29,94,744	27,97,105	93.4%
97	Karnataka	Dharwad	18,46,993	15,96,005	86.4%
98	Karnataka	Udupi	11,77,908	9,48,607	80.5%
99	Karnataka	Belgaum	47,78,439	37,96,619	79.5%
100	Karnataka	Uttara_Kannada	14,36,847	11,40,182	79.4%
101	Karnataka	Chamarajanagar	10,20,962	8,06,065	79.0%
102	Karnataka	Chikmagalur	11,37,753	8,82,752	77.6%
103	Karnataka	Hassan	17,76,221	13,82,266	77.8%
104	Karnataka	Dakshina_Kannada	20,83,625	15,94,615	76.5%
105	Karnataka	Bagalkot	18,90,826	14,06,314	74.4%
106	Karnataka	Bellary	25,32,383	18,58,573	73.4%
107	Karnataka	Bangalore	95,88,910	69,26,381	72.2%
108	Karnataka	Ramanagar	10,82,739	7,78,618	71.9%
109	Karnataka	Gadag	10,65,235	7,61,342	71.5%
110	Karnataka	Bangalore_Rural	9,87,257	6,96,531	70.6%
111	Karnataka	Mandya	18,08,680	12,73,415	70.4%
112	Karnataka	Bijapur(KAT)	21,75,102	15,40,716	70.8%

113	Karnataka	Davangere	19,46,905	13,65,227	70.1%
114	Karnataka	Bidar	17,00,018	11,72,512	69.0%
115	Karnataka	Koppal	13,91,292	9,61,454	69.1%
116	Karnataka	Kolar	15,40,231	10,72,080	69.6%
117	Karnataka	Shimoga	17,55,512	12,15,113	69.2%
118	Karnataka	Haveri	15,98,506	11,28,047	70.6%
119	Karnataka	Chitradurga	16,60,378	10,67,838	64.3%
120	Karnataka	Kodagu	5,54,762	3,53,705	63.8%
121	Karnataka	Gulbarga	25,64,892	15,86,333	61.8%
122	Kerala	Pathanamthitta	11,95,537	11,63,244	97.3%
123	Kerala	Thrissur	31,10,327	29,17,329	93.8%
124	Kerala	Wayanad	8,16,558	7,66,452	93.9%
125	Kerala	Kottayam	19,79,384	18,38,920	92.9%
126	Kerala	Palakkad	28,10,892	26,11,081	92.9%
127	Kerala	Alappuzha	21,21,943	19,64,617	92.6%
128	Kerala	Kozhikode	30,89,543	28,54,788	92.4%
129	Kerala	Kannur	25,25,637	23,30,798	92.3%
130	Kerala	Idukki	11,07,453	10,02,756	90.5%
131	Kerala	Ernakulam	32,79,860	29,59,233	90.2%
132	Kerala	Kollam	26,29,703	23,75,192	90.3%
133	Kerala	Malappuram	41,10,956	36,83,995	89.6%
134	Kerala	Kasaragod	13,02,600	11,60,326	89.1%
135	Kerala	Thiruvananthapuram	33,07,284	29,26,538	88.5%
136	Lakshadweep	Lakshadweep	64,429	55,405	86.0%
137	Madhya_Pradesh	Hoshangabad	12,40,975	11,30,737	91.1%
138	Madhya_Pradesh	Khandwa	13,09,443	11,77,578	89.9%
139	Madhya_Pradesh	Harda	5,70,302	5,06,132	88.7%
140	Madhya_Pradesh	Burhanpur	7,56,993	6,33,926	83.7%
141	Madhya_Pradesh	Bhopal	23,68,145	19,43,876	82.1%
142	Madhya_Pradesh	Jabalpur	24,60,714	19,42,390	78.9%
143	Madhya_Pradesh	Seoni	13,78,876	10,90,426	79.1%
144	Madhya_Pradesh	Shajapur	15,12,353	11,81,635	78.1%
145	Madhya_Pradesh	Alirajpur	7,28,677	5,49,517	75.4%
146	Madhya_Pradesh	Chhindwara	20,90,306	15,72,084	75.2%
147	Madhya_Pradesh	Mandla	10,53,522	7,95,381	75.5%
148	Madhya_Pradesh	Betul	15,75,247	11,78,568	74.8%
149	Madhya_Pradesh	Indore	32,72,335	24,42,143	74.6%
150	Madhya_Pradesh	Narsinghpur	10,92,141	8,00,902	73.3%
151	Madhya_Pradesh	Balaghat	17,01,156	12,47,379	73.3%
152	Madhya_Pradesh	Mandsaur	13,39,832	9,81,713	73.3%
153	Madhya_Pradesh	Dindori	7,04,218	5,10,387	72.5%

154	Madhya_Pradesh	Ratlam	14,54,483	10,38,733	71.4%
155	Madhya_Pradesh	Dewas	15,63,107	11,13,155	71.2%
156	Madhya_Pradesh	Ujjain	19,86,597	14,01,231	70.5%
157	Madhya_Pradesh	Damoh	12,63,703	8,93,953	70.7%
158	Madhya_Pradesh	Satna	22,28,619	15,38,190	69.0%
159	Madhya_Pradesh	Umaria	6,43,579	4,36,304	67.8%
160	Madhya_Pradesh	Katni	12,91,684	8,62,266	66.8%
161	Madhya_Pradesh	Shahdol	10,64,989	7,12,665	66.9%
162	Madhya_Pradesh	Dhar	21,84,672	14,18,484	64.9%
163	Madhya_Pradesh	Panna	10,16,028	6,54,289	64.4%
164	Madhya_Pradesh	Raisen	13,31,699	8,42,587	63.3%
165	Madhya_Pradesh	Sagar	23,78,295	15,02,326	63.2%
166	Madhya_Pradesh	Neemuch	8,25,958	5,20,077	63.0%
167	Madhya_Pradesh	Vidisha	14,58,212	9,17,522	62.9%
168	Madhya_Pradesh	Sehore	13,11,008	8,21,780	62.7%
169	Madhya_Pradesh	Khargone	18,72,413	11,68,813	62.4%
170	Madhya_Pradesh	Anuppur	7,49,521	4,64,120	61.9%
171	Madhya_Pradesh	Barwani	13,85,659	8,71,483	62.9%
172	Madhya_Pradesh	Rewa	23,63,744	14,50,595	61.4%
173	Madhya_Pradesh	Jhabua	10,24,091	6,19,594	60.5%
174	Maharashtra	Wardha	12,96,157	11,99,129	92.5%
175	Maharashtra	Nagpur	46,53,171	41,10,877	88.3%
176	Maharashtra	Gondia	13,22,331	11,45,667	86.6%
177	Maharashtra	Mumbai	1,24,78,447	1,07,56,726	86.2%
178	Maharashtra	Amravati	28,87,826	24,52,488	84.9%
179	Maharashtra	Bhandara	11,98,810	10,16,692	84.8%
180	Maharashtra	Dhule	20,48,781	17,27,322	84.3%
181	Maharashtra	Sangli	28,20,575	23,06,144	81.8%
182	Maharashtra	Ahmednagar	45,43,083	36,96,328	81.4%
183	Maharashtra	Jalgaon	42,24,442	34,04,152	80.6%
184	Maharashtra	Kolhapur	38,74,015	31,15,923	80.4%
185	Maharashtra	Ratnagiri	16,12,672	12,99,538	80.6%
186	Maharashtra	Satara	30,03,922	24,07,619	80.1%
187	Maharashtra	Chandrapur	21,94,262	17,37,291	79.2%
188	Maharashtra	Nandurbar	16,46,177	13,00,842	79.0%
189	Maharashtra	Beed	21,61,250	17,07,972	79.0%
190	Maharashtra	Thane	1,10,54,131	86,63,859	78.4%
191	Maharashtra	Nashik	61,09,052	47,84,279	78.3%
192	Maharashtra	Raigad	26,35,394	20,53,996	77.9%
193	Maharashtra	Buldhana	25,88,039	20,03,677	77.4%
194	Maharashtra	Gadchiroli	10,71,795	8,30,430	77.5%

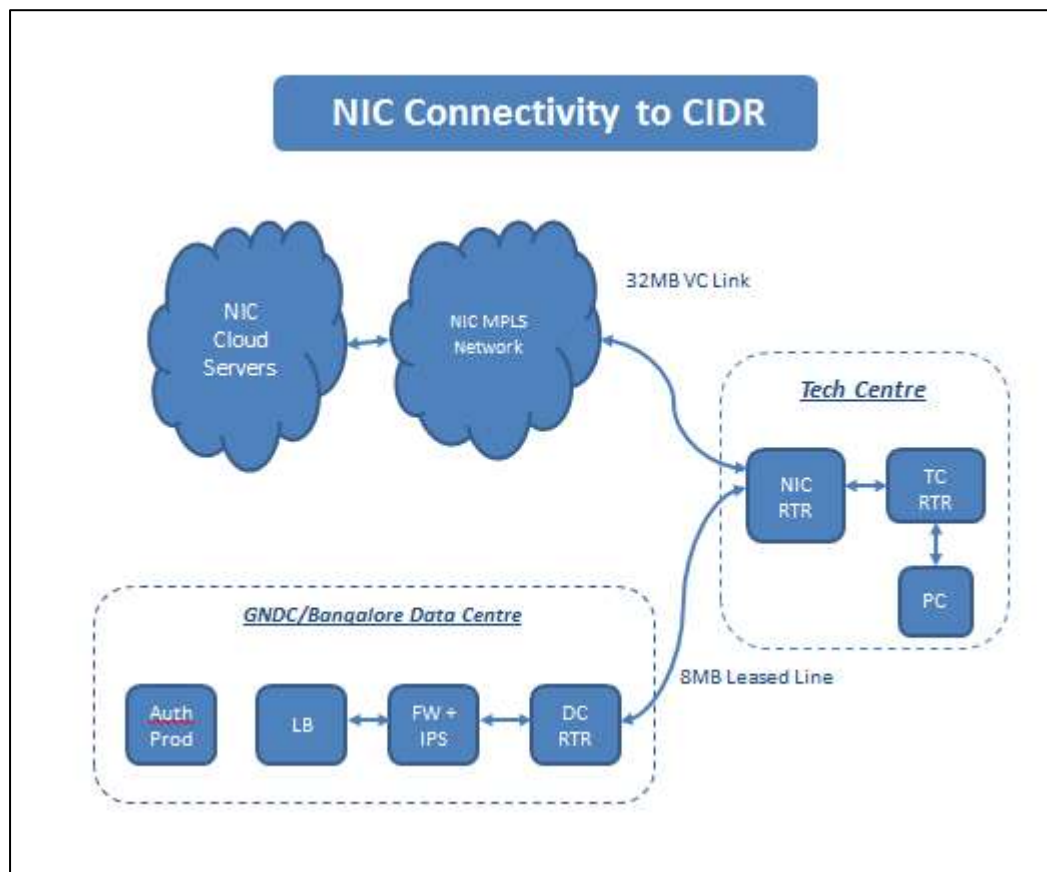
195	Maharashtra	Aurangabad	36,95,928	28,42,912	76.9%
196	Maharashtra	Akola	18,18,617	13,97,966	76.9%
197	Maharashtra	Jalna	19,58,483	14,83,097	75.7%
198	Maharashtra	Pune	94,26,959	70,92,225	75.2%
199	Maharashtra	Sindhudurg	8,48,868	6,30,719	74.3%
200	Maharashtra	Latur	24,55,543	17,87,251	72.8%
201	Maharashtra	Osmanabad	16,60,311	12,04,404	72.5%
202	Maharashtra	Yavatmal	27,75,457	19,22,971	69.3%
203	Maharashtra	Washim	11,96,714	8,07,482	67.5%
204	Maharashtra	Solapur	43,15,527	27,79,219	64.4%
205	Maharashtra	Nanded	33,56,566	21,15,222	63.0%
206	Maharashtra	Hingoli	11,78,973	7,23,821	61.4%
207	Odisha	Puri	16,97,983	12,34,193	72.7%
208	Odisha	Khordha	22,46,341	15,53,896	69.2%
209	Odisha	Dhenkanal	11,92,948	8,10,897	68.0%
210	Odisha	Gajapati	5,75,880	3,85,683	67.0%
211	Odisha	Cuttack	26,18,708	17,46,044	66.7%
212	Odisha	Balangir	16,48,574	11,09,450	67.3%
213	Odisha	Nayagarh	9,62,215	5,97,366	62.1%
214	Odisha	Nuapada	6,06,490	3,64,310	60.1%
215	Puducherry	Pondicherry	9,46,600	9,62,928	101.7%
216	Puducherry	Karaikal	2,00,314	1,54,771	77.3%
217	Punjab	Ludhiana	34,87,882	33,01,837	94.7%
218	Punjab	Faridkot	6,18,008	5,82,937	94.3%
219	Punjab	Jalandhar	21,81,753	20,37,584	93.4%
220	Punjab	Rupnagar	6,83,349	6,38,401	93.4%
221	Punjab	Nawanshahr	6,14,362	5,67,348	92.3%
222	Punjab	Fatehgarh_Sahib	5,99,814	5,44,257	90.7%
223	Punjab	Moga	9,92,289	8,96,193	90.3%
224	Punjab	Barnala	5,96,294	5,24,752	88.0%
225	Punjab	Patiala	18,92,282	16,55,722	87.5%
226	Punjab	Sangrur	16,54,408	14,47,271	87.5%
227	Punjab	Hoshiarpur	15,82,793	13,82,390	87.3%
228	Punjab	Mansa	7,68,808	6,70,133	87.2%
229	Punjab	Kapurthala	8,17,668	7,12,793	87.2%
230	Punjab	Amritsar	24,90,891	21,49,615	86.3%
231	Punjab	Muktsar	9,02,702	7,78,745	86.3%
232	Punjab	Gurdaspur	22,99,026	19,26,775	83.8%
233	Punjab	Bathinda	13,88,859	11,62,557	83.7%
234	Punjab	Tarn_Taran	11,20,070	9,31,928	83.2%
235	Punjab	Ajit Garh(SAS Nagar)	9,86,147	7,78,745	79.0%

236	Rajasthan	Ajmer	25,84,913	19,52,558	75.5%
237	Rajasthan	Jhunjhunu	21,39,658	15,73,213	73.5%
238	Rajasthan	Kota	19,50,491	13,44,641	68.9%
239	Rajasthan	Udaipur	30,67,549	21,01,898	68.5%
240	Rajasthan	Rajsamand	11,58,283	7,75,819	67.0%
241	Rajasthan	Pali	20,38,533	13,67,220	67.1%
242	Rajasthan	Alwar	36,71,999	24,55,211	66.9%
243	Rajasthan	Jaipur	66,63,971	43,99,228	66.0%
244	Rajasthan	Ganganagar	19,69,520	12,80,072	65.0%
245	Rajasthan	Sikar	26,77,737	17,35,440	64.8%
246	Rajasthan	Churu	20,41,172	13,15,831	64.5%
247	Rajasthan	Barmer	26,04,453	16,12,038	61.9%
248	Rajasthan	Chittorgarh	15,44,392	9,49,715	61.5%
249	Rajasthan	Sirohi	10,37,185	6,30,664	60.8%
250	Sikkim	West_Sikkim	1,36,299	1,32,272	97.0%
251	Sikkim	East_Sikkim	2,81,293	2,61,890	93.1%
252	Sikkim	South_Sikkim	1,46,742	1,28,470	87.5%
253	Sikkim	North_Sikkim	43,354	33,135	76.4%
254	Tamil_Nadu	Tiruchirappalli	24,18,366	19,93,912	82.4%
255	Tamil_Nadu	Tiruvallur	24,71,222	23,20,808	93.9%
256	Tamil_Nadu	Thoothukudi	12,68,094	10,91,064	86.0%
257	Tamil_Nadu	Ariyalur	7,52,481	5,90,145	78.4%
258	Tamil_Nadu	Tirunelveli	27,13,858	19,96,723	73.6%
259	Tamil_Nadu	Virudhunagar	19,43,309	14,10,379	72.6%
260	Tamil_Nadu	Nagapattinam	16,14,069	11,57,721	71.7%
261	Tamil_Nadu	Madurai	30,41,038	21,60,727	71.1%
262	Tamil_Nadu	Karur	10,76,588	7,52,142	69.9%
263	Tamil_Nadu	Erode	22,59,608	16,07,520	71.1%
264	Tamil_Nadu	Theni	12,43,684	8,67,278	69.7%
265	Tamil_Nadu	Dharmapuri	15,02,900	10,50,707	69.9%
266	Tamil_Nadu	Salem	34,80,008	24,10,472	69.3%
267	Tamil_Nadu	Thanjavur	24,02,781	16,52,995	68.8%
268	Tamil_Nadu	Pudukkottai	16,18,725	10,99,184	67.9%
269	Tamil_Nadu	Vellore	39,28,106	26,51,407	67.5%
270	Tamil_Nadu	Kanyakumari	18,63,174	12,54,696	67.3%
271	Tamil_Nadu	Perambalur	5,64,511	3,82,187	67.7%
272	Tamil_Nadu	Thiruvallur	12,68,094	8,59,124	67.7%
273	Tamil_Nadu	Coimbatore	34,72,578	22,82,969	65.7%
274	Tamil_Nadu	Dindigul	21,61,367	13,74,202	63.6%
275	Tamil_Nadu	Viluppuram	34,63,284	22,01,765	63.6%
276	Tamil_Nadu	Namakkal	17,21,179	10,90,182	63.3%

277	Tamil_Nadu	Cuddalore	26,00,880	16,43,760	63.2%
278	Tamil_Nadu	Nilgiris	7,35,071	4,63,226	63.0%
279	Tamil_Nadu	Kancheepuram	39,90,897	24,75,247	62.0%
280	Tamil_Nadu	Ramanathapuram	13,37,560	8,10,743	60.6%
281	Telangana	Hyderabad	40,10,238	61,38,727	153.1%
282	Telangana	Adilabad	27,37,738	27,28,271	99.7%
283	Telangana	Khammam	27,98,214	26,48,609	94.7%
284	Telangana	Karimnagar	38,11,738	35,77,311	93.8%
285	Telangana	Warangal	35,22,644	32,75,629	93.0%
286	Telangana	Nizamabad	25,52,073	23,65,860	92.7%
287	Telangana	Nalgonda	34,83,648	31,89,148	91.5%
288	Telangana	Medak	30,31,877	27,42,399	90.5%
289	Telangana	Mahbubnagar	40,42,191	36,10,488	89.3%
290	Telangana	Ranga_Reddy	52,96,741	45,65,140	86.2%
291	Tripura	Khowai	3,27,391	3,07,025	93.8%
292	Tripura	Dhalai	3,78,230	3,48,523	92.1%
293	Tripura	West_Tripura	17,24,619	14,63,319	84.8%
294	Tripura	South_Tripura	8,75,144	7,40,712	84.6%
295	Tripura	North_Tripura	6,93,281	5,77,055	83.2%
296	West_Bengal	Howrah	42,73,099	34,88,630	81.6%
297	West_Bengal	Hooghly	55,20,389	44,71,392	81.0%
298	West_Bengal	Kolkata	44,86,679	30,33,979	67.6%
299	West_Bengal	Murshidabad	71,02,430	46,77,470	65.9%
300	West_Bengal	Malda	39,97,970	24,99,211	62.5%

* The Saturation levels may exceed 100 percent due to reorganization of districts/ immigrants etc.

Annexure II – Technology architecture adopted for the exercise



To process such bulk request, the UIDAI developed an Authentication Client application on behalf of NIC, which is responsible for processing multiple Comma Separated Value files and subsequently undertake Demographic Authentication in bulk mode. Below, is the list of functionalities incorporated within the client:

- i. Read record from input CSV file and write into output CSV file.
- ii. Source & Destination path configurable for files to be processed.
- iii. Transaction name space configurable and should start with "ASD".
- iv. Make Digital signature skip as configurable.
- v. PI / PA data columns as configurable (Y/N) to be included for demo Auth.
- vi. Matching Strategy & Threshold used to be configurable ms="S" & mv="20", configurable.
- vii. O/p file name shall be "<Input filename>_RESP_<YYYYMMDD>.csv"
- viii. O/p file format is Input file columns + Final Result, err, response time, Name matched String, Gender Matched, DOB Matched, Age Matched, State Matched, Pin code Matched, Phone Matched

- ix. The “Name matched String” to contain % of words matched, count of words matched against each matching strategy (Exact | Soundex Refined | Soundex Caverphone| etc. against each record) Example: “PC:62|EX:1|SR:1|SC: |SS: |IN:1”.
- x. The final result (Y/N) in the o/p files to be decided by ASDV replay client, based on only mandatory name matched or not, i.e. if Name is matched and even if other optional demo attributes are NOT matched, override the Auth’s ‘N’ response as ‘Y’. Other optional fields like DOB / YOB / Age / Pin code / State name / Phone are NOT considered in final result, while attribute wise verification result is included from INFO bits (from auth response #7).
- xi. Make the column position for reading the demographic attributes as configurable to handle multiple / any dynamic format of the input CSV file. Column positions (1, 2, 3...) configurable for UID#, Name, Gender, DOB, Age, Pin code, State Name, Local Name, Language Code, phone ... to be included in the demo Auth
- xii. Data Format Validations to be included (for columns whichever are configured to be included for demo auth)...
- xiii. If column value’s format for ‘UID no.’ is not correct (!=12 digit no OR Empty) discard the entire record, it will NOT be sent to auth server as anyway auth servers will fail them, and mark with err as “-1: Not Authenticable”. The vheroff check or err 998 to be populated as per response from Auth API.
- xiv. If column value’s format for ‘Name’ is not correct (Empty/null) discard the entire record, it will NOT be sent to auth server, and mark with err as “-2: Not Authenticable” in output file.
- xv. For Remaining fields / demo attributes if format is in valid send the record with default values. Default values for optional attributes
- xvi. Error = -1 : Aadhaar Number format invalid / Empty
- xvii. Error = 997: Invalid Aadhaar Status
- xviii. Error = 998: Invalid Aadhaar Number
- xix. I/p files should be moved to a different folder / archived. It should get moved automatically to “<source folder path>/archive” folder after processing.
- xx. The “txn” for auth request to be prepared as “ASD:<input_filename (max 20 chars)><timestamp_in_millis>”, so that we can identify such transactions and various aggregation / business reports can be generated from our backend also (Auth BI, if required in future)
- xxi. Logger/s: After each file is processed, we print (on console)..
 - a. Filename picked for processing
 - b. Total Records Processed for that file,
 - c. Time taken (in ms) to process each file
 - d. File moved to archived or not to monitor file archival after processing

Annexure III - Reject Codes with Reasons

Code	Description
100	Basic demographics not matching
200	Address demographics not matching
510,511	Non compliant auth API format in CIDR
563	Duplicate request
567	Unsupported characters – invalid input
811	Missing template in CIDR for a given number
931,935	Technical errors internal to auth server
997	Invalid Aadhaar status
998	Invalid Aadhaar number
1	Network Issue; URL Not found
-1	Invalid Aadhaar format, Non 12 digit or any other characters inside etc or even empty
-2	Name/Local Name format invalid or empty
-3	Gender Format Invalid or Empty
-4	Date of Birth format invalid or empty
-5	State name format invalid
-6	phone/ Mobile format invalid
-7	Pincode format invalid
-8	Age format invalid or empty