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Government of India  
Ministry of Consumer Affairs, Food and Public Distribution  
Department of Food & Public Distribution

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Krishi Bhawan, New Delhi

Dated:11/01/2019

To

Principal Secretary / Secretary,  
Food & Civil Supplies Department,  
All States/UTs.

Subject:-Advisory to improve percentage of validation of seeded Aadhaar with ration cards and e-KYC procedure - reg.

Sir/Madam,

I am directed to forward herewith a copy of advisory to improve percentage of validation of seeded Aadhaar with ration cards and e-KYC procedure prepared by this Department. It is requested to take necessary action on the subject.

2. It is also requested that any suggestion/feedback may also please be furnished to this Department for further incorporation and sharing same with other States/UTs.

Yours faithfully,

Signature valid

Digitally signed by B.K. HEMBROM  
KUMAR HEMBROM  
Date: 2019.01.11 11:16:15 IST  
Reason: Approved

(B.K. Hembrom)

Under Secretary to the Govt. of India

Tele: 011-23383942

Encl:-As above.

Copy to:

1. Sh. Gautam Ghosh, DDG, NIC-HQ, New Delhi.
2. Sh. Yashwant Kumar, ADG, UIDAI, Bangla Sahib Road, Behind Kali Bari Mandir, Gole Market, New Delhi-01.

# Guidelines for validation of Aadhaar Number using Bulk Authentication and e-KYC procedure



**Department of Food & Public Distribution**  
Ministry of Consumer Affairs, Food & Public Distribution  
Government of India

Correct seeding of Aadhaar numbers in Ration Card database by States/UTs is essential to ensure efficient, transparent and targeted delivery of subsidies to eligible beneficiaries. Bulk Demographic Authentication procedure, eKYC process and physical verification mechanisms could be adopted by the States/ UTs to ensure that all ration card/ beneficiary records are seeded with a valid Aadhaar numbers.

**(1) Bulk demographic authentication:** Once the Aadhaar number is provisionally seeded in the ration card/ beneficiary database, States/UTs can use Web Services provided by UIDAI for bulk demographic authentication. To avail this facility, NIC/IT team of States/UTs to develop a small utility which can interact with UIDAI system using their Web Services over AUA/ASA channel. Following steps to be taken by States/UTs to perform bulk authentication of seeded Aadhaar number

**Step 1.** FCS Dept. to sign agreement with NIC or State IT Dept. to avail AUA/ASA Services of UIDAI ( in-case FCS Dept. doesn't have AUA/ASA service)

**Step 2.** State NIC Team / IT team of FCS Dept. to develop small software utility using Web Services provided by UIDAI to send below information to UIDAI server for validation

- a. Aadhaar Number,
- b. Beneficiary Name,
- c. Gender,
- d. Age/Date of Birth/ Year of Birth,
- e. Father's Name/ Mother's Name /Husband's Name

**Step 3.** State to prepare list of beneficiaries (covering above fields) who have yet not validated either through bulk authentication or eKYC process.

**Step 4.** FCS Dept. to take the decision to use demographic fields for validation of beneficiary details with UIDAI System. They may send Beneficiary Name, Gender, Age/DoB/DoY, etc. along with Aadhaar number to UIDAI server but it would be highly recommended to use only Aadhaar number and Beneficiary Name for better results.

**Step 5.** It has been experienced in many States during bulk authentication that sequence of First Name, Middle Name and Last Name may vary in records of UIDAI and Ration Card. While developing utility, State NIC team/ Technical team can make the provision of sending all combination of First Name, Middle Name and Last name in following manner to ensure higher chance of data validation

- a. First Name + Middle Name + Last Name
- b. Last Name + Middle Name + First Name
- c. Last Name + First Name
- d. First Name + Last Name
- e. First Letter of First Name + Last Name
- f. First Letter of Last Name + First Name

Note : Above combinations are indicative, State/UT may add or delete more such combinations based on results they receive after first few rounds of bulk authentication process.

**Step 6. Starting Bulk Authentication Procedure :** After development and testing of Software utility, State NIC team to start sending demographic information to UIDAI server through the utility but it advisable to schedule FPS wise or Block wise validation activity during off-peck time i.e. 6 PM to 8 AM

**Step 7. Results of Bulk Authentication :** Utility automatically sends Aadhaar number and demographic data ( Beneficiary name) to UIDAI server and immediately receives response ( in few seconds). State NIC team may develop a web page within the utility to show results of bulk authentication. It should also show Aadhaar number, ration card data and beneficiary name (one of multiple combinations) which got exactly match with UIDAI database. Sample web page is given below for reference

SNo.	Select All	Valid UID	Member Name As Per AADHAAR	RC Number	Member ID	UID	Member Name	Gender	DOB	AGE	Mobile No
1	<input checked="" type="checkbox"/>			272025869168	01	XXXXXXXXXX650	SABITA DAS	F	01/01/1987	30	XXXXXX9789
2	<input type="checkbox"/>	N	Not Match	272020183085	01	XXXXXXXXXX136	CHAUDHARI GOTU JAGNATTANNATH	M	01/01/1958	59	
3	<input type="checkbox"/>	N	Not Match	272020183085	02	XXXXXXXXXX841	CHAUDHARI SHARADA JAGNNAT	F	01/01/1963	54	
4	<input type="checkbox"/>	Y	VINITA GOTU CHAUDHARI	272020183085	03	XXXXXXXXXX169	CHAUDHARI VINITA GOTU	F	01/01/1982	35	
5	<input type="checkbox"/>			272020183111	02		KUMBHAR RUKHAMABAI RAMADAS	F	01/01/1967	50	
6	<input type="checkbox"/>			272020183111	03		KUMBHAR SUNIL RAMADAS	M	01/01/1980	37	
7	<input type="checkbox"/>			272020183111	06		KUMBHAR RAVINDR RAMADAS	M	01/01/1985	32	
8	<input type="checkbox"/>			272020183111	07		KUMBHAR LALITA RAVINDR	F	01/01/1988	29	
9	<input type="checkbox"/>			272020183111	01		KUMBHAR RAMADAS GOVINDA	M	01/01/1960	57	
10	<input type="checkbox"/>			272020183111	04		KUMBAR RTNABAI SUNIL	F	01/01/1984	33	
11	<input type="checkbox"/>			272020183111	05		KUMBHAR ANIL RAMADAS	M	01/01/1982	35	
2077	<input checked="" type="checkbox"/>			272020183365	10	XXXXXXXXXX878	KOLI DINESH	M	01/01/1990	27	
2078	<input checked="" type="checkbox"/>			272020183365	02	XXXXXXXXXX862	KOLI MIRABAI	F	01/01/1962	55	
2079	<input type="checkbox"/>			272020183365	08		KOLI JAYSHRI	F	01/01/1987	30	
2080	<input checked="" type="checkbox"/>			272020183365	07	XXXXXXXXXX208	KOLI SATSH	M	01/01/1984	33	
2081	<input checked="" type="checkbox"/>			272020183365	11	XXXXXXXXXX015	KOLI MANGESH	M	01/01/1994	23	
2082	<input type="checkbox"/>			272020183370	03		NERKAR SANDIP	M	01/01/1989	28	
2083	<input type="checkbox"/>			272020183370	01		CHUDHARI RAVINDRA UTTAM	M	01/01/1965	52	
2084	<input type="checkbox"/>			272020183370	02		CHUDHARI REKHABAI	F	01/01/2008	9	
2085	<input type="checkbox"/>			272020183370	04		NERKAR SWATI	F	01/01/1992	25	
2086	<input checked="" type="checkbox"/>			272020183379	01	XXXXXXXXXX652	KHATIK SAMMAD VIRAM	M	01/01/1940	77	

**Step 8. Post the result of Bulk Authentication :** It has been observed in the results of many States/UTs that success ratio of bulk authentication is always be lesser than 30% due to difference in the name of UIDAI database and PDS database. Earlier, UIDAI used to allow 60-70% accruacy while matching names but now this accuracy level set as 100% means validation result will be successful only if both names ( as per UIDAI and PDS ) excalty match with each other. Considering above scenarios, States/UTs may take following steps

- a. **Segregation of success results:** State NIC / IT team to flag beneficiaries/ Aadhaar number in PDS database which have got successfully validated from UIDAI system.
- b. **Physical verification of doubtful cases :** Failed cases need to be carefully examined and doubtful cases to be identified for performing physical verification by a concerned officer.
- c. **eKYC through ePoS device :** Remaining failed cases may be considered for eKYC wherever ePoS devices have been installed.

**(2) Physical verification of doubtful cases:** States/UTs have to carefully examined failed cases and identify ration cards which have suspicious transaction patterns like irregular lifting, non-biometric authentication, etc. Such doubtful cases may be considered for physical verification by a concerned officer. The concerned officer are required to individually verify these cases by first crosschecking with the copy of Aadhaar card submitted by the beneficiary during Aadhaar seeding process and make necessary data entry corrections, if any. Minor mismatches (similar information across different data sources that do not have exact match between them) could be flagged for correction and if necessary, for re-verification, with appropriate marks. For cases which still fail, corrective action is recommended through requesting clarification/ additional details from beneficiaries or through undertaking spot visit.

During physical verification, when information in Aadhaar database / RC database is found incorrect, the beneficiaries should be asked to correct them by approaching permanent enrolment centres of UIDAI or through self-service resident portal of UIDAI.

**(2) Validation through eKYC :** States/UTs that have already rolled-out PoS (Point of Sale) devices at Fair Price Shops, can incorporate facility to seed Aadhaar number in the RC database through PoS wherein beneficiary who is physically present is first bio-metrically authenticated for seeding purpose and then Aadhaar number is seeded in the beneficiary database. eKYC authentication is the process wherein the Aadhaar Number, along with other attributes, including biometrics, are submitted online to the UIDAI server for its verification on the basis of information or data or documents available with it. eKYC is best possible alternative to validate Aadhaar number of beneficiaries through ePoS device which have failed during bulk authentication process. States/UTs may adopt following steps to perform e-KYC process

- a. **Upgradation of ePoS software:** States/UTs to instruct System Integrator /NIC team to develop and upgrade ePoS software to perform eKYC of beneficiaries through Aadhaar biometric and OTP authentication. Technical team can make the use of [https://uidai.gov.in/images/resource/aadhaar\\_ekyc\\_api\\_2\\_1.pdf](https://uidai.gov.in/images/resource/aadhaar_ekyc_api_2_1.pdf) document for developing software module of ePoS device.
- b. **Create awareness and organize camps for eKYC :** State Govt. should create awareness amongst beneficiaries and FPS dealer to carry out validation of Aadhaar number using eKYC facility available on ePoS device. In this regard, list of targeted beneficiaries, whom Aadhaar validation is not completed/failed, should be provided at FPSs and necessary instruction to be issued to DFSOs/ FPS dealers to complete their eKYC during monthly foodgrain. Dedicated camps should also be organized at FPSs during idle time (after completion of foodgrain distribution cycle) for completing eKYC of maximum number of PDS beneficiaries.
- c. **Usage of eKYC facility:** The e-KYC API can be used (ONLY with the explicit authorization of the beneficiary via Aadhaar biometric/OTP authentication) by an agency (KUA) to obtain electronic copy of Aadhaar letter. There are primarily

two scenarios under which this API may be used:

**i. First Time Aadhaar Seeding :**

- I. In this case, FPS dealer should capture Aadhaar number and invoke e-KYC API for biometric authentication of beneficiary;
- II. After successful authentication, Electronic copy of Aadhaar letter returned as part of the e-KYC API which contains basic demographic information of beneficiary
- III. Response is encrypted and digitally signed by UIDAI; and
- IV. State Dept. may decide to use Aadhaar OTP if biometric authentication of beneficiary gets failed.
- V. This eliminates collecting photocopy of Aadhaar letter from resident.
- VI. Using the electronic Aadhaar demographic data obtained through this e-KYC API, the FCS Dept. can keep Aadhaar number and other demographic fields in PDS database.
- VII. System should flag respective beneficiary as eKYC compliant

**ii. Validation of seeded Aadhaar number :**

- I. In this case, FPS dealer should capture Aadhaar number and invoke e-KYC API for biometric authentication of beneficiary;
- II. After successful authentication, Electronic copy of Aadhaar letter returned as part of the e-KYC API which contains basic demographic information of beneficiary
- III. Response is encrypted and digitally signed by UIDAI; and
- IV. State Dept. may decide to use Aadhaar OTP if biometric authentication of beneficiary gets failed.
- V. Using the electronic Aadhaar demographic data obtained through this e-KYC API, the FCS Dept. can keep Aadhaar number and other demographic fields against respective beneficiary.
- VI. FCS dept. to instruct State NIC team/ technical team to develop a web page to show details of beneficiary from two sources i.e. PDS database and demographic data obtained UIDAI server. This simple workflow based web page will allow DFSO/AFSO/Inspector to approve the validation of Aadhaar number by comparing data retrieved through the e-KYC API against what is on record within PDS database and
- VII. Once verified, the beneficiary record can be declared as eKYC compliant and transaction trail can be stored for audit.
- VIII. If FCS officer (approver) finds major variation in

demographic details of PDS and UIDAI data then field verification process should be initiated for taking final decision