Guidelines for Enrolment

Contents

1.   General Guidelines to Enrolment Agencies

1.1.   The objective of enrolment is to collect the demographic data after due verification as prescribed by the UIDAI and thereafter collect the biometric data from the enrolees. The data thus collected would be transmitted to the UIDAI for a process of de-duplication and allotment of the UID Number.

1.2.   The Enrolment Agencies will be appointed by the Registrars based on the process as suggested by the UIDAI. The Enrolment Agencies will enter into an Agreement with the Registrars for covering particular geographical area or section of beneficiaries.

1.3.   The Enrolment Agencies will require close co-ordination with the Registrars and the State Government authorities in the process of enrolment. The Enrolment Agencies will have to study the Agreement entered into with the Registrars in detail and acquaint themselves with the scope of work to be done by them. The scope of work could include additional fields required by the Registrars as part of the KYR+.

1.4.   The Enrolment Agencies would work out the plan and methodology for collection of the demographic and biometric data by taking into account the target number of enrolees, the area-specific issues, the terrain and the logistics support. The Enrolment Agencies would select the premises for putting up the enrolment centres and stations in co-ordination with the Registrars/State Governments.

1.5.   The collection of the demographic and biometric data is key element to ensure de-duplication and allotment of unique identification number. Therefore, the Enrolment Agencies will have to devote utmost care and attention in the exercise of capture of the demographic and biometric data. The Enrolment Agencies will ensure that the right talent is deployed for the enrolment exercise. The performance of the operators is to be monitored by their internal monitoring mechanism to ensure that the guidelines are being adhered to in letter and spirit. The Enrolment Agencies will have to put the operators through the training module prescribed by the UIDAI.

1.6.   The Enrolment Agencies would use the client software prepared by the UIDAI for the collection of demographic data and the biometric data. The software will be supported by a User Manual.

1.7.   The Enrolment Agency and his Staff (regular and contractual) would be governed by the safeguards in the Agreement with the Registrar as regards privacy and safety issues. Any violation would attract penal provisions as applicable under the Statute.

1.8.   The detailed guidelines for capture of demographic data and the biometric data and the use of prescribed Forms are provided in this Annexure.

Demographic Data:

1.9. The Demographic Data fields and their standards along with the verification process have been prescribed by the DDSVP Committee. There are four mandatory fields, six conditional fields and two optional fields for collection of Demographic Data. The Enrolment Agency must ensure that these items are captured with utmost care and as per the data type which is indicated in table as Table A below. The data is captured either by Registration through internet, the process of Pre-registration based on data collected from the Registrars or collected during the process of enrolment. In all the three cases it is necessary that the data is verified on the basis of the documents produced, through the system of Introducers or through the NPR. The demographic data shall be collected in the Form prescribed by the UIDAI as given in this Annexure.

1.10. The accuracy of the Demographic Data is important for the overall integrity of the data base and will lead to a smooth process of collection of Biometric particulars and thereafter allocation of Unique Identification Numbers after de-duplication.

1.11. Table A gives the summary of items to be collected from every individual during the process of enrolment. The data fields in detail along with the list of supporting documents to be produced for verification of the data are given in Appendix I to Annexure III.

Table - A

Information	Fields	Mandatory/Optional	Data Type
Personal Details	Name	Mandatory	Varchar (99)
	Date of Birth ##	Mandatory	Date
	Gender	Mandatory	Char (1) – M/F/T
Address Details	Residential Address	Mandatory	8 address lines and pin code.
Parent/ Guardian Details	Father's/ Husband's/ Guardian's Name*	Conditional	Varchar (99)
	Father's/ Husband's/ Guardian's UID*	Conditional	Number (12)
	Mother's/ Wife's/ Guardian's Name*	Conditional	Varchar (99)
	Mother's/ Wife's/ Guardian's UID*	Conditional	Number (12)

Introducer Details	Introducer Name**	Conditional	Varchar (99)
	Introducer's UID**	Conditional	Number (12)
Contact Details	Mobile Number	Optional	Varchar (18)
	Email Address	Optional	Varchar (254)

A flag is maintained to indicate if Date of Birth (DoB) is verified, declared, or approximate.

* For infants, Father/ Mother/ Guardian's name (at least one) and UID is mandatory.

* For children under a particular age, biometric de-duplication will not be done. Hence their UID will be flagged as such until they are biometrically de-duplicated at a later age. Their UID will be linked to at least of the parent's UID.

* For adults, Name of Father/ Husband/ Guardian or Mother/ Wife/ Guardian is mandatory. But, an option will be provided to not specify in the case the adult is not in a position or does not want to disclose.

** For enrolees with no document proof, an "Introducer" should certify his/ her identity.

Biometric Data:

1.12.   The Unique Identification Authority of India (UIDAI) has decided to collect the following biometrics from the enrolees:

- Facial image;

- Iris – both eyes;

- Finger prints – all fingers.

1.12.1. Finger prints are captured in the following sequence:

- Left hand four finger slap;

- Right hand four finger slap;

- Capture of both the thumbs.

1.13.   The above biometrics will be captured in respect of all the enrolees. The detailed procedure for capture of biometrics, the details of devices to be used, the instructions to the operators and the safety precautions to be taken is detailed in Section 6 of this Annexure. The recommended standards for the biometrics capture are listed out in Appendix II to Annexure III.

1.14.   It is to be noted that the client software supplied to the Enrolment Agency as part of the Contract with the Registrar would outline the process sequence and have the necessary quality checks to ensure that the captured images

meet the quality requirements prescribed. However, instances of manual capture and exception handling would be done by the trained operators and supervisors at the Enrolment Centres.

Enrolment flow diagram
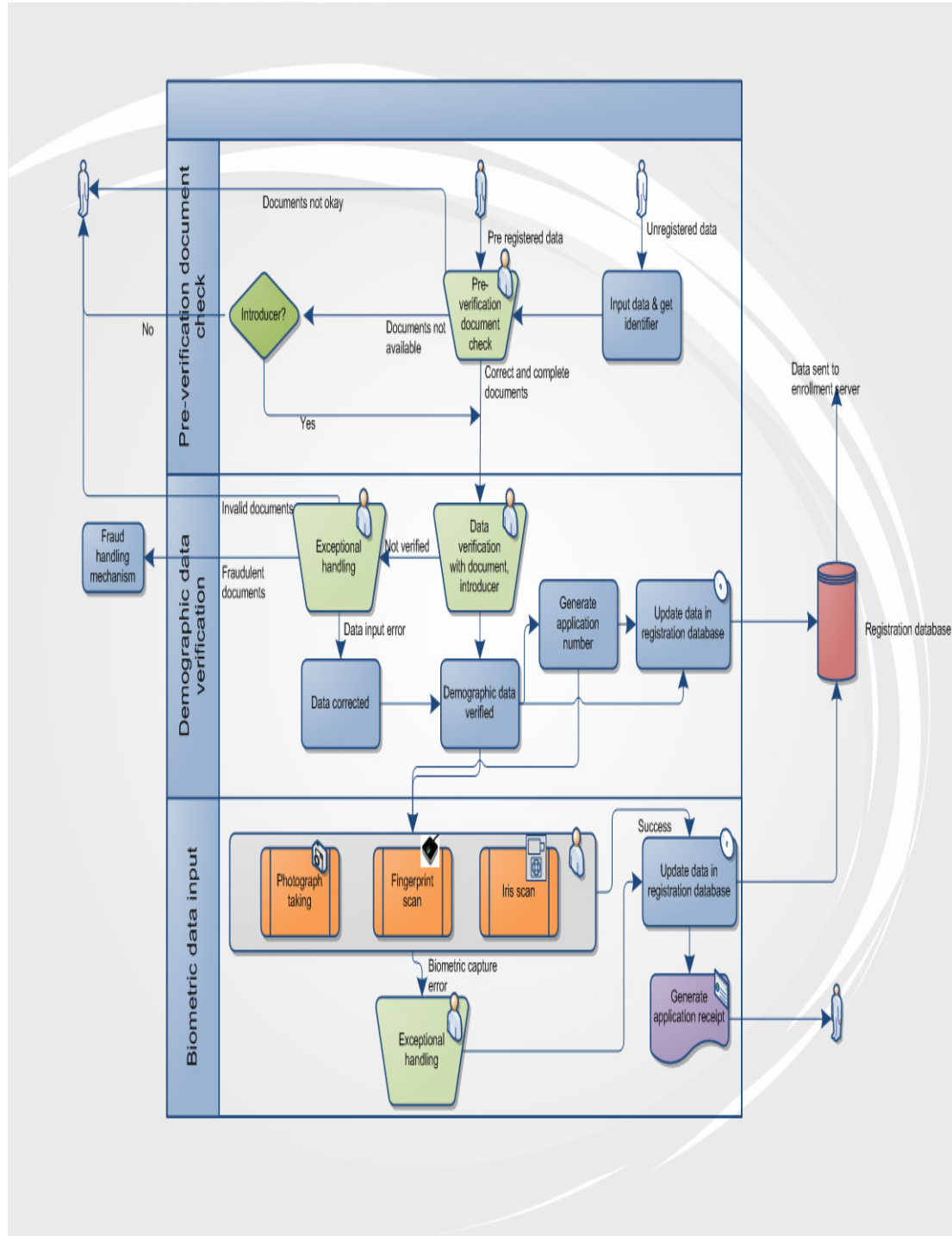
2. Guidelines for setting up Enrolling Centres

2.1. The enrolment Centres are to be set up across the country to facilitate capture of the Demographic and the Biometric Data. The key activity of collection of data takes place in these Centres and therefore, a lot of planning and care needs to be given to this aspect. Each Enrolment Agency will have to set up enrolment Centres to cover the area / section of enrolees assigned to them by the Registrars.

2.2. **Planning**

2.2.1. The plan for the coverage of the enrolees in the area allotted to the enrolling agency should be discussed with the Registrars, the premises at different locations are to be selected and a detailed enrolment schedule is to be worked out.

2.2.2. The details of the area including the terrain, local weather conditions, law and order situation, logistics support etc., are to be assessed in consultation with the Registrars / State Government while preparing a plan for enrolment.

2.2.3. The number of stations can be decided based on the target number of days for completion of enrolment in the particular area or the district and the expected number of enrolees in the area. It should be borne in mind that only 60-70 enrolments can be done by one station in a day.

2.2.4. The Enrolling Agency can visit the village / ward where the enrolment is to be carried out a few days in advance and can get in touch with the representatives of the Registrars for selection of the building / space for housing the enrolment Centres. The enrolling agency can enlist the help of the District Administration for the space to house the Centres, the required furniture and provision of adequate lighting and electrical points.

2.2.5. Typically, the Enrolment Centres set up in an area / district should be able to complete the coverage in 20 – 25 days. This would help focus the efforts of the district/ area administration in the area and also ramp up the publicity in all the modes so as to bring the enrolees to the Enrolling Centres for the enrolment.

2.3. **Preparation**

2.3.1. The Enrolment Agency should co-ordinate with the local district administration right from the planning stage to the actual roll-out of the enrolment.

2.3.2. It should be ensured that the pre-registered data pertaining to the area to be covered by the Enrolling Agency in the period is held with them.

2.3.3. The Enrolment Kit, the accessory equipment, the required manpower, the Forms used for filling up the personal details and the receipts to be given to the enrolees are to be kept ready.

2.3.4. All the systems and biometric instruments should be cleaned and kept ready well before the starting time of the enrolments and the prescribed routines are to be carried out for the hardware in the enrolment Centres. Adequate number of devices should be provided for back up at the Enrolment Centres or for a cluster of enrolment centres.

2.3.5. The software for the capture of demographic data and the biometric data would be provided by the UIDAI. It will be ensured that the operators are trained thoroughly in the execution of the software. The User Manual of the software should be available in every Enrolment Centre for ready reference.

2.3.6. The necessary arrangement for storage and transmission of the data captured from the enrolees should be in place.

2.4. **Layout**

2.4.1. The Enrolment Centre must be set up as far as possible in a spacious hall / room so that there is enough space for movement. If a single large hall is not available, it would be advisable to set up stations in contiguous rooms so that the area is spacious and the process can be coordinated well.

2.4.2. The layout of stations should be in such a manner that the process in one station should not disturb the persons in another station i.e., stations should be located as wide apart as possible.

2.4.3. All the Enrolling Stations should be easily accessible to the enrolees and preferably located in the ground floor.

2.4.4. The furniture (tables and chairs used for operator and the Enrolee) laid out should be ergonomic and should minimize unnecessary movements of the Enrolee for capturing biometric during enrolment.

2.4.5. Clean and neat environment should be maintained in the enrolment Centres.

2.5. **Facilities at the Enrolment Centre**

2.5.1. The enrolment Centre selected must be secured and protected from the natural elements so that there is no damage or loss to the devices and data.

2.5.2. The enrolment Centre should have adequate lighting and facilities such as fans and sufficient electrical points so that the operators and enrolees can go through the process in reasonable comfort. Sufficient shade and chairs/ benches should be provided for the enrolees waiting at the Centre for their turn.

2.5.3. White background should be maintained for the purpose of capturing the facial image.

2.5.4. At least one enrolling station in each Centre should be earmarked for physically challenged individuals, pregnant women, and women with infants,

and elderly enrolees. This station should be clearly marked with a visible banner. The Enrolling Agency should endeavour to provide a ramp at the enrolment centres.

2.5.5. This station should have the facility to capture Biometric Data from enrolees using wheel chair, without asking them to shift to normal chair or make them stand etc.

2.5.6. Lady operators / assistants should be available for enrolling lady enrolees. It would be advisable to enlist the help of volunteers from the village where the enrolment Centre has been set up. With some minimal training the lady volunteer would be able to render the required help to the women Enrolee for capture of biometrics.

2.5.7. Technical personnel for attending power /system / biometric instrument related maintenance problems should be available on call in a centrally located place covering about six enrolment Centres so that the downtime can be minimized.

2.5.8. A check list of items required in an Enrolment Centre / Stations is given below in Section 3 of this Annexure.

2.6. **Process & Publicity**

2.6.1. Posters depicting the process of the enrolment should be displayed in English and the local language in the Enrolling Centre in a prominent place,

preferably with photographs.

2.6.2. To avoid fatigue to the operators, Enrolment Agency should not use the services of the same operator continuously – preferably two operators should man a station alternatively i.e., two shifts covering forenoon and afternoon of the day.

2.6.3. There should be method of rotation of the job to avoid operator fatigue and to ensure a smooth process of enrolment.

Enrolling station showing biometric capturing devices:

2.7.   **Operators**

2.7.1. The training of operators is vital to the quality of capture of demographic and biometric data. The operators should be well trained and should have been put through training module on the enrolment process which includes the User manual for client software used for data capture.

2.7.2. The operators must be uniformed and neat and tidy in appearance. All the operators should be instructed to be polite with the enrolees. Special care must be taken in case of the women and elders.

2.7.3. The layout and the furniture in the enrolment Centres should give maximum comfort to the Enrolee and little fatigue to the operator during enrolment process.

2.7.4. The operator should be able to concentrate on the process without distraction during the process. The Enrolee should not be troubled by being repeatedly asked to change posture. The operator should endeavour to capture Biometric Data at the first instance. Failure may result in nervousness of the Enrolee and lead to further abortive attempts.

2.7.5. Enrolment Agency should ensure that each enrolment Centre is under the control of a supervisor in order to ensure smooth enrolment and for guidance to the operators and enrolees especially in handling exceptional cases.

3. Checklist for erecting Enrolling Centres

The devices are to be as per the standards and specifications laid down by the UIDAI and duly certified by independent certifying agency / agencies empanelled by the UIDAI

3.1. Enrolment Station:

i. Laptop

ii. Iris capturing device

iii. Fingerprint capturing device

iv. Digital/web camera

v. White back ground screen

vi. Sponge for wetting and hand-cleaning cloth

vii. Carry cases to house these devices and for mobility

3.2. Enrolment Centre:

i. Backup power supply (generator) of 2 KVA capacity for every five enrolment stations kept in a centre

ii. Fuel – petrol and kerosene to run the generators

iii. Communication channel like mobile phone, land phone or net for immediate communication with UIDAI /Registrars etc.

iv. Water, soap and towel for cleaning hands

v. Data backup device (external hard disk)

vi. Drinking water

vii. Chairs for waiting enrolees

viii. Banner for the enrolment Centre

ix. Posters depicting enrolment process

x. Sufficient number of tables and chairs for enrolment stations

xi. Material for cleaning biometric instruments and laptops

xii. First aid kit

xiii. ORS kit for areas in extreme heat conditions

xiv. Material required for a separate enclosure to enrol "purdah-nasheen" women.

xv. Adequate lighting

3.3.   **Safety Items**

3.3.1. All the electrical equipment should be properly earthed. It should be ensured that no un-insulated wiring runs on the floor or along the walls. The wiring that is required for the generator backup and for connecting the various devices used for enrolment should be neatly organized to ensure smooth conduct of the process and to ensure safety and security.

3.3.2. Fuel for backup devices or any other inflammable material should be stored away from the enrolment area. Fire safety equipment should be kept handy. The power generator should be kept sufficiently away from the enrolment stations.

3.3.3. Local Emergency Help numbers are to be kept for quick response in case of emergency. Each enrolment Centre should be provided with first aid kits in case of emergency.

3.3.4. Enrolees should not be allowed to carry bags / suitcases or any other material into the enrolment Centres.

4.   Form for collecting Demographic Data

Unique Identification Authority of India provides an enrolment form (specimen given above) for collecting Demographic Data of the enrolees for the enrolment process.

UNIQUE IDENTIFICATION AUTHORITY OF INDIA (UIDAI)

ENROLMENT FORM

Name	
Date of Birth	DD/ MM/ YYYY **Date of Birth Type**
Gender (M/F/T)	
Residential Address	
C/O	
BUILDING	
STREET	
LANDMARK	
LOCALITY	
VILLAGE_TOWN_CITY	
DISTRICT	
STATE	
PINCODE	
COUNTRY	

Father/ Mother/Husband/ Wife/ Guardian's Name	
Father/ Mother/ Husband / Wife / Guardian's UID	
Introducer Name	
Introducer's UID	
Mobile Number	
Email Address	

I hereby declare that:

1. I am voluntarily applying for a unique identification number by providing the above information, my photo, iris and fingerprints.
2.   I have not previously applied for a UID number.
3. The information provided by me is true to the best of my knowledge and belief.
4. I have no objection to my identity being authenticated for delivery of services from time to time by agencies to whom I present the UID number and am aware that the information provided by me for securing the UID number shall be used for authentication of my identity.

General instructions to fill up the form:

1. The Form should be filled up in clear and legible handwriting.

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2. UID is a 12 digit number and shall be written where required in Arabic numerals.

0	1	2	3	4	5	6	7	8	9

3. Name, gender, residential address, father's name etc. shall be written in capital letters. A box shall be left between two separate words.

4. Date of Birth should be written in Arabic numerals in DD/MM/YYYY format.

5. PIN Code, Mobile number or Landline number shall be written in Arabic numerals.

6. E-mail address shall be written in full.

7. The UID number, on allotment will be sent to the Address as given in the Form.

8. The details of fields to be filled in and the nature of field – mandatory / conditional / optional is given below:

Information	Fields	Mandatory/Optional
Personal Details	Name	Mandatory
	Date of Birth ##	Mandatory
	Gender	Mandatory
Address Details	Residential Address	Mandatory
Parent/ Guardian Details	Father's/ Husband's/ Guardian's Name*	Conditional
	Father's/ Husband's/ Guardian's UID*	Conditional
	Mother's/ Wife's/ Guardian's Name*	Conditional
	Mother's/ Wife's/ Guardian's UID*	Conditional
Introducer Details	Introducer Name**	Conditional
	Introducer's UID**	Conditional
Contact Details	Mobile Number	Optional
	Email Address	Optional

A flag is maintained to indicate if Date of Birth (DoB) is verified, declared, or approximate.

* For infants, Father/ Mother/ Guardian's name (at least one) and UID is mandatory.

* For children under a particular age, biometric de-duplication will not be done. Hence their UID will be flagged as such until they are biometrically de-duplicated at a later age. Their UID will be linked to at least of the parent's UID.

* For adults, Name of Father/ Husband/ Guardian or Mother/ Wife/ Guardian is mandatory. But, an option will be provided to not specify in the case the adult is

not in a position or does not want to disclose.
** For enrolees with no document proof, an "Introducer" should certify his/ her identity

5.   Detailed Guidelines for collecting Demographic Data

5.1.   **Data Fields**:

5.1.1.   **The Enrolment Agency** should collect the Demographic Data as required by the UIDAI to meet the requirements of Know Your Resident (KYR). The summary of the data fields to be collected is given as Table A in Section 1 of this Annexure. The detailed field structure has been given in Appendix I to Annexure III.

5.1.2.   The additional fields as required by the Registrar and as indicated in the Agreement with the Registrar can be collected by the Enrolment Agency (KYR+).

5.2.   **Collection of Data:** The UIDAI has provided multiple methods for initial collection of the Demographic Data.

5.2.1.   In order to collect the Demographic Data, the Enrolment Agency can draw upon the data as it exists with the Registrars and import the required data fields into its database. The data as collected in this method would be verified during the enrolment process as per the prescribed procedure for verification.

5.2.2.   The Enrolee has also been given the facility for **furnishing Demographic Data through a web based application** hosted by the UIDAI. The Enrolee would fill in all the data therein (in electronic format) and come for enrolment at the prescheduled (slot booked at the time of registration in the net) time to the enrolment Centre. In this case:

5.2.2.1.   Obtain the record created by the Enrolee with the help of application number provided by the Enrolee (created at the time of registration through web).

5.2.2.2.   Verify the details with documentary proof as mentioned in registration form by the Enrolee.

5.2.2.3.   If there is no documentary proof available with the Enrolee collect all details as declared by the Enrolee and Introducer along with Introducer's UID.

5.2.2.4.   Ask the Enrolee to verify the particulars.

5.2.3.   **The Enrolee brings the filled and duly signed form** (distributed by the Enrolment Agency or downloaded by the Enrolee herself/himself from net). In this case:

5.2.3.1.   Check the form thoroughly to see all the mandatory fields are filled in by the Enrolee. If any deficiencies are noticed, clarify from the Enrolee.

5.2.3.2.   Obtain documentary proofs as prescribed in Appendix I to Annexure III for Name / photo /date of birth and residential address.

5.2.3.3. If no documentary proof is available with the Enrolee, collect all details as declared by the Enrolee as endorsed by the Introducer.

5.2.3.4. Then the Enrolment Agency will make the electronic data entry duly filling all the fields with care.

5.2.3.5. Ask the Enrolee to verify the particulars.

5.2.3.6. When the Enrolee satisfies herself / himself with the details the Enrolment Agency can accept the data.

5.2.4. **When Enrolee enters the enrolment Centre without a filled in form:**

5.2.4.1. Provide pre-printed form to the Enrolee and ask her / him to fill up the form, if he is literate and capable of understanding and filling up the form.

5.2.4.2. Follow the procedure as laid down in the paragraph 5.2.3.1 to 5.2.3.6 above.

5.2.5. When the Enrolee is illiterate or expresses inability to fill up the form the Enrolment Agency should collect Demographic Data from the Enrolee in the following fashion and fill the electronic form. After filling the data follow the instructions as laid down in the paragraphs 5.2.3.1 to 5.2.3.6 above.

5.3. **Guidelines for recording data:**

5.3.1. **Name**

5.3.1.1. Write the name of the person in full in the boxes provided.

5.3.1.2. The Enrolment Agency should verify the proof of identity documents produced by the individual before recording the name.

5.3.1.3. The name of the person in full should be entered in the boxes provided for this purpose. Leave single box between two separate words. Please ensure that the particulars are filled in correctly.

5.3.1.4. It is very important to write the person's name very carefully and **correctly.** For example, the respondent may tell that his name is V. Vijayan whereas his full name may be Venkatraman Vijayan and similarly R. K. Srivastava's full name may actually be Ramesh Kumar Srivastava. Similarly, a female Enrolee may tell her name as K. S. K. Durga while her full name may be Kalluri Surya Kanaka Durga.

5.3.1.5. Ascertain from her/him the expansion of her/his initials and check the same in the documentary evidence produced before recording the name in full.

5.3.1.6. If no documentary proof is available with the Enrolee collect all details as declared by the Enrolee, take print of the data form and get it verified and vetted by the Enrolee and Introducer along with Introducer's UID.

5.3.1.7. In case of difference in the name declared and the one in document (PoI), name that appears in the documents shall be recorded by the Enrolment Agency.

5.3.1.8. If two documentary proofs produced by the Enrolee have variation in the same name (i.e., with initials and full name), the Enrolee's preferred name should be recorded.

5.3.1.9. Sometimes the infants and children may not have been named yet. Please try to ascertain the intended name for the child by explaining to the Enrolee the importance of capturing the name of the individual for allotting UID.

5.3.1.10. In case of non availability of supporting documents for PoI, the name should be recorded with the assistance of the Introducer.

5.3.2. **Date of Birth** (DoB)[1]

Date of Birth Type	

Date of Birth	D	D	/	M	M	/	Y	Y	Y	Y

5.3.2.1. Write date of birth of Enrolment Agency, indicating day, month and year in the relevant boxes provided. Date of birth is one of the important items of information being collected for allotting UID. In most cases there will be documentary evidence for the date of birth of the Enrolee. In such cases 'V' (verified) should be recorded in the date of birth type. In case no document is produced, enter 'D' (declared) for DoB type if the enrolee declares the DoB. If the enrolee is not able to give his exact date of birth the DoB should be arrived at approximately based on some guidance and is to be entered as 'A' (approximate) Some of the situations that an Enrolment Agency is likely to encounter while collecting Demographic Data the question on date of birth of a person are discussed below:

5.3.2.2. **The actual date of birth as per English Calendar is known** and verifiable from the documentary evidence: Record the day (2 digits), month (2 digits) and year (4 digits) as per the acceptable document produced by the Enrolee.

5.3.2.3. **The date of birth is known as per local calendar**: In such cases, convert the date of birth as per local calendar to that of English calendar to the extent possible.

5.3.2.4. **If the month of birth is known in the local calendar**, record the English equivalent month.

5.3.2.5. **Only year of birth is known:** In such situations follow the step-wise approach stated below:

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[1] This procedure for collection of DOB data is adopted from NPR Manual of instructions – RG & Census Commissioner of India.

5.3.2.5.1.   Record the year of birth.

5.3.2.6. **If the Enrolee tells only the year of birth** but is not sure about the month of birth, ask whether the birth was before the rainy season or not. If the birth was before the rainy reason, you may further ask whether the birth was in the month during which some important festivals like New Year's Day, Guru Gobind Singh Jayanti, Makara Sankranti, Pongal, Republic Day, Basant Panchami, Maharishi Dayanand Saraswati Jayanti, Maha Shivratri, Holi, Gudi-Padawa, Ramnavami, Vaisakhi, Bihu, Mahabir Jayanti, Good Friday, Budhpurnima are celebrated and estimate the month of birth. Similarly, if the birth was during or after the rainy season, you may probe and estimate the month of birth by asking whether the birth was in the month during which some important festivals like, Nagapanchami, Janamashtmi, Raksha Bandhan, Independence Day, Ganesh Chaturthi, Onam, Dussehra, Gandhi Jayanti, Diwali, Bhai Duj, Maharishi Valmiki Jayanti, Chhath Puja, Guru Nanak Jayanti, Ayyappa Festival, Christmas festival are celebrated.

5.3.2.7. Also estimate the day in these cases appropriately and record the same in the space provided.

5.3.2.8. In all such cases, write "A" as DOB Type.

5.3.2.9. **Year of Birth is not known but age in completed years is known:** In such cases, subtract the age from the present calendar year and record the same as the year of birth. Follow the steps mentioned above to arrive at the month and day of birth and record the same at the appropriate place. In all such cases, write 'D' in the box provided.

5.3.2.10.**Neither date of birth nor age is known:** In such cases, you have to estimate the day, month and year of birth through probing questions or with the help of the Introducer. Some examples of probing methodology to estimate the year are depicted below. The month of birth may be estimated following the step mentioned above.

5.3.2.11.The Enrolee may be assisted to arrive at the correct year of birth by stimulating her/his memory with reference to any historical event, etc. well known in the area such as a war, flood, earthquake, change in political regime, etc. Examples include: First World War (1914-1918), Dandi Salt march (1930), Quit India movement (1942), India's independence (1947), India's war with China (1962), war with Pakistan (1965), liberation of Bangladesh (1971), Asiad Games (1982), India's win in the cricket world cup (1983) etc. relating the birth of a person with the year when an important event has occurred, you can arrive at the year of birth of the person**.** In all such cases, write 'A' in the box provided.

5.3.2.12.Sometimes the year of birth/age can be ascertained with reference to the year of birth/age of another person of known year of birth/age, who may be

available immediately or that of a well known person of the village such as Headman of the village. A person can then easily say whether she/he was older or younger than such a person any by how many years. This will help the Enrolment Agency to find the year of birth/age more precisely. If Enrolment Agency can estimate age but not the year of birth, use the para 5.3.2.9 to arrive at the year of birth from estimated age. In all such cases, write 'A' in the box provided.

5.3.2.13. In the case of women sometimes it becomes difficult to know the actual date of birth or age. If a woman is not aware about her age and is also unable to report the year of her birth, Enrolment Agency will have to further probe to estimate her year of birth. One way of estimating it is to find the date of birth of her eldest living son or daughter and her own age at the time when she gave birth to this child. Subtract her age at the time of birth or her child from the 4 digit year of birth of the child to get a fair estimate of her year of birth. In all such cases, write 'A' in the box provided.

5.3.2.14. If a woman is not able to tell her age at the time when the first child was born, try to ascertain her age at the time of marriage (or her age at the time or consummation of marriage) and the interval between her marriage and the birth of her eldest child. Adding these two figures with the age of her eldest child will determine her current age. In all such case, write 'A' in the box provided.

5.3.2.15. If a woman does not know her age at marriage, try to find out the difference between her age from the age of her husband whose year of birth may be known. Use this to record the woman's year of birth. In all such cases, write 'A' in the box provided.

5.3.2.16. If the Enrolee does not know the date of birth or age and probing also does not help in determining the age of the Enrolee, Enrolment Agency will have to estimate her/his age by using best judgment. Remember this is last resort to be used only when all your efforts at probing the age have failed. After determining the age, use the para 5.3.2.9 to record the year of birth. In all such cases, write "A" in the box provided.

5.3.2.17. In all cases where day and month of birth are not known, estimate the day and month of birth through steps mentioned above. In all such cases, write "A" in the box provided.

5.3.3. **Gender:**

5.3.3.1. Gender has to be recorded by the Enrolment Agency as declared by the Enrolee in the box provided by recording Male, Female or Transgender 'M' or 'F' or 'T' respectively.

5.3.4. **Residential Address:**

5.3.4.1. Record the residential address in the boxes provided.

5.3.4.2. The address should be recorded as available in the documentary evidence produced by the Enrolee in the space provided. Leave space between two words. Please ensure that the particulars are filled up correctly.

5.3.4.3. In case any of the particulars (optional in nature) are not available that field should be left blank as per guidelines given below.

5.3.4.4. In line 1 of the address capture "care of" person's name if any. (Usually this has to be captured for children and old age people living with parents and children respectively). If not available, leave the Address line 1 blank.

5.3.4.5. Generally in a village in rural areas, Building number, House number etc. are not available. If not available leave the address line 2 blank.

5.3.4.6. Write the Street Name, if any, in Address line 3, otherwise leave the space blank.

5.3.4.7. Write major/minor landmark if any in address line 4 otherwise leave the space blank.

5.3.4.8. Write name of Mohalla/Locality/Post Office in address line 5, otherwise leave the space blank.

5.3.4.9. Name of the village is to be written in address line 6.

5.3.4.10. Write the name of District and State in address line 6 and 7.

5.3.4.11. Ascertain the Postal Index Number Code (PIN code) and record in the boxes.

5.3.5. **Parent/ Spouse /Guardian Information (Conditional)**

5.3.5.1. Name of the father / husband / guardian or Mother / Wife / Guardian is mandatory for all. If they are enrolled their UID should be recorded.

5.3.5.2.   An option will be provided to not specify this field in case the adult is not in a position or does not want to disclose.

5.3.5.3. If the UID number is not available, then one obviously cannot record it.

5.3.5.4. In case of children below the age of 6 years one of the parents' or guardian's name and UID is mandatory and shall be recorded.

5.3.5.5. If the child's father /mother / guardian has / have not enrolled and / or do / does not possess an UID at the time of enrolment, the enrolment of that child cannot be done unless the above requirements are fulfilled.

5.3.6. **Relationship type (Conditional)**

5.3.6.1. This field is mandatory if the information in the above field is available; otherwise leave this field as blank.

5.3.6.2. Here the relationship type of the above field to be recorded as "F" for Father, "M" for Mother, "H" for Husband, "W" for Wife and "G" for Guardian.

5.3.7. **Introducers Name (Conditional)**

5.3.7.1. Name of the Introducer has to be recorded in this field in case where Enrolee is not able to produce any documentary evidence as PoI and PoA.

5.3.7.2. When the Enrolee depends on Introducer for proof of verification, the UID of the Introducer is mandatory.

5.3.8. **Mobile Number (optional)**

5.3.8.1. If the Enrolee possesses and is willing to provide his/her mobile number this optional field can be filled in. The Enrolee can provide land line number if he wants in place of mobile number.

5.3.9. **Email address (optional)**

5.3.9.1. If the Enrolee possesses and is willing to provide his/her e-mail ID this optional field can be filled in.

6. Detailed Guidelines for collecting Biometric Data

6.1. The biometrics are to be collected by the Enrolling Agency based on the standards laid down by the UIDAI. The recommended standards for the capture of facial image, finger prints and the iris are given in Appendix II to Annexure III.

6.2. The devices are to be procured by the Enrolling Agencies. The standards for collecting Biometric data are given in Appendix II to Annexure III. The software provided by the UIDAI has an inbuilt quality check which ensures capture of the biometrics as per the standards laid down by the UIDAI.

6.3. However, the following guidelines are detailed for the enrolling agency to take note of and for compliance.

6.3.1. The computer will be connected to the biometrics devices to constitute the enrolment Centre.

6.3.2. The biometric devices are to be maintained in a state of operational readiness by undertaking the maintenance routines as prescribed in the Technical Manuals.

6.3.3. Sufficient backup devices are required to be held by the Enrolling Agency so that the process of enrolment does not halt at any stage. The Enrolling Agency may note that penal provisions have been built into the RFP in case the process is halted for reasons attributable to them.

6.3.4. It is very important to pay attention to the ergonomics of the set up to get the best possible biometrics. An important factor in obtaining better image quality is the operational process.

6.3.5. There should be a hood / cover to ensure that the ambient light is not too intense in order to avoid poor quality fingerprints.

6.3.6. Operators will be trained to guide the Enrolee's hand and apply pressure if necessary to obtain best possible image quality.

6.3.7. Arrangements must be made by the Enrolment Agencies for having assistance from the trained lady operators if the Enrolee happens to be a lady.

6.3.8. If the initial capture is unsatisfactory, the operator will be trained to provide corrective measures such as wiping fingers with a wet cloth or applying lotion.

6.3.9. Only after all such measures are exhausted in five attempts, will the operator be able to override the quality gate and resort to "manual capture". The final decision will be taken by the Enrolment Agency to take the "best possible" image.

6.3.10. Once the image has been captured, one can perform basic quality check and image improvement.

6.4. **Capture of Facial Image**

The enrolee should be properly guided by the operator to occupy the chair in front of the enrolment station. The enrolee should be instructed to be seated properly with their back upright and their face towards the camera. Guidelines for each of the parameters that influence the quality of facial image capture are given below.

6.4.1. **Enrolee Position:** For capturing facial image, it is advisable for the operator to adjust the camera instead of the Enrolee to position herself/himself at the right distance or in the right posture.

6.4.2. **Focus:** The capture device should use auto focus and auto-capture functions. The output image should not suffer from motion blur, over or under exposure, unnatural coloured lighting, and radial distortion. Interlaced video frames are not allowed.

6.4.3. **Expression:** Expression strongly affects the performance of automatic face recognition and also affects accurate visual inspection by humans. It is

strongly recommended that the face should be captured with neutral (non-smiling) expression, teeth closed and both eyes open.

6.4.4. **Illumination:** Poor illumination has a high impact on the performance of face recognition. It is difficult for human operators to analyze and recognize face images with poor illumination. Proper and equally distributed lighting mechanism should be used such that there are no shadows over the face, no shadows in eye sockets, and no hot spots.

6.4.5. **Eye Glasses:** If the person normally wears glasses, it is recommended that the photograph be taken with glasses. However, the glasses should be clear and transparent so that pupils and iris are visible. If the glasses are with tint, then direct and background lighting sources should be tuned accordingly.

6.4.6. **Accessories**: Use of accessories that cover any region of the face is not permitted.

6.4.6.1. However, accessories like eye patches are allowed due to medical reasons.

6.4.6.2. Further, accessories like turban are also allowed as religious practices.

6.4.6.3. Operators need to be trained to obtain the best possible face images that satisfy requirements.

6.5. **Fingerprint Capture**

6.5.1. **Image Capture:** The images of all the ten fingers are to be captured. A slap capture device can capture up to four plain fingers in one scan. The fingerprints must be captured in the sequence of slaps of four fingers of left hand, right hand followed by the two thumbs.

Methodology for capture

6.5.2. **Left Hand Fingerprints:** The Enrolee should be requested to place all four fingers of the **left hand** to platen of the fingerprint scanner for the four-finger capture to ensure good contact and maximize the area of the captured fingerprints.

6.5.3. If **automatic** capture does not happen, the operator should force the capture through option available in the enrolment software. The capture software will allow forced capture only after at least one attempted automatic capture for that Enrolee.

6.5.4. The operator should visually check the image for quality and for typical problems. In case there are problems go back to steps above to retry the capture.

6.5.5. If capture is still not possible, move on to the next step to capture the fingerprints of the right hand.

6.5.6. **Right Hand Fingerprints:** The Enrolee should be requested to place all four fingers of the **Right Hand** to platen of the fingerprint scanner for the four-finger capture to ensure good contact and maximize the area of the captured fingerprints.

6.5.7. If **automatic** capture does not happen, the operator should force the capture through option available in the enrolment software. The capture software will allow forced capture only after at least one attempted automatic capture for that Enrolee.

6.5.8. Visually check the image for quality and for typical problems. In case there are problems go back to steps above to retry the capture.

6.5.9. If capture is still not possible, move on to the next step to capture the fingerprints of the two thumbs.

6.5.10. **Two Thumbs:** The Enrolee should be requested to place **Two Thumbs** to platen of the fingerprint scanner for the capture to ensure good contact and maximize the area of the captured fingerprints.

6.5.11. If **automatic** capture does not happen, the operator should force the capture through option available in the enrolment software. The capture software will allow forced capture only after at least one attempted automatic capture for that Enrolee.

6.5.12. Visually check the image for quality and for typical problems. In case there are problems go back to steps above to retry the capture.

6.6.   **Iris Capture**

6.6.1. Iris pattern of each eye is not correlated, and gives two independent biometric feature sets. It assures correct assignment of left and right eyes and allows for more accurate estimation of roll angle.

6.6.2. In order to obtain good quality template, the iris image diameter should be a minimum of 170 native pixels.

6.6.3. In order to retain sufficient image surrounding the iris for the purpose of identifying the left or right eye as well as for a more accurate iris segmentation, the margins around the iris portion of the image need to be at least 50% of the iris diameter on the left and right sides of the image, and a least 25% of the iris diameter on the top and bottom of the image.

6.6.4. The capture device should be more than 300 mm away from the Enrolee to be considered non-intrusive.

6.6.5. The capture device should use auto focus and auto-capture functions.

6.6.6. In special circumstances where the Enrolee has to position herself or himself, the capture device should be more than 100mm away but the device should use a visor or other mechanical alignment aid to enable the Enrolee to position themselves.

6.6.7. In order to provide an acceptable level of usability and ease of alignment, the camera must allow for some variability in the position of the iris centre relative to the camera. This variability is defined by position tolerances in the horizontal, vertical, and axial dimensions that together define a volume (the "capture volume") within which the centre of the iris must be located in order to enable image capture.

6.6.8. For two eye capture devices, the capture volume dimensions for devices without mechanical alignment aids are 19 mm wide, 14 mm high, and 20 mm deep, and for devices with such aids, 19 mm wide, 14 mm high, and 12 mm deep.

6.6.9. The iris image capture device must be capable of capturing light in the range of 700 to 900 nanometres. The camera's near infrared illuminator(s) must have a controlled spectral content, such that the overall spectral imaging sensitivity, including the sensor characteristics, transfers at least 35% of the power per any 100 nm-wide sub-band of the 700 to 900 nm range.

6.6.10. The iris image capture sensor shall use progressive scanning.

6.6.11. Illumination shall be compliant with illumination standard IEC 825-1 and safety specification ISO 60825-1.

6.6.12. In order to achieve acceptable recognition accuracy, the iris acquisition sensor must achieve a signal-to-noise ration of at least 36dB.

6.6.13. Within the frequency range of interest, 700 to 900 nm, the iris sensor shall generate images with at least 8 bits per pixel.

6.6.14. The operator and not the Enrolee will handle the capture device.

6.6.15. The Enrolee will be required to sit (or stand) in a fixed position, like taking a portrait photograph.

6.6.16. The iris capture device or the connected computer would be able to measure the iris image quality. An initial image quality assessment would be done to provide feedback to the operator during the capture process. The device alerts the operator if the captured iris image is of insufficient quality.

6.6.17. The iris capture process is sensitive to ambient light. No direct or artificial light should directly reflect off Enrolee's eyes.

7.   Privacy and Security

7.1.   The Unique Identification Authority of India (UIDAI) accords highest importance and primacy to the security of data collected on the enrolees who enrol themselves to obtain Unique Identification Numbers. It is the responsibility of the enrolling agencies to make sure that the data is kept in a very secure and confidential manner and under no circumstances shall they use the data themselves nor part with the data to any other agency than the UIDAI. Privacy of an individual's data is accorded utmost importance by the UIDAI. If there is any violation of privacy by the enrolling agency or through its employees, contractual or otherwise, there shall be a breach of contract, apart from attracting the penal provisions of the Act which will govern the operations of the Authority. Detailed guidelines in this regard will be circulated separately by the UIDAI.

7.2.   Therefore the enrolling agencies are advised to be cautious and not violate the stipulations as above.

8.   Data Storage and Transmission

8.1.   The Unique Identification Authority of India (UIDAI) will separately prescribe the methods by which the data has to be transferred to the Authority for storage in Central Identities Data Repository (CIDR). The guidelines from UIDAI will relate to the transfer of data into specific memory devices and

transporting them through a secure network or physically by the postal or courier services to the address which will be specified. The enrolling agencies are therefore advised to obtain these instructions before they proceed to collect the demographic and Biometric Data of the willing enrolees.

8.2.   The UIDAI will also issue separate instructions on the form of capture and storage for the PoI and PoA documents.

Appendix I to Annexure III

Field details and List of documents for verification of Demographic Data

Details of the fields

a) **Name**

Name of Resident	
Field Name	NAME
Data Type	Varchar (99)
Mandatory / Optional	Mandatory
Specification Owner	DIT (MDDS Standard)
Valid Values and Default Value	---
Language Support	Yes. Other than English, it will also be stored in one official Indian language. Data storage will be based in UTF-8. An additional Indian language code (Indian Language codes as specified under DIT standards) will also be maintained for transliteration purposes. Specific guidelines such as handling "matras" on hand-written forms will be provided by UIDAI as part of Registrar on-boarding process.
Description	Name of the resident.
Display and Print Specifications	---

Support PoI Documents Containing Name and Photo
1. Passport
2. PAN Card
3. Ration/ PDS Photo Card
4. Voter ID
5. Driving License
6. Government Photo ID Cards
7. NREGS Job Card
8. Photo ID issued by Recognized Educational Institution
9. Arms License
10. Photo Bank ATM Card
11. Photo Credit Card
12. Pensioner Photo Card
13. Freedom Fighter Photo Card
14. Kissan Photo Passbook
15. CGHS / ECHS Photo Card
16. Address Card having Name and Photo issued by Department of Posts
17. Certificate of Identify having photo issued by Group A Gazetted Officer on letterhead

b) **Date of Birth(DOB)**

Date of Birth	
Field Name	DOB
Data Type	Date
Mandatory / Optional	Mandatory
Specification Owner	DIT (MDDS Standard)
Valid Values and Default Value	---
Language Support	---
Description	Date of Birth of the resident.
Display and Print Specifications	Print and display format should be DD/MM/YYYY

Supported Proof of DoB Documents
1.　　　Birth Certificate
2.　　　SSLC Book/Certificate
3.　　　Passport
4.　　　Certificate of Date of Birth issued by Group A Gazetted Officer on letterhead

c) **Gender**

Gender	
Field Name	GENDER
Data Type	Char (1)
Mandatory / Optional	Mandatory
Specification Owner	ORGI
Valid Values and Default Value	"M" – Male, "F" – Female, "T" – Transgender
Language Support	---
Description	Gender of the resident
Display and Print Specifications	---

d) **Residential Address**

Residential Address	
Field Name	RESIDENTIAL_ADDRESS
Data Type	Address (see address structure details below)
Mandatory / Optional	Mandatory
Specification Owner	Dept. of Post
Valid Values and Default Value	---
Language Support	Yes. Other than English, it will also be stored in one official Indian Language. Data storage will be based in UTF-8. An additional Indian Language code (Indian language codes as specified under DIT standards) will also be maintained for transliteration purposes.
Description	A verifiable address where resident lives normally.
Display and Print Specifications	Format should be (empty values/lines not printed): C/o Person Name Building Street Landmark, Locality Village/Town/City, District State - Pin Code

Address Structure			
Address Field	**Description**	**Data Type**	**Mandatory / Optional**
CARE_OF	Field to capture "C/o" person name	Varchar (60)	Optional
BUILDING	Door/House/flat/Bldg number and name	Varchar (60)	Mandatory
STREET	Street number and name	Varchar (60)	Optional
LANDMARK	Major/Minor Landmark	Varchar (60)	Optional
LOCALITY	Locality/Area/Suburb/ Sector/Block	Varchar (60)	Optional
VILLAGE_ TOWN_CITY	Village/Town/City	Varchar (8) for code and Varchar (50) for name (stored as code*)	Mandatory
DISTRICT	District	Varchar (4) for code and Varchar (50) for name (stored as code*)	Mandatory
STATE	State	Varchar (2) for code and Varchar (50) for name (stored as code*)	Mandatory
PINCODE	Postal code for an area	CHAR(6)	Mandatory
COUNTRY	Country. Currently not used on forms.	Varchar (3) for code and Varchar (50) for name (stored as code*)	Mandatory
* All region codes are based on "Land Codification" from ORGI			

Supported PoA Documents Containing Name and Address	
1.	Passport
2.	Bank Statement/ Passbook
3.	Post Office Account Statement/Passbook
4.	Ration Card
5.	Voter ID
6.	Driving License
7.	Government Photo ID cards
8.	Electricity Bill (not older than 3 months)
9.	Water bill (not older than 3 months)
10.	Telephone Landline Bill (not older than 3 months)
11.	Property Tax Receipt (not older than 3 months)
12.	Credit Card Statement (not older than 3 months)
13.	Insurance Policy
14.	Signed Letter having Photo from Bank on letterhead
15.	Signed Letter having Photo issued by registered Company on letterhead
16.	Signed Letter having Photo issued by Recognized Educational Instruction on letterhead
17.	NREGS Job Card
18.	Arms License
19.	Pensioner Card
20.	Freedom Fighter Card
21.	Kissan Passbook
22.	CGHS / ECHS Card
23.	Certificate of Address having photo issued by MP or MLA or Group A Gazetted Officer on letterhead
24.	Certificate of Address issued by Village Panchayat head or its equivalent authority (for rural areas)
25.	Income Tax Assessment Order
26.	Vehicle Registration Certificate
27.	Registered Sale / Lease / Rent Agreement
28.	Address Card having Photo issued by Department of Posts
29.	Caste and Domicile Certificate having Photo issued by State Govt.

e) **Parent/Spouse/Guardian Information**

Father/Husband/Guardian and Mother/Wife/Guardian Information	
Field Name	NAME and UID
Data Type	Same as Name and UID
Mandatory / Optional	Name of either Father/Husband/Guardian or Mother/Wife/Guardian is mandatory for all. But, an option will be provided to not specify in the case the adult is not in a position or does not want to disclose. In the case of children, both Name and UID of at least one parent/guardian is mandatory.
Specification Owner	DIT (MDDS Standard)
Valid Values and Default Value	---
Language Support	Yes. Other than English, it will also be stored in one official Indian Language. Data storage will be based in UTF-8. An additional Indian Language code will also be maintained for transliteration purposes.
Description	Name and UID of parent/guardian.
Display and Print Specifications	---

f) **Relationship Type**

Relationship Type	
Field Name	RELATIONSHIP_TYPE
Data Type	Char (1)
Mandatory / Optional Specification Owner	Mandatory when Parent/Spouse/Guardian data is provided UIDAI
Valid Values and Default Value	"F" – Father, "M" – Mother, "H" – Husband, "W" – Wife, "G" – Guardian
Language Support	---
Description	Flag used to indicate. Two separate flags will be stored in database - one for Father/Husband/Guardian and another for Mother/Wife/Guardian.
Display and Print Specifications	---

g) **Introducer Information**

Introducer Information	
Field Name	INTRODUCER_NAME and INTRODUCER_UID
Data Type	Varchar (99) and Number (12)
Mandatory / Optional	Optional
Specification Owner	UIDAI
Valid Values and Default Value	---
Language Support	---
Description	In the case of residents having no documents as proof, they can be "introduced" by any approved "Introducer" (see KYR process chapter for details on Introducer system). Both Name and UID will be captured in the form although only Introducer UID will be stored against the Resident's record.
Display and Print Specifications	---

h) **Mobile Number**

Mobile Number	
Field Name	RESIDENT_PHONE
Data Type	Varchar (18)
Mandatory / Optional	Optional
Specification Owner	DIT (MDDS Standard)
Valid Values and Default Value	---
Language Support	---
Description	Mobile phone number of the resident. This can be used for enhanced authentication and alerting. Landline also will be accepted if mobile number is not available.
Display and Print Specifications	---

i) **Email Address**

Email Address	
Field Name	RESIDENT_EMAIL
Data Type	Varchar (254)
Mandatory / Optional	Optional
Specification Owner	DIT (MDDS Standard)
Valid Values and Default Value	---
Language Support	Yes.
Description	Email address of resident.
Display and Print Specifications	---

Appendix II to Annexure III

Standards for collecting Biometric Data

Face Image Capture

Table below summarizes key guidelines for face images.

Key Decisions	Summary of Decisions
Enrolment	
Image capture	Full frontal, 24 bit colour
Digital / Photographic requirements	Per ISO 19794-5 Section 7.3, 7.4, 8.3 and 8.4 with Section 8.3 of Technical Corrigendum 2. Inter-eye distance – minimum 120 pixels.
Pose	Per ISO 19794-5 Section 7.2.2
Expression	Neutral expression. Specified as best practices.
Illumination	Per ISO 19794-5 Section 7.2.7
Eye Glasses	Per ISO 19794-5 Section 7.2.11
Accessories	Permissible for medical and ethical reasons only.
Multiple samples of face	Yes. Recommended for automatic face recognition.
Operational	Per ISO 19794-5 Section 7.2.4 – 7.2.10
Assistance	Yes. Specified as best practices.
Segmentation and feature extraction	Recommended for automatic face recognition
Quality check	Yes. Specified as best practice.
Storage & compression	Uncompressed image strongly recommended. For legacy reasons, lossless JPEG 2000 colour accepted.
Authentication	
Image capture	Same as enrolment
Compression	JPEG 2000 colour compression recommended. Compression ratio to be less than 10:1
Number of Images	One full frontal image

Fingerprint Capture

Table below summarizes key guidelines for fingerprint images

Key Decisions	Summary of Decisions
Enrolment	
Image capture	
Plain or rolled	Plain, live scan
Number of fingers	Ten
Device characteristics	Setting level 31 or above, EFTS/F certified
Quality check	Yes – Specified as best practice. Avoid NFIQ quality 4 and 5 level fingerprints.
Operational	
Assistance	Yes – Specified as best practice
Corrective measure	Yes – Specified as best practice
Storage & transmission Compression	Uncompressed image strongly recommended. For legacy reasons, JPEG 2000 or WSQ compression accepted.
Storage format	Per ISO Section 8.3 No deviation necessary
Minutiae format	Per ISO Section 8.3. No deviation necessary
Multi-finger fusion algorithm	Recommended. Application dependent.
Authentication	
Image capture	
Number of fingers	No minimum, no maximum. Application dependent. Recommended as best practice
Any finger option	Yes. Recommended as best practice
Retry	Maximum 5. Recommended as best practice.
Device characteristics	Setting level 28 or above
Transmission format	Per ISO. No tailoring necessary
Compression	JPEG 2000 compression recommended. Compression ratio to be less than 15:1
Minutiae format	Per ISO 19794-2. No tailoring necessary

Iris Capture

Table below gives the parameters for capture of the iris image

Key Decisions	Summary of Decisions
Enrolment	
Image	Two eyes, > 140 pixel image diameter (170 pixel preferred), image margin 50% left and right, 25% top and bottom of iris diameter
Device Characteristics	Tethered, autofocus, continuous image capture, exposure < 33 mille-second, distance >300 mm for operator control, > 100mm Enrolee control
Operational	Operator controlled strongly preferred. No direct natural or artificial light reflection in the eye, capture location: indoor.
Segmentation	Non-linear segmentation algorithm
Quality Assessment	Per IREX II recommendations
Compression & Storage	ISO 19794-6 (2010) data format standard as tailored in Section 11 JPEG 2000 or PNG lossless compression, KIND_VGA of Table A.1 of ISO 19794-6 (2010)
Authentication	Same as enrolment except One and / or two eyes JPEG 2000