REQUEST FOR PROPOSAL

Selection of MDM & De-duplication Tool

for

Development, Implementation and Maintenance of
Social Protection Delivery Platform (SPDP) in Odisha

(RFP Ref. No. OCAC-SEGP-SPD-0043-2021-22002)

Odisha Computer Application Centre

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Last date for submission of Bid	22.02.2022 by 12 noon
Date for opening of Technical Bid	22.02.2022 at 12:30 PM
Date for Technical Presentation	To be intimated later
Date for opening of Commercial Bid	To be intimated later

1 Introduction to the Social Protection Delivery Platform (SPDP) of Odisha

1.1 Vision

SPDP is envisioned to be a one-stop platform for beneficiary registration and update processes across the social protection schemes and will be an integrated social registry that would serve as a critical foundation for various program operations by facilitating seamless data sharing.

A successful implementation of SPDP will enable various State departments to streamline their scheme management processes, facilitate data-driven policymaking and better expenditure planning for the Government, as well as simplify the benefit delivery experience for beneficiaries. The benefits that various stakeholders stand to gain from SPDP are outlined below:

- Government authorities [State/National] and various Departments
  - It will help in managing inclusion, exclusion and duplication errors in beneficiary records in Odisha
  - It will facilitate the creation of a single source of truth registry on 'socio-economic' attributes for Odisha's residents
  - It will aid Government efforts at scheme consolidation at-a-State level to give a view of all the schemes and their targeted beneficiaries. This will ensure appropriate fund allocations and in better expenditure tracking of the State's various DBT programs
  - It will facilitate better co-ordination across multiple Departments (via a 'common integration layer') to support interchange of information among the different scheme databases
  - It will aid Department efforts to improve the efficiency of current scheme operations; as well as bring in greater transparency and accountability in delivery of services
  - It will improve the outcome and impact evaluation of the State's various social protection programs
  - It will aid Government efforts in beneficiary fraud detection and resolution
  - It will provide more accurate beneficiary trends (e.g. linkages to social protection programs) for policymakers
  - It will help the State in better on-ground resource planning and thus, leverage HR capacities available at all levels (e.g. districts, blocks, villages) for streamlining the benefit delivery processes.
  - SPDP will help the Government to effectively address many UN Sustainable Development Goals and achieve measurable success, owing to its ability to streamline the population targeting process in public service delivery.
- Beneficiaries (Individuals & Families)
  - It will provide a common avenue for availing scheme-related information (across schemes) and thereby aid their decision-making process
  - It will simplify the service-delivery experience, by establishing 'common touch points' for managing their socio-economic data across the State (e.g. to add/edit their demographic attributes in "one" place, rather than individually update through various linked schemes)
  - It will ensure transparency via strong consent rules effective technical measures to safeguard an individual's PII.

1.2 Functional Scope

The key needs of the SPDP platform is to simplify various functions in the benefit delivery lifecycle, build a verifiable source-of-truth registry to support benefit disbursement processes of schemes, and strengthen inter-Department collaboration efforts. The design of the SPDP platform must address the various existing challenges in scheme operations faced by Departments and beneficiaries, as well as leverage global best practices used for similar social protection delivery platforms. The table below outlines the functional goals of the SPDP platform:

1. The platform should function as a 'Single Source of Truth (SSoT)' for beneficiaries in Odisha
To enable a single-source-of-truth vision, SPDP will provide a centralized beneficiary registry that will manage the socio-economic profiles of the State's beneficiaries. For this purpose, SPDP needs to support master data management in its platform design. It should also support managing 'dynamic data updates' across the partner ecosystem. This is to ensure that the beneficiary data in SPDP is always up-to-date and negate data inconsistencies across the participating schemes in the ecosystem.
2. The platform should provide common services that can be used across participating schemes in the ecosystem
SPDP will facilitates seamless data sharing with the connected schemes, after the explicit consent from the beneficiary; as well as provide common services [e.g. beneficiary search, alert/notification capabilities]. There can be provisions made to support standards-based data exchanges with certain external systems as well. This common interoperability layer of SPDP, will help the Government negate the need to build individual point-to-point data interfaces; thereby reducing costs and simplifying operations.
3. The platform should support the service delivery autonomy of the participating Departments
The platform should not interfere with the operational and implementation aspects of the various DBT schemes in the State. Instead, the platform can function as a 'common avenue' for Departments to support specific scheme operations (e.g. registration and data updates of beneficiaries), which in turn can aid in their decision-making process. The platform will have a service catalogue which provides a collection of services for different components enabling the scheme owners to *aid* their service delivery, but at the same *retain* control over their functioning.
4. The platform should enable stakeholders and policy makers in 'Data driven decision making'
By being the most-trusted source of a beneficiary's socio-economic data in the State, the platform can help policymakers to make informed policy decisions, by providing rich data analytics and trends forecasting around key operational metrics. I.e. specific insights can be drawn from this platform, which could then be used to develop tailored strategies in the benefit delivery processes
5. The platform should be user-centric and simply the processes
SPDP must prioritize beneficiary-centricity in its operating model and technology architecture, and thereby aid the simplification of administrative processes in a Department's benefit delivery lifecycle
6. The platform should adhere to Government regulations on beneficiary PII and Consent

Platform should be designed to adhere to Governmental regulations around 'data privacy and security' protocols and 'consent rules for individuals'. The platform will adhere to the following regulations but not limited to:

- Information Technology Act, 2000
- Personal Data Protection Bill 2018
- The Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016, Aadhaar (Data Security) Regulations, 2016, Aadhaar (Sharing of Information) Regulations, 2016
- Electronic Consent Framework
- Data Sharing and Accessibility Policies
- National Data Sharing and Accessibility Policy (NDSAP)
- Odisha State Data Policy, 2015
- RTI Act
- Policy on Open Application Programming Interface (API) for Government of India
- Policy on Open Standards for e-Governance

2 Building the SPDP Registry

2.1 Approach for building SPDP Registry using Source Databases

Several approaches could be considered by the Government to build the SPDP registry. One way is to begin "grounds-up" and capture the demographic/socio-economic data of residents via an elaborate on-field state-wide registration process. The key limitations of this approach include significantly long gestation periods and considerable efforts required in terms of resources. Alternatively, the Government can leverage existing national *or* state databases to expedite the building of the SPDP registry. India also has a robust and stable ID ecosystem – 'Aadhaar' and numerous other functional IDs like PAN, Ration card, Voter ID card, etc. – which can be leveraged to streamline the beneficiary verification process to create an effective SPDP registry.

Based on the assessment and analysis of viable source databases, it is advisable to establish the SPDP registry by employing a combination of the following 15 source databases, to cover the major population of the State:

  i. **PDS -** Maintained by Food Supplies & Consumer Welfare Department, this has the most accurate and verified household data of beneficiaries in the State under the PDS scheme.
  ii. **Krushak Assistance for Livelihood and Income Augmentation (KALIA) -** Maintained by Agriculture & Farmer's Empowerment Department, this has 100% verified Aadhaar for individual beneficiaries with the most updated data under the KALIA scheme.
  iii. **Unified District Information System for Education (UDISE) -** Covers student beneficiaries enrolled across various schools of the State.
  iv. **E-Municipality -** Maintained by the Housing & Urban Development Department, the Birth Certificate module of the E-Municipality database covers ~53% of the State's urban population.
  v. **Energy -** Maintained by Energy Department, this has the database of electricity consumers across the State.
  vi. **HRMS** - Maintained by General Administration Department, this is a repository of service records of the employees of the Government of Odisha.
  vii. **MAMATA –** Maintained by the Department of Women and Child Development, to alleviate the problem of maternal and infant undernutrition.
  viii. **PAReSHRAM –** Maintained by Labour & ESI Department, this is a single-stop, self-contained, cost-effective and timely digital solution for all industries/ establishments/ shops/ contractors, regarding approvals and payments related to registrations, renewals, licenses, amendments, transfers etc. under the respective acts.
  ix. **Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU GKY) –** Maintained by Panchayati Raj & Drinking Water Department, this has the database of skilled rural youth who are poor, to provide them with jobs having regular monthly wages or above the minimum wages.
  x. **Driving License (SARATHI) –** Maintained by Commerce & Transport Department, this is a computerised database of vehicle-related licenses across the State.
  xi. **Oldage Pensions (IGNOAPS & Madhu Babu Pension Yojana) -** Maintained by Department of Social Security & Empowerment of Persons with Disabilities (SSEPD).
  xii. **Scholarships -** Includes scholarship schemes of ST & SC, Higher Education, School & Mass Education, Skill Development & Technical Education, Labour & ESI and Agriculture Department).
  xiii. **Student Academic Management System (SAMS) -** Pertains to Higher Edu, School & Mass Education, Skill Development & Technical Education and Sports & Youth Services Departments.
  xiv. **Board of Secondary Education (BSE) and Council of Higher Secondary Education (CHSE) Results Database**
  xv. **EPIC database**

The table below outlines a comparative view of key parameters across the major source databases:

SOURCE DATABASES								
Parameters	**NFSA-PDS**	**UDISE+**	**KALIA**	**ENERGY**	**E-MUN. BIRTH**	**HRMS**	**OLDAGE PENSIONS (NSAP & MBPY)**	**DRIVING LICENSE**
Population Coverage	3.23 Crs Rural – 2.95 Crs Urban – 0.29 Crs	69.17 L Rural – 58.26 L Urban – 10.91 L	65 L	27.6 L (Urban)	37.3 L	8.02 L	48.13 L	28 L
Family Coverage	97.8 L	NA	65 L	NA	NA	NA	NA	NA
Aadhaar Seeding	74%	71%	100%		NA	100%		
Bank A/c Seeding	86%	NA	100%	NA	NA	100%		NA
Attributes Captured	Total 18 attributes Mandatory – 14, Optional - 4	Total 31 attributes Mandatory – 27, Optional - 4	Total 15 attributes Mandatory – 12, Optional - 3	Total 21 attributes Mandatory – 10, Optional - 11	Total 18 attributes Mandatory – 16, Optional - 2	Total 23 attributes;	Total 27 attributes Mandatory – 19, Optional - 8	Total 11 attributes Mandatory – 9, Optional – 2
Unique Identifier	11-digit Ration Card No.	16-digit Unique Student ID	10-digit KALIA Beneficiary ID & Aadhaar	12-digit Customer ID	8-digit Birth Certificate Registration Number	8-digit HRMS ID	16-digit Sanction Order No.	11-digit Driving License No.

The creation of the SPDP registry involves *three* 'database' stages:

- **Stage I: Non-Verified** - This will be a 'temporary' database into which beneficiary records from the source databases will be imported. This data-import activity may be performed via a batch-mode ETL process. This will not entail an 'import of full-beneficiary records' from each of the 15 databases; but instead beneficiary records with **only a pre-defined set of attributes** [relevant for developing the SPDP registry], will be imported into this 'Non-verified database'. The list of pre-defined attributes needed for this process will have to be finalized by the Government.
- **Stage II: Semi-Verified** - All beneficiary records in the 'non-verified' database, will be subjected to harmonization process in this stage, and the records will be classified into 'two' clusters:
  - Conclusive Records: which are records that can establish uniqueness of a beneficiary
  - Inconclusive Records: which are 'duplicate' records which cannot establish the uniqueness of a beneficiary

The harmonization process can be executed via an AI-based rule-driven algorithm that can match attribute values across all 15 databases to determine if there is an '*exact match*' or a *'very high probability match'*. The algorithm can also determine conditions under which the 'conclusiveness' of the beneficiary record can be confirmed. For instance, even if the "non-verified" database may

have 12-15 attributes per each beneficiary record on an average; the authorities can define the minimum number of attributes [e.g. 4 attributes – name, date of birth, father's name, Aadhaar] in the algorithm, that has to be either an "exact match" or "very-high probability match" to confirm the conclusiveness of the beneficiary record. Any beneficiary records that cannot pass this logic, will be the basis for classifying them as 'inconclusive' and hence, will be grouped in a separate "cluster" as outlined above.

- **Stage III: Verified** - All in-conclusive records resulting from the harmonization process will be handed over to the field-staff for 'registering' these beneficiaries in SPDP. Hence, inconclusive records will be treated as a "new beneficiary registration" case for SPDP. This field verification exercise could be implemented by Government-authorized staff (or an independent verification agency contracted by the Government). Based on the record list present in the semi-verified database, the verification staff can be given target areas [and a resident list belonging to that area] to conduct this verification process, as well as complete the 'SPDP' registration process. This process would entail the following sub-steps;
  - Verification of an 'Individual' in a household: which can be performed via the following methods;
    - o If the individual's Aadhaar is available = then Authenticate (Demographic/Biometric) against Aadhaar database
    - o If the individual's Aadhaar is not available = then Authenticate using any/all of these methods;
      - Use any other alternate IDs (e.g. Ration Card number) which can be used to perform a live check against the specific ID database (e.g. PDS)
      - Mobile-OTP validation

In the next step, both sets of 'conclusive' and 'inconclusive' records are subjected to a de-duplication process. Once the deduplication process is successfully completed for beneficiaries, the semi-verified database is then deemed to be a 'verified database' [i.e. the SPDP registry] carrying their "golden" records.

All residents are required to furnish proof (e.g. proof of identity, proof of address, proof of age) via supporting documents, which would be verified by the staff and then scanned/uploaded and also directly pulled in electronic form from Digi Locker whenever required, based on beneficiary consent. Any other details that were not available for a beneficiary record in the semi-verified database (e.g. marital status) and is necessary to complete his/her registration into SPDP, will be collected/entered in the registration application. Beneficiary consent for using SPDP services [including sharing with other Departments for service delivery purposes], will also be taken during this process. Once the registration activity is complete and submitted by the field staff, it would be sent to other designated SPDP authorities for a final verification and approval, before a unique record is created for the beneficiary (i.e. his/her golden record) in the 'SPDP registry'.
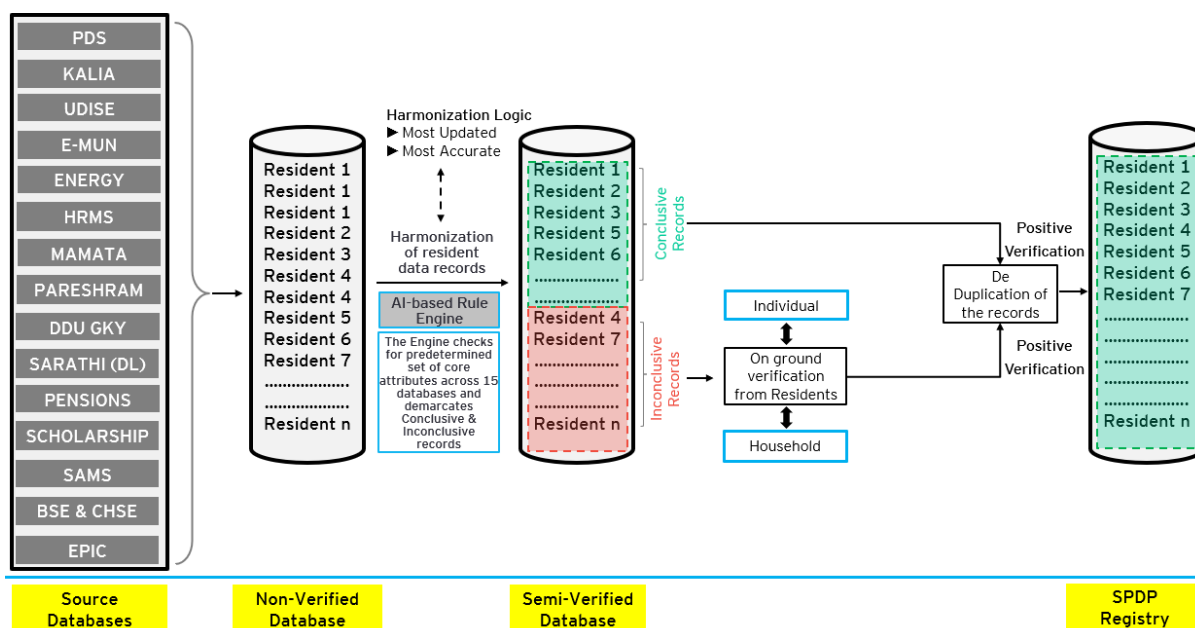
Figure 1: Building the SPDP Registry

2.2 Defining the SPDP Registry Data Structure

The choice of data attributes that are collected for a Social ID depends upon the inclusivity, cost, purpose, trustworthiness and compliance with the data protection and privacy laws. There are mainly two kinds of data:

- Demographic data
- Socio-Economic data

The choice of data collected can be evaluated based on the other factors like registration process, authentication process, types of credentials, data exchange framework, privacy and security etc.

Key considerations for the type of data collected are:

Inclusion: A barrier of participation can be generated as certain groups might not be able to provide specific data due to unavailability or due to technical difficulties

Reliability: If large number of data fields are captured for Social ID, it can lead to security risks and decrease the accuracy and completeness of information over time.

Data Protection: According to the data protection standards, minimum data should be collected to limit the risk of privacy invasion.

Sustainability: More the data fields, the longer it will take for registration and will also increase the overall cost of operations.

The PII data collected will be considered as sensitive data as certain fields are sensitive in nature and might have serious impact on the individual as they would include characteristics like ethnicity, health information, income etc. Thus, the data collected should be managed with utmost precaution by the appropriate entity.

The structure of the Social ID number has to be made in the following format:

Random: A random number for the social ID is generated using a mathematical algorithm and it has no intelligence or information of the person

Generating the Social ID

After successful registration into the program, each beneficiary will be provided with a unique "Individual-ID". Each ID will be linked to a respective unique "Household-ID" as well. In case the beneficiary is the first one to enrol from his/her family, a new Household-ID will also be generated (at the same time as the Individual-ID generation), which will be linked to his/her Individual-ID.

Nomenclature of 'Individual-ID' and 'Household-ID'

Both the "Individual-ID" and "Household-ID" should be generated as 'random numbers' and _not_ as a pattern-based number with encoded information or alphanumeric string. This is recommended for the following reasons:

- A random number will avoid prospect of profiling of individuals
- A random number-based system will be more secure and avoid guessing of an individual's unique Individual-ID number (or the Household-ID) and potentially hacking the system

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Based on popular ID models, this random Individual-ID/Household-ID can have a string size of anywhere between 10 -12 digits (thereby having enough numbers of the current and future State population), where the last digit of the ID is reserved as a "checksum" digit. The randomness of the number will make it difficult to guess the number. The last digit which is reserved for the checksum will help in eliminating the data entry errors, like single digit, transposition of adjacent digit, jump transposition, twin, phonetic and jump twin. The check sum digit can follow the Verhoeff method which help in eliminating the major errors successfully

In the SPDP registry, two types of attributes – 'core' and 'auxiliary' attributes – will be stored. Keeping in line with the principle of 'minimalism' in the SPDP architecture, the core and auxiliary attributes collected from each beneficiary will have to be kept to a _minimum set only_ – i.e. only enough to build a unique socio-economic profile of the beneficiary. The 'core' attributes will be a combination of '_demographic attributes'_ (e.g. name, gender, date of birth) and '_socio-economic attributes'_ (e.g. household type, availability of drinking water etc). The 'auxiliary' attributes can be _self-declared_ attributes - i.e. the attributes that provide additional information on a beneficiary (e.g. income, mobile number, bank account number). The core attributes will be 'mandatory', whereas the auxiliary attributes will be 'optional'. Beyond these minimal attributes, the SPDP registry will not collect/store more beneficiary-data from the various partnering scheme databases. The following data management principles need to be adhered-to, while _capturing_ beneficiary data and _updating_ attributes in the SPDP registry:

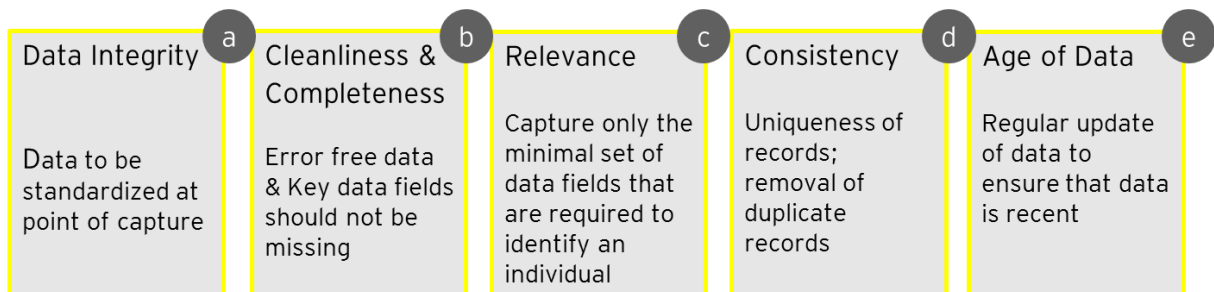| a Data Integrity	b Cleanliness & Completeness	c Relevance	d Consistency	e Age of Data
Data to be standardized at point of capture	Error free data & Key data fields should not be missing	Capture only the minimal set of data fields that are required to identify an individual	Uniqueness of records; removal of duplicate records	Regular update of data to ensure that data is recent

Figure 2: Data management priorities for the SPDP Registry

The following figure illustrates an indicative list of core and auxiliary data attributes proposed to be maintained in SPDP Registry. The identified core attributes (27 nos.) are already being maintained in the 15 databases identified as source data sets for developing the registry.

List of Core Attributes:

S. #	ATTRIBUTE	S. #	ATTRIBUTE	S. #	ATTRIBUTE
1	Name	10	Social Category	19	GP Name
2	Father's Name	11	Caste	20	RI Circle
3	Spouse's Name	12	Photo	21	Police Station
4	Aadhaar No.	13	C/o.	22	Tahsil Name
5	Date of Birth	14	House No. / Plot No.	23	Block/ ULB Name
6	Gender	15	Street No.	24	Sub-Division Name
7	Blood Group	16	Land Mark	25	District Name
8	Mobile No.	17	Ward No.	26	State Name
9	Religion	18	Village Name	27	PIN Code

List of Auxiliary Attributes:

S. #	ATTRIBUTE	S. #	ATTRIBUTE	S. #	ATTRIBUTE
	Personal Information	9	PAN Card		**Education/ Occupation**
1	Is Orphan	10	Driving License No. & Validity	15	Education Level
2	Relationship with HoF	11	Passport No & Validity	16	Occupation
3	Mother's Name	12	Voter ID No. (EPIC)	17	Whether Pvt. or Govt. Employee
4	Marital Status	13	Bank Account Number	18	Annual Income Slab
5	Mother Tongue	14	IFSC Code	19	Actual Income
6	No. of Family Members			20	Income Certificate No.
7	Email ID				
8	PAN Card				

S. #	ATTRIBUTE	S. #	ATTRIBUTE	S. #	ATTRIBUTE
	Consumer Information	28	PMAY/ BPGY		**Residential Details**
21	Electricity Consumer No.	29	Caste Certificate No.	39	Residential Status
22	PHE Water Bill No.	30	Physically Handicapped Certificate No.	40	Household Type
23	LPG Consumer No.	31	NSAP Pension ID	41	Duration of stay on the current address
	Scheme Identifier	32	Scholarship Regd. No.	42	Category House
24	Ration Card Number	33	Labour Card No & Validity	43	Condition of House
25	KALIA ID	34	Birth Regd. Certificate No.	44	Holding Tax No.
26	MGNREGA Card Number	35	RCH ID	45	Land Details
27	Unified Farmer ID	36	AWC Code		
		37	MCTS No.		
		38	UDISE Student ID		

The illustration below is a high-level summary of the registry data structure to be used in the SPDP platform architecture:
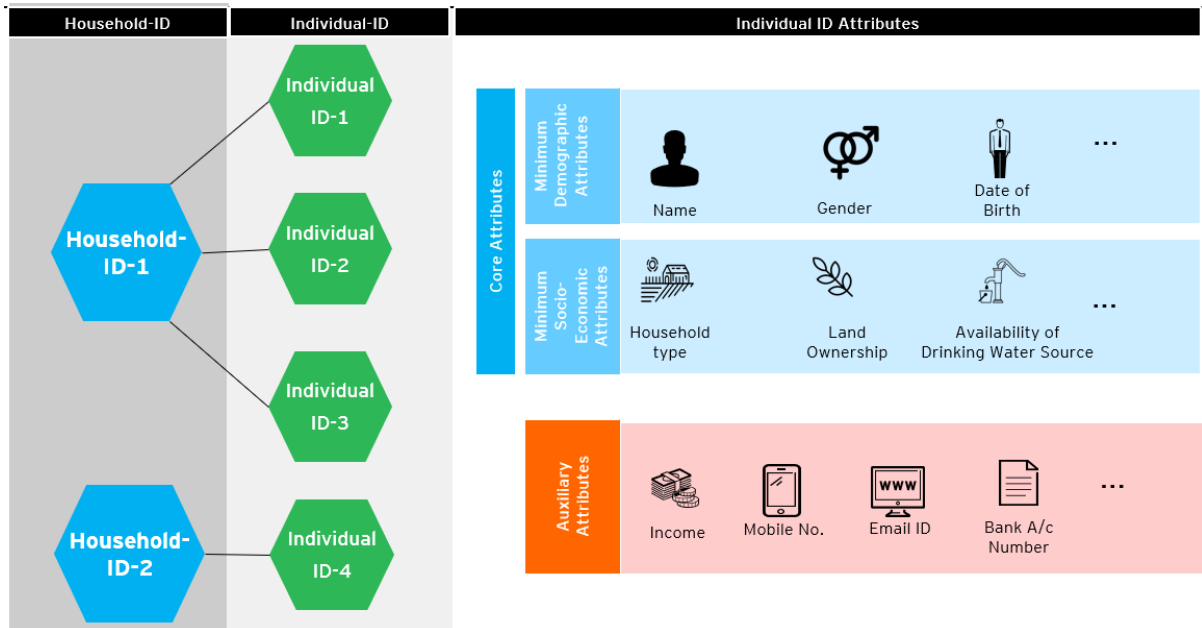

Figure 3: SPDP-ID Data Structure

It is recommended that both the Individual-ID [generated for every individual, after successful registration] and Household-ID [generated for every household, after successful registration] are shared with and stored in all partnering scheme databases as well. This is important to facilitate the easy communication of any future beneficiary record exchanges [e.g. updates to an individual's socio-economic profile, originating from any of the partnering scheme databases] with the SPDP registry. SPDP can also subsequently communicate such 'new updates' to other participating scheme databases, using the individual's Individual-ID.

3   Scope of Work

OCAC is looking for the supply, installation, configuration and implementation support of data deduplication and MDM tool, for building and maintaining a Beneficiary Data Platform which will be the heart of proposed SPDP project. Licenses shall be used only for the intended purpose of SPDP and not for any other project/ application.

3.1   Scope of work

An indicative scope of work is provided below:

- At a high level, the solution encompasses building of Social Protection Delivery Platform (SPDP) that facilitates maintain the demographic information of all beneficiaries across all schemes/ departments, build a Golden record of the Beneficiary and enable different systems/LOBs access the Golden Record of the Beneficiary.

- The SPDP would provision for assigning a UBIC (Unique Beneficiary Identification Code) for each Beneficiary.

- There would be provision for generating a Golden Record for each Beneficiary. A Golden record is Single Source of Truth (SSoT) derived from multiple sources/ data sets within the SPDP ecosystem

- SPDP should also allow for uploading data obtained from an external source.

- While uploading the data, SPDP provides for the functionalities like
    o Ability to load the data available in any form and format.
    o Given that there would not be a uniformity in respect of beneficiary demographic attributes across different depts/ schemes, SPDP IA shall propose such data model to

accommodate any kind of data structure. The data model should support for all demographic attributes, multiple values of each attribute.

- o Should provide an API for sharing of records on real time.
- o While processing the data, SPDP need to validate the data for patterns and build a golden record or Master Record of the Beneficiary. SPDP SI will share the data structure with the selected bidder of MDM and De-duplication and the bidder of MDM and De-duplication will share the golden record as per the required format to the SI of SPDP.

- Data deduplication & Matching: SPDP see this capability as a critical feature for an efficient linking of records and arriving at an enriched golden record of the beneficiary and the selected bidder should be responsible for data de-duplication and creation of Golden record.

- The UBIC assignment shall be a batch process at the end of the day (eod) and will be through following series of steps.

- For assigning the UBIC for all the existing beneficiaries, a one-time process of deduplication of current beneficiary base will be carried out. The matches will be classified as the perfect matches and probable matches. For the perfect matches, the UBIC will be automatically assigned. All the probable matches are directed to a eye balling and then UBIC will be assigned.

- A decisioning system shall be available for the eyeballing of matches with a Maker Checker policy.

- Golden Record Creation: A Golden Record of a Beneficiary is a single, well defined view of a beneficiary derived from multiple systems of the SPDP and other trusted sources of external information obtained by the SPDP. It is a Single Version of Truth based on Survivorship Rules. The Golden record would help trace the Beneficiary & improve the contractability. A Golden record is created for each UBIC. The following are the requirements in this regard.

  - o The BDP enables create a Golden Record for all the SPDP 's Beneficiaries.
  - o The Golden record would be based on survivorship rules. The Survivorship Rules/Merging Rules will determine the composition of a Golden Record and they run in an automatic setup to generate the Golden Record. Survivorship rules are rules that specify the surviving attribute.
  - o Preparation of family tree, if possible

- Relationship Discovery & Networking: The system should be capable of identifying & linking the records of related persons and associates of the Beneficiary.

- The following GUI should be available:
  - o For defining the matching rules, setting the tolerances of match etc.
  - o For uploading a file for matching and downloading the matches
  - o For defining the Survivorship rules that governs the Golden records
  - o For decisioning of the matches for assigning the UBIC with Maker Checker policy
  - o For decisioning the probable matches obtained during the real time query.

- The demographic deduplication and entity resolution is a critical component of the solution and the match engine will be assessed for its efficiency. The following are the key aspects of the entity resolution match engine.
  - o Response Time & Throughput: The Response time of the search engine should be very low and throughput high.
  - o Accuracy of record retrieval: The Precision and Recall of the search engine should be very high.
  - o Configurable: A flexible match rule definition should be available with provision to define rules, define the tolerance of match of attributes.
  - o Match Classification & Bucketing: There should be provision for branding a match as Perfect match/probable match with provision to define rules for such tagging. There should be provision to assign weights to various matching attributes, report total match score.
  - o Ranking: The results should be able to be ranked with the best match assigned the lowest rank.

- o Handle data as is available: Since the data is derived from disparate sources, uniformity cannot be assured in respect of availability of attributes or quality of available data. The engine should be able to provide the best matches considering the data quality issues.
- o Bulk data processing: The engine should be capable of deduplicating millions of records within the defined timelines.

3.2 Technical Requirement

The technical requirements of proposed tool are provided below:

- Environments: Staging and Production
- Scalable (Horizontal & Vertical) to handle any data volumes: The solution must support Horizontal and vertical scalability to take care of ever-growing demands of the SPDP.
- High Availability (HA): All the components of the solution must provide adequate redundancy to ensure high availability. The solution shall have built in redundancy so that service is not impacted and is available 24x7.
- Security: Adequate security aspects should be built into the application
- Reliability: The solution needs to be reliable to maintain data integrity and support business continuity.
- Browser compatibility: The solution should be browser independent and should support all leading web browsers.
- Database: The solution should support the database of SPDP.
- Storage

- Backup: Will be taken in regular intervals as well as critical configuration back up will be taken as and when required
- Application Server, Web server, Operating System, Messaging Queue: The solution should align with SPDP s choice on these aspects.
- Latest technology adoption: The solution should advise and adopt latest technology stack.

- During implementation the bidder is expected to engage adequate number of experienced resources with requisite skillset for timely and successful implementation.
- Since, the product will be integrated with SPDP solution, any vulnerability found in the product, solution deployed and the customization part shall be resolved by the bidder without any financial implication to OCAC.
- Training and Capacity Building: The bidder has to impart training physically on de-duplication and creation of Golden record to the authorized person of OCAC and the system integrator of SPDP for smooth functioning of the platform. However, in case of exigencies/pandemic, OCAC may ask the bidder to impart training on virtual mode.

The bidder has to do necessary customization of their product to make it fit as per the requirement of OCAC/Govt. of Odisha and provide necessary API and support for preparation of Social registry as well as integration with the SPDP application.

3.3 Project Documentation
The bidder has to provide following documentations

1. Manual on the supplied tool
2. Installation and Configuration manual of the supplied tool
3. SRS on the customisation part

3.4 Exit Plan

The selected firm will provide systematic exit plan and conduct proper knowledge transfer process to handover operations to OCAC technical team at least one year before project closure. IT resource persons of OCAC will work closely with resource persons of SI at test, staging and production environment during knowledge transfer phase. All knowledge transfer should be documented and possibly recorded. The bidder will ensure capacity building of the IT resource persons of OCAC on maintenance of deduplication tool. During last one year IT resource persons of OCAC should work independently and bidder will be ensured the guidance.

4 Instruction to the Bidders

4.1 General

While efforts have been made to provide comprehensive and accurate background information, requirements and specifications, Bidders must form their own conclusions about the solution needed to meet requirements. Also, bidders may wish to consult their own legal advisers in relation to this RFP.

All information supplied by Bidders may be treated as contractually binding on the Bidders, on successful award of the assignment by OCAC on the basis of this RFP.

No commitment of any kind, contractual or otherwise shall exist unless and until a formal written contract has been executed by or on behalf of OCAC. Any notification of preferred Bidder status by OCAC shall not give rise to any enforceable rights by the Bidder. OCAC may cancel this public procurement at any time prior to a formal written contract being executed by or on behalf of OCAC.

This RFP supersedes and replaces any previous public documentation and communications, and Bidders should place no reliance and dependence on such communications.

4.2 Compliant Proposals and Completeness of Response

Bidders are advised to study all instructions, forms, terms, requirements and other information in the RFP documents carefully. Submission of the bid shall be deemed to have been done after careful study and examination of the RFP document with full understanding of its implications.

Failure to comply with the requirements of this paragraph may render the Proposal non-compliant and the Proposal may be rejected. Bidders must:

       i.   Include all documentation specified in this RFP.
      ii.   Follow the format of this RFP and respond to each element in the order as set out in this RFP.
     iii.   Comply with all requirements as set out within this RFP.

The response should be accompanied by an authorization in the name of signatory of the Bidder. The authorization shall be in the form of a written Power of Attorney or a Board resolution in favour of person signing the Proposal.

i. All provisional conditions in the Power of Attorney should be adhered to by authorized signatory before signing of the bids. Any non-compliance to this effect will be the responsibility of Bidder and can lead to disqualification.

ii. The authorised signatory representing the Bidder shall sign and stamp on forms and required documents as provided in this RFP document.

5 Earnest Money Deposit

The Bidders are exempted from paying EMD. It is mandatory for all Bidders to fill up and submit the Bid Security Declaration Form (Annexure - I). The form shall be effective and in force until the bid validity period, or, until the selection of the Selected Bidder (whichever is earlier). In case a Selected Bidder is announced, the forms of all unsuccessful Bidders shall be deemed ineffective, while the form of the Selected Bidder shall continue to be effective until the Selected Bidder furnishes the performance Bank

Guarantee (as per the provisions of the RFP). The clauses of Bid Security Declaration Form shall be exercised on account of the following reasons:

The EMD may be forfeited (by exercising the provision mentioned in Bid Security Declaration Form):

- If a Bidder withdraws the Proposal or increases the quoted prices after opening of the Proposal and during the Bid validity period or its extended period, if any.
- In case of a successful Bidder, if the Bidder fails to sign the Agreement in accordance with Terms & Conditions (including timelines for execution of the Agreement) of this RFP or fails to furnish Performance Bank Guarantee in accordance with the Terms & Conditions (including timelines for furnishing Performance Bank Guarantee)
- If a Bidder withdraws its bid during the period of bid validity.
- During the Bid process, if a Bidder indulges in any act that would jeopardize or unnecessarily delay the process of bid evaluation and finalization.
- If a Bidder has been found to have indulged in any suppression of facts, furnishing of fraudulent statement, misconduct, or other dishonest or other ethically improper activity, in relation to this RFP
- If a Bidder's proposal contains deviations, conditional offers and partial offers.

6   Submission of Proposals

6.1   Instruction to Bidders for Online Bid Submission

e-Nivida is a complete process of e-Tendering, from publishing of tenders online, inviting online bids, evaluation and award of contract using the system. The instructions given below are meant to assist the bidders in registering on e-Nivida Portal and submitting their bid online on the portal.

More information useful for submitting online bids on the e-Nivida Portal may be obtained at: https://enivida.odisha.gov.in

6.2   Guidelines for Registration

1. Bidders are required to enrol themselves on the eNivida Portal https://enivida.odisha.gov.in or click on the link "Bidder Enrolment" available on the home page by paying Registration Fees of Rs.5,600/- inclusive of Applicable GST.
2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
3. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication with the bidders.
4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate **(Only Class III Certificates with signing + encryption key usage)** issued by any Certifying Authority recognized by CCA India (e.g. Sify/ TCS / nCode/ eMudhra etc.), with their profile.
5. Only valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
6. Bidder then logs in to the site through the secured log-in by entering their user ID /password and the password of the DSC / e-Token.
7. The scanned copies of all original documents should be uploaded in pdf format on e-tender portal.
8. After completion of registration payment, bidders need to send their acknowledgement copy on our help desk mail id odishaenivida@gmail.com for activation of the account.

6.3   Searching for Tender Documents

1. There are various search options built in the e-tender Portal, to facilitate bidders to search active tenders by several parameters.

2. Once the bidders have selected the tenders they are interested in, then they can pay the Tender fee and processing fee (NOT REFUNDABLE) by net-banking / Debit / Credit card then you may download the required documents / tender schedules, Bid documents etc. Once you pay both fee tenders will be moved to the respective 'requested' Tab. This would enable the e- tender Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.

6.4 Preparation of Bids

1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid.
3. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF formats. Bid Original documents may be scanned with 100 dpi with Colour option which helps in reducing size of the scanned document.
4. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, GST, Annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Documents" available to them to upload such documents.
5. These documents may be directly submitted from the "My Documents" area while submitting a bid and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process. Already uploaded documents in this section will be displayed. Click "New" to upload new documents.

6.5 Submission of Bids

1. Bidder should log into the website well in advance for the submission of the bid so that it gets uploaded well in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document as a token of acceptance of the terms and conditions laid down by Department.
3. Bidder has to select the payment option as per the tender document to pay the tender fee / Tender Processing fee & EMD as applicable and enter details of the instrument.
4. In case of BG bidder should prepare the BG as per the instructions specified in the tender document. The BG in original should be posted/couriered/given in person to the concerned official before the Online Opening of Financial Bid. In case of non-receipt of BG amount in original by the said time, the uploaded bid will be summarily rejected.
5. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the yellow Coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.
6. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
7. The uploaded bid documents become readable only after the tender opening by the authorized bid openers.
8. Upon the successful and timely submission of bid click "Complete" (i.e. after Clicking "Submit" in the portal), the portal will give a successful Tender submission acknowledgement & a bid summary will be displayed with the unique id and date & time of submission of the bid with all other relevant details.

9. The tender summary has to be printed and kept as an acknowledgement of the submission of the tender. This acknowledgement may be used as an entry pass for any bid opening meetings.

6.6 Clarifications on using e-Nivida Portal

1. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.

2. Any queries relating to the process of online bid submission or queries relating to e-tender Portal in general may be directed to the Helpdesk Support. Please feel free to contact e-Nivida Helpdesk (as given below) for any query related to e-tendering.

Phone No.: 011-49606060

Mail id: odishaenivida@gmail.com

6.7 RFP Document Fees

The bidder must furnish along with its bid required bid processing fee amounting to ₹ 5,600 inclusive of GST @ 12% (Rupees Eleven Thousand and Two Hundred only) in shape of DD in favour of Odisha Computer Application Centre (OCAC), drawn in any scheduled commercial bank and payable at Bhubaneswar failing which the bid will be rejected. The fee may also be paid through electronic mode to the following account:

Bank A/c No.: 149311100000195
Payee Name: Odisha Computer Application Center
Bank Name & Branch: Union Bank of India, Acharya Vihar, Bhubaneswar
Account Type: Savings
IFSC: UBIN0814938

6.8 Tender Validity

Proposals shall remain valid for a period of 120 Days from the date of opening of the pre-qualification and technical proposals. OCAC reserves the rights to reject a proposal valid for a shorter period as on-responsive and will make the best efforts to finalize the selection process and award of the contract within the bid validity period. The bid validity period may be extended on mutual consent.

6.9 Late Bids

a) Bids received after the due date and the specified time (including the extended period if any) for any reason whatsoever, shall not be entertained and shall be returned unopened.

b) The bids submitted in hard copy or by post/e-mail etc. shall not be considered and no correspondence will be entertained on this matter.

c) OCAC reserves the right to modify and amend any of the above-stipulated condition/criterion depending upon project priorities vis-à-vis urgent commitments.

7 Pre-Qualification Evaluation Criteria

S. #	Basic Requirement	Specific Qualification Criteria	Document/ Information to be Submitted
a)	Legal Entity	The bidder should be a company registered under Indian Companies Act, 1956 & 2013 OR	Copy of Certificates of incorporation

S. #	Basic Requirement	Specific Qualification Criteria	Document/ Information to be Submitted
		A partnership firm registered under Indian Partnership Act, 1932	
b)	Sales Turnover in System Integration	Average Annual Turnover generated from IT services or solutions during the last three financial years ending on 31.03.2021 (as per the last published Balance sheets), should be at least ₹5 Crores.	Extracts from audited Balance Sheet and P&L Account OR Certificate from Statutory Auditor
c)	Certification	The bidder must possess SEI CMMi Level 3 OR ISO 9001:2015 certification.	Copy of certification issued from accreditation organizations need to be attached, which should be valid on the date of bid submission.
d)	Technical Capability	Bidder must be an owner or an authorized channel partner for Enterprise level data deduplication MDM products and the quoted product tool should have been implemented in at least one application at Central/ State/UT Govt. department/ PSU/ BFSI/ Telecom in India with record count exceeding 5 crores	Documentary evidence relating to implementation.
e)	Blacklist	Responding Firm/ Company shall not be under a declaration of ineligibility for corrupt or fraudulent practices and must not be blacklisted by any State Govt. Central Govt., for any reason, at the time of bid submission.	Self-Declaration on Bidder's letterhead
f)	Consortium	Consortium bidding / sub-contracting is not allowed.	Not applicable
g)	RFP Document Fee	The bidder must submit RFP document fee amounting to ₹ 5600/- (inclusive of 12% GST).	RFP document fee: Demand Draft/ Electronic Transfer Acknowledgement Slip / e-Nividha Transaction Slip
h)	Power of Attorney for Authorized Signatory	The bidder shall submit Power of Attorney/ Board Resolution, duly authorizing the person signing the documents to sign on	Power of Attorney/ Board Resolution document

S. #	Basic Requirement	Specific Qualification Criteria	Document/ Information to be Submitted
		behalf of the bidder and thereby binding the bidder.	

OCAC reserves the right to accept or reject any or all responses without assigning any reason.

8   Technical Evaluation Scoring Matrix

8.1   Technical Evaluation Scoring Matrix

Technical proposal of those bidders will be opened and evaluated, who qualify the Pre-Qualification criteria. The Evaluation Committee will evaluate the Technical Proposals on the basis of technical evaluation criterion as provided below:

S. No.	Description of Evaluation Criteria	Point System	Max. Score	Supporting Required
1	Bidder must have supplied, installed deduplication products and implemented Enterprise-level Deduplication solution (with record count exceeding 50 million records) in Central/ State/ UT Govt. department/ PSU/ BFSI/ Telecom in India for: **Bulk matching & Creation of MasterID, EOD/ Incremental Processing**.	Each implementation carries 5 marks. Maximum 4 implementations	20	Certified copies of citations as per FORM TECH-2 along with work orders (including extensions, if any) and completion certificates. In case completion certificates are not available, bidder may submit the work order with a self-certification of works completed, from authorised signatory. For ongoing projects, the implementation component must have been completed with go-live at time of bid submission.
2	Number of implementation of Enterprise-level Deduplication solution (with record count exceeding 50 million records) in Central/ State/ UT Govt. department/ PSU/ BFSI/ Telecom in India for: **Real time Query and 360 View of Customer.**	Each implementation carries 5 marks. Maximum 4 implementations	20	Certified copies of citations as per FORM TECH-3 along with work orders (including extensions, if any) and completion certificates. In case completion certificates are not available, bidder may submit the work order with a self-certification of works completed, from authorised signatory. For ongoing projects, the implementation component must have been completed with go-live at time of bid submission.
3	The Solution should drive new insights and access to information based on AI & ML Algorithm. These capabilities should help in resolving the matches, enrich the data like identify gender, enrich missing address attributes etc.	○ Project value > ₹20 Lakhs: 15 marks ○ ₹15 Lakhs < Project value <= ₹20 Lakhs: 10 marks	15	Project experience details as per FORM TECH-4. The form should be completed in all respects AND Copy of Work Order (including extensions if any) or Agreement or Contract

	(Bidder needs to submit necessary documentation in support of the above feature)	o Project value <= ₹15 Lakhs: 5 marks		AND Certificate of Completion of Project or of Transition Phase from client. Note: In case of the project under Non-Disclosure Agreement (NDA), Company Secretary of the bidder should provide necessary certificates in lieu of Work Order/ Contract and Certificate of Completion.
4	The solution should have INDIA specific phonetics libraries/algorithm.	o Project value > ₹50 Lakhs: 10 marks o ₹25 Lakhs < Project value <= ₹50 Lakhs: 5 marks o Project value <= ₹25 Lakhs: 2 marks	10	Project experience details as per FORM TECH-5. The form should be completed in all respects AND Copy of Work Order (including extensions if any) or Agreement or Contract AND Certificate of Completion of Project or of Transition Phase from client. Note: In case of the project under Non-Disclosure Agreement (NDA), Company Secretary of the bidder should provide necessary certificates in lieu of Work Order/ Contract and Certificate of Completion
5	The solution should provide the following capabilities: Data sufficiency analysis in terms of null count, blank count, unique count etc. Data Statistics such as min, max, mean, median, mode, standard deviation etc. Computing frequency distributions Performing pattern checks. Capability to validate the data for patterns viz., for PAN, Mobile, Aadhar etc. Identifying outliers and percentiles Computing metadata validations and other statistics Capability of building family tree after matching various source data.	o Project value > ₹50 Lakhs: 10 marks o ₹25 Lakhs < Project value <= ₹50 Lakhs: 5 marks o Project value <= ₹25 Lakhs: 2 marks	10	Project experience details as per FORM TECH-6. The form should be completed in all respects AND Copy of Work Order (including extensions if any) or Agreement or Contract AND Certificate of Completion of Project or of Transition Phase from client. Note: In case of the project under Non-Disclosure Agreement (NDA), Company Secretary of the bidder should provide necessary certificates in lieu of Work Order/ Contract and Certificate of Completion.
6	Approach and Methodology for implementing the following features. 1. The solution should be capable of handling following variations that could occur in name: • Sequence Variation: Variation in the order of name tokens		25	Approach and Methodology for implementing the features mentioned as per FORM TECH-7.

	• Spelling: Variation in spelling in name tokens • Splitting: Split/merger of few tokens • Abbreviation: Certain tokens abbreviated (unexpanded initials) • Missing/Extra Part: Certain tokens missing/extra. • Typos, Phonetic/cultural variations 2. The solution should be able to resolve multiple instances of the same individual with attribute variations like name, father's name, mother's name, spouse name, address, date of birth, Driving License, Mobile number, email, telephone number etc. as per user defined resolution rules. 3. Networking and linking with the related records. The system should not only be able to identify the multiple records of the person but also should be capable of identifying & linking the records of related persons, associates.			

8.2 Evaluation of Commercial Bids

i. The Commercial Bids of technically qualified bidders (i.e. Bidders with more than 70 marks in Technical Evaluation) will be opened on the prescribed date in the presence of bidder representatives.

ii. Only fixed price financial bids indicating total price for all the deliverables and services specified in this bid document will be considered.

iii. The bid price will include all taxes and levies and shall be in Indian Rupees and mentioned separately.

iv. Any conditional bid would be rejected.

v. Errors & Rectification: Arithmetical errors will be rectified on the following basis: "If there is a discrepancy between the unit price and total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail. If the bidder does not accept the correction of error, its bid will be rejected".

vi. If there is no price quoted for certain material or service, the bid shall be declared as disqualified.

vii. In the event that there are 2 or more bidders having the same value in the commercial bid, the bidder securing the highest technical score will be adjudicated as "Best responsive bid" for award of the Project.

viii. The bidder with the lowest qualifying financial bid (L1) will be awarded 100% score. The Financial score for other bidders will be evaluated using the following formula: Fn = {(Financial Bid of L1 / Financial Bid of Bidder) * 100} %.

8.3 Final Evaluation of Bids

i. The technical and financial evaluation scores secured by each bidder will be added using weightages of 70% and 30% respectively to compute composite score. The composite score will be computed as under:

ii. $Bn = 70 * Tn + 30 * Fn$

iii. The bidder securing highest composite score will be adjudicated as most responsive bidder for award of project.

9 Appointment of Implementation Agency

9.1 Award Criteria

OCAC will award the Contract to the successful bidder whose proposal has scored the highest composite score and would consider it as substantially responsive as per the process outlined above.

9.2 Right to Accept Any Proposal and To Reject Any or All Proposal(s)

OCAC reserves the right to accept or reject any proposal, and to annul the tendering process/ public procurement process and reject all proposals at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for OCAC action.

9.3 Notification of Award

Prior to the expiration of the proposal validity period, OCAC will notify the successful bidder in writing or by fax or email, that its proposal has been accepted. In case the tendering process/public procurement process has not been completed within the stipulated period, OCAC may like to request the bidders to extend the validity period of the bid.

The notification of award will constitute formation of the Contract. Upon the successful bidder's furnishing of Performance Bank Guarantee (PBG), OCAC will notify each unsuccessful bidder and return their EMD.

9.4 Contract Finalization and Award

OCAC may also like to reduce or increase the quantity of any item in the Scope of Work defined in RFP. Accordingly, total contract value may change on the basis of rates defined in the financial proposal.

9.5 Performance Guarantee

OCAC will require the selected bidder to provide a Performance Bank Guarantee, within 15 days from the Notification of award, for a value equivalent to 03% of the total cost of Contract excluding taxes (or as per the prevailing guidelines of Finance Department, Odisha, at the time of notification of award). The Performance Guarantee should be valid for the stipulated period of the project plus 90 days. The Performance Guarantee shall be kept valid till completion of the project and Warranty period, if any. The Performance Guarantee shall contain a claim period of three months from the last date of validity. The selected bidder shall be responsible for extending the validity date and claim period of the Performance Guarantee as and when it is due on account of non-completion of the project and Warranty period. In case the selected bidder fails to submit Performance Guarantee within the time stipulated, OCAC at its discretion may cancel the order placed on the selected bidder without giving any notice. OCAC shall invoke the Performance Guarantee in case the selected bidder fails to discharge their contractual obligations during the period or OCAC incurs any loss due to bidder's negligence in carrying out the project implementation as per agreed terms and conditions.

9.6   Signing of Contract

After OCAC notifies the successful bidder that its proposal has been accepted, OCAC shall enter into a contract with the successful bidder (prime bidder in case of consortium), incorporating all clauses, pre-bid clarifications and proposal of the bidder.

A draft MSA document has been provided as a separate document for the reference of bidders only. The agreement with the selected bidder will be signed after getting the same vetted from competent Legal Authority.

9.7   Failure to Agree with the Terms and Conditions of the RFP

Failure of the successful bidder to agree with the draft legal agreement and Terms & Conditions of the RFP shall constitute sufficient grounds for the annulment of award, in which event OCAC may call for new proposals from the interested bidders. In such a case, OCAC shall invoke the PBG of successful bidder.

10 Penalty Clause

Sl. No.	Project Activity / Scope of Work	Timeline	Penalty
1	Supply of Licenses	15 days from the issuance of PO	A penalty @ 1% per week of the component value subject to maximum of 10% of the total contract value
2	Installation of Licenses	30 days from the issuance of PO	A penalty @ 1% per week of the component value subject to maximum of 10% of the total contract value
3	Customization and Implementation product (including training as mentioned at the scope of work)	8 weeks from the issuance of PO	A penalty @ 1% per week of the component value subject to maximum of 10% of the total contract value
4	Annual Technical Support and AMC of customization part	4 years from second year onwards	A penalty @ 1% per week of the component value subject to maximum of 10% of the total contract value
5	Customization and maintenance (any customization suggested by OCAC, based on future requirements)	As per the change request for customization	A penalty @ 1% per week of the component value subject to maximum of 10% of the total contract value

In case, the delay is more than 8 weeks and the cause of delay is attributable to bidder, authority reserves right to increase the penalty value and/ or take appropriate action against the bidder such as cancellation of contract etc.

11 Settlement of Disputes

Any dispute or difference, whatsoever, arising between the parties to this agreement arising out of or in relation to this agreement shall be amicably resolved by the Parties through mutual consultation, in good faith and using their best endeavours. Parties, on mutual consent, may refer a dispute to a

competent individual or body or institution or a committee of experts appointed By OCAC (Nodal Authority) for such purpose and abide by the decisions thereon.

On non-settlement of the dispute, same shall be referred to the Secretary to Government, E&IT Department, Government of Odisha for his decision and the same shall be binding on all parties, unless either party makes a reference to arbitration proceedings, within sixty days of such decision.

Such arbitration shall be governed in all respects by the provision of the Arbitration and Conciliation Act, 1996 or later and the rules framed there under and any statutory modification or re-enactment thereof. The arbitration proceeding shall be held at Bhubaneswar, Odisha.

12 Deliverables and Timeline

Sl. No.	Project Activity / Scope of Work	Deliverable	Timeline
1	Supply of Licenses	License Certificate	15 days from the issuance of PO
2	Installation of Licenses	Successful Installation Report	30 days from the issuance of PO
3	Customization and Implementation product (including training as mentioned at the scope of work)	Product implementation certificate from competent authority of OCAC	8 weeks from the issuance of PO
4	Annual Technical Support and AMC of customization part	Declaration of bidder	4 years from second year onwards
5	Customization and maintenance (any customization suggested by OCAC, based on future requirements)	Sign off from OCAC on the customization acceptance	As per the change request for customization

13 Payment Terms and Schedule

Component-wise payments shall be released to the selected OEM as per following terms. Taxes will be paid extra as per the rate prevalent at time of billing. Legitimate payment shall be made within 30 working days of the receipt of invoice along with supporting documents subject to penalties, if any.

13.1 License Cost

- 100% cost of License will be paid on supply and installation of licenses. The required licenses should be issued in the name of OCAC and will include first year warranty/ technical support cost.
- The warranty/ technical support cost of the product second year onwards will be paid at the beginning of each year.

13.2 Implementation and Customization Cost

- 80% cost of the implementation will be released on successful completion of the User Acceptance Test (UAT).
- Remaining 20% of implementation cost will be paid after successfully running of the SPDP application for a period of three (3) months from the date of go-live of application with 24 phase 1 schemes.
- Maintenance for the customization part shall be paid at the beginning of each year.
- After successful go-live of all 24 schemes considered under Phase I, all DBT applicable State as well as Central schemes running across all the departments are planned to be

integrated in the SPDP platform in a phase-wise manner. As mentioned in the RFP, the SPDP registry will be established with a combination of 15 source databases which is expected to cover the major population of the State.

13.3 Change request Cost

100% cost of the change request cost will be released after completion of work on successful completion of the User Acceptance Test (UAT)

13.4 Resource Cost

100% of the resource cost shall be paid on quarterly basis.

13.5 Other

- Taxes will be paid extra as per the rate prevalent at the time of billing
- Payment shall be made within 30 working days of the receipt of invoice along with supporting documents subject to penalties, if any.

14 Formats for Response

14.1 Pre-Qualification Bid Formats
14.1.1 FORM PQ-1: Bidder's Organization (General Details)

(To be submitted on the Letterhead of Bidder)

S. #	Information	Details
1.	Name of Bidder	
2.	Registered Address of Bidder	
3.	Address for Communication	
4.	Name, Designation and Address of the contact person to whom all references shall be made regarding this RFP	
5.	Mobile no. of contact person:	
6.	E-mail address of contact person:	
7.	GST Number of the Firm	
8.	PAN No. of the firm	
9.	Turnover: i. FY 2018-19 ii. FY 2019-20 iii. FY 2020-21	

Authorized Signatory with Date and Seal:

Name:

Title:

Address of Bidder:

14.1.2 FORM PQ-2: Acceptance of Terms and Conditions

(To be submitted on the Letterhead of Bidder)

To

The General Manager (Admin),
Odisha Computer Application Centre,
N-1/7-D, Acharya Vihar P.O. RRL,
Bhubaneswar - 751013.

Subject: RFP for selection of Agency for the supply, configuration and implementation support of Deduplication and Master Data Management (MDM) Tool, for Social Protection Delivery Platform (SPDP) in Odisha.

Madam,

I have carefully and thoroughly gone through the Terms & Conditions along with scope of work contained in the RFP No. **OCAC-SEGP-SPD-0043-2021-22002** regarding "Selection of Agency for the supply, configuration and implementation support of Deduplication and Master Data Management (MDM) Tool, for Social Protection Delivery Platform (SPDP) in Odisha".

I declare that all the provisions/clauses including scope of work of this RFP are acceptable to our company. I further certify that I am an authorized signatory of the company and I am, therefore, competent to make this declaration.

Authorized Signatory with Date and Seal:

Name:

Title:

Address of Bidder:

14.1.3 FORM PQ-3: Product Details

Name of Product	IP developed in India/ outside India	No. of Installations in India	Total volume of records handled from Golden Record/ EOD/ 360-degree view, etc.

14.1.4 FORM PQ-4: Technical Capability Citation Format

1	**Project Name:**	
3	**Name of the Client:**	
4	**Project Location:**	
5	**Contact person of the client with address, phone and e-mail:**	
6	**Project Duration:**	
7	**Start Date (month/year):** **Completion Date (month/year):**	
8	**Status of assignment: Completed / Ongoing** **(if it is on-going, level of completion)**	
9	**Narrative description of the project with scope:**	
10	**Solution Details:** i. Platform & Technology details ii. Software & Tools details iii. Any other (specify in details)	

14.2 Technical Bid Formats
14.2.1 FORM TECH-1: Covering Letter

(To be submitted on the Letterhead of Bidder)

To

The General Manager (Admin),

Odisha Computer Application Centre,

N-1/7-D, Acharya Vihar P.O. RRL,

Bhubaneswar - 751013.

Subject: RFP for Selection of MDM and De-duplication Tool for Development, Implementation and Maintenance of Social Protection Delivery Platform (SPDP) in Odisha.

Ref: RFP Reference No. OCAC-SEGP-SPD-0043-2021-22002

Madam,

I, the undersigned, offer to provide the services for the proposed assignment in respect to your Request for Proposal No. **OCAC-SEGP-SPD-0043-2021-22002**. We hereby submit our technical proposal which will be valid for acceptance up to 120 Days and I confirm that this proposal will remain binding upon us and may be accepted by you at any time before this expiry date. All the information and statements made in our proposal are true and correct and I accept that any misinterpretation contained in it may lead to disqualification of our proposal. If negotiations are held during the period of validity of the proposal, I undertake to negotiate on the basis of proposal submitted by us. Our proposal is binding upon us and subject to the modifications resulting from contract negotiations.

I have examined all the information as provided in your Request for Proposal (RFP) and offer to undertake the service described in accordance with the conditions and requirements of the selection process. I agree to bear all costs incurred by us in connection with the preparation and submission of this proposal and to bear any further pre-contract costs. In case, any provisions of this RFP/ ToR/Scope including of our technical and financial proposal are found to be deviated, then you shall have rights to reject our proposal. I confirm that, I have the authority to submit the proposal and to clarify any details on its behalf.

I understand you are not bound to accept any proposal you receive.

Yours faithfully,

Authorized Signatory with Date and Seal:

Name:

Title:

Address of Bidder:

14.2.2 FORM TECH-2: Experience in supplying, installing deduplication products and implementing Enterprise-level Deduplication solution (with record count exceeding 50 million records) in Central/ State/ UT Govt. department/ PSU/ BFSI/ Telecom in India for: Bulk matching & Creation of Master ID, EOD/ Incremental Processing

Name of Organization	Record Count (In Million)	Name & brief description of product/ solution	Contact person of client with address, phone and e-mail

14.2.3 FORM TECH-3: Experience in implementing Enterprise-level Deduplication solution (with record count exceeding 50 million records) in Central/ State/ UT Govt. department/ PSU/ BFSI/ Telecom in India for: Real time Query and 360 View of Customer

Name of Organization	Record Count (In Million)	Name & brief description of product/ solution	Contact person of client with address, phone and e-mail

14.2.4 FORM TECH-4: Project Citation Format (Solution should drive new insights and access to information based on AI & ML Algorithm)

1	Project Name:	
2	Value of Contract/ Work Order (In INR):	
3	Name of the Client:	
4	Project Location:	
5	Contact person of the client with address, phone and e-mail:	
6	Project Duration:	
7	Start Date (month/year): Completion Date (month/year):	
8	Status of assignment: Completed / Ongoing (if it is on-going, level of completion)	
9	Narrative description of the project with scope:	
10	List of Services provided by your firm/company:	

14.2.5 FORM TECH-5: Project Citation Format (Solution should have INDIA specific phonetics libraries/algorithm)

1	Project Name:	
2	Value of Contract/ Work Order (In INR):	
3	Name of the Client:	
4	Project Location:	
5	Contact person of the client with address, phone and e-mail:	
6	Project Duration:	
7	Start Date (month/year): Completion Date (month/year):	
8	Status of assignment: Completed / Ongoing (if it is on-going, level of completion)	
9	Narrative description of the project with scope:	
10	List of Services provided by your firm/company:	

14.2.6 FORM TECH-6: Project Citation Format (Solution should provide capabilities on data sufficiency analysis, data statistics, computing frequency distributions, pattern checks, validate data for patterns, identifying outliers and percentiles, computing metadata validations)

1	Project Name:	
2	Value of Contract/ Work Order (In INR):	
3	Name of the Client:	
4	Project Location:	
5	Contact person of the client with address, phone and e-mail:	
6	Project Duration:	
7	Start Date (month/year): Completion Date (month/year):	
8	Status of assignment: Completed / Ongoing (if it is on-going, level of completion)	
9	Narrative description of the project with scope:	
10	List of Services provided by your firm/company:	

14.2.7 FORM TECH-7: Approach & Methodology for implementing the features mentioned in technical evaluation criteria

14.3 Financial Bid

14.3.1 FORM FIN-1: Financial Bid Covering Letter

(To be submitted on the Letterhead of Bidder)

To

The General Manager (Admin),
Odisha Computer Application Centre,
N-1/7-D, Acharya Vihar P.O. RRL,
Bhubaneswar - 751013.

Subject: RFP for selection of MDM & De-duplication Tool for development, implementation and maintenance of Social Protection Delivery Platform (SPDP) in Odisha.

Ref: RFP Reference No. OCAC-SEGP-SPD-0043-2021-22002

Madam,

I /We, the undersigned, offer to provide MDM and De-duplication Tool for Development, Implementation and Maintenance of Social Protection Delivery Platform (SPDP) in Odisha as per RFP No.: **OCAC-SEGP-SPD-0043-2021-22002** and our Pre-Qualification, Technical and Financial Proposals. Our attached Financial Proposal is for the sum of <<Amount in words and figures>> inclusive of all applicable taxes and duties.

1) BID PRICE

We declare that our Bid Price is for the entire scope of the work as specified in Section 3. These prices are indicated in the Financial Bid as part of this RFP response. In case there is substantial difference between the component wise price approved by OCAC and the price quoted by the bidder, OCAC will have the rights to ask the bidder to realign their prices without impacting the total bid price. We hereby agree to submit our offer accordingly.

2) PERFORMANCE BANK GUARANTEE

We hereby declare that in case the contract is awarded to us, we shall submit the Performance Bank Guarantee as specified in this RFP document.

We understand you are not bound to accept any Proposal you receive. We hereby declare that our Proposal is made in good faith, without collusion or fraud and the information contained in the proposal is true and correct to the best of our knowledge and belief.

We understand that our proposal is binding on us and that you are not bound to accept any proposal you receive.

Yours faithfully,

Authorized Signatory with Date and Seal:
Name:
Title:

Address of Bidder:

14.3.2 FORM FIN-2: Summary of Financial Bid (in Indian Rupees)

SL #	Description	Unit	Unit Cost excluding Taxes	Total Cost Excluding Taxes
1.	License Cost with one Year Annual Technical Support. (The bidder has to mention license policy) *Note: Bidder may quote the licenses considering 12 Crore records initially. Beyond 12 crore records, payment towards licenses shall be made pro-rata basis. In case the licensing policy of the bidder is core/processor-based, the bidder has to do the hardware sizing considering 12 crore records initially and beyond 12 crore records payment shall be made based on the addition of new servers processors / cores).* **However, payment will be made as per the actual number of records**.			
2.	Annual Technical Support	4 Years.		
3.	Customization and Implementation Cost with one-year AMC from Go-Live	Lump-sum		
4.	AMC Cost for customization part	4 Years.		
5.	Cost Discovery item Man month rate for change request management in future (bidder to quote for 50 man-months. However, payment will be made as per the actual number of man-month consumed)	50 man-month		
6.	Cost Discovery item On-site resource cost @_____(per month per person) in case of requirement	12 months		
7.	Any other item, the bidder to specify			
8.	Any other item, the bidder to specify			
Total (excluding taxes)				

1. Bidder has to quote for required number of licenses in the unit column as per their licensing policy
2. Bidder has to quote the cost excluding tax. Taxes will be paid extra as per actual at the time of billing
3. Total Amount will be considered for commercial evaluation

Authorized Signatory with Date and Seal:

Name:

Title:

Address of Bidder:

15 Annexure - I: Bid Security Declaration Form

(To be submitted on the Letterhead of Bidder)

To

The General Manager (Admin),

Odisha Computer Application Centre,

N-1/7-D, Acharya Vihar P.O. RRL,

Bhubaneswar - 751013.

Subject: Bid Security of RFP for selection of MDM & De-duplication Tool for Development, Implementation and Maintenance of Social Protection Delivery Platform (SPDP) in Odisha.

Ref: RFP Reference No. OCAC-SEGP-SPD-0043-2021-22002

Madam,

I/We understand that, as per clause no. 4 above referenced RFP, bids must be supported by a Bid Security Declaration In lieu of Earnest Money Deposit, (reference Finance Department, Government of Odisha, Office Memorandum No. 281/F, dated 05.01.2022). I/We hereby accept that I/We may be disqualified from bidding for any contract with you for a period of three years from the date of disqualification as may be notified by you (without prejudice to FACT's rights to claim damages or any other legal recourse) if,

1) I am /We are in a breach of any of the obligations under the bid conditions,

2) I/We have withdrawn or unilaterally modified/amended/revised, my/our Bid during the bid validity period specified in the form of Bid or extended period, if any.

3) On acceptance of our bid by FACT, I/we failed to deposit the prescribed Security Deposit or fails to execute the agreement or fails to commence the execution of the work in accordance with the terms and conditions and within the specified time.

Yours faithfully,

Authorized Signatory with Date and Seal:

Name:

Title:

Address of Bidder: