

Integrated Service Delivery Platform for SSNP programs using CRVS core systems

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In response to the continuing efforts of improving and monitoring the SSNP programs, CRVS secretariat has designed a platform called ISDP (Integrated Service Delivery Platform) with which government can efficiently monitor and improve targeting and service deliveries. Integrated Service Delivery Platform (ISDP) is a platform which will also enable us to develop a single window view of SSNP services against a citizen or a household. The simple concept is to build a system which will only store enrollment data of each SSNP program against a unique ID.

CONTEXT AND BACKGROUND

A vital element of the SSNP is the continuous, timely and accurate targeting of beneficiary, the enrollment processes and finally delivering the service. There are 150+ SSNP programs spreading to 35+ ministries covering more than 60+ million citizen directly or indirectly which makes SSNP one of the most complex systems to monitor. There are also lots of duplication of work as well as inefficient manual process involved making it expensive as well.

The primary objective of ISDP

- To provide universal access to services through the use of appropriate strategies and technologies for efficient and effective service delivery
- To simplify the operational processes through the use of a digital CRVS systems
- To strengthen systems of e-governance needed for sustainable program implementation
- To improve and maximize utilization of SSN Funds, avoiding duplication of work for targeting and enrollment.
- To strengthen the government's service delivery platform (Interoperability, Data Share, Standard Practices etc.)
- To make SSNP service delivery more transparent and less expensive
- A central dashboard for all SSNP programs (Monitoring, continuous improvement, impact analysis etc.)
- Monitor and improve citizen livelihood
- Real-time data made available for researchers and
- To increase the efficiency of targeting, enrolling and KYC management for SSNP programs.
- To enable data based decision making
- Safeguard the information from unauthorized access, disclosure, copying, use or modification.
- Know your client better for personalized service delivery
- To manage and share knowledge to empower continuous improvement.

During designing the ISDP we followed the following principals to achieve maximum value:

- Reduce duplication of work not only within the organization but also across the government.
- We should not introduce any new process
- At the core data should be as minimum as possible while ensuring maximum value
- Provide universal access to services in a convenient, efficient, transparent and reliable way and build the core of integrated government

- Improve access to information by reducing digital divide and Provide realistic and relevant data and technologies to support e-Government and SSNP programs
- Create a platform for continuous improvement and to measure impact.

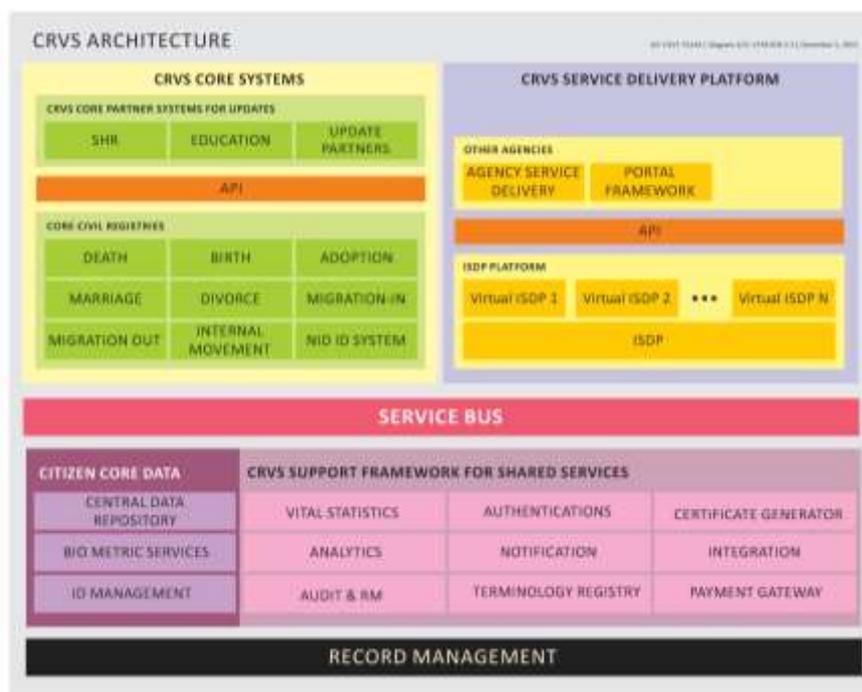
Core Components of ISDP

ISDP is designed to be very simple yet maximize value. The principle is to keep minimum data about a service therefore, ISDP will only keep service enrollment data (including service duration) and citizen ID. There are two core module od ISDP which are Master Client Index (MCI) and Service Manager.

The **Master Client Index (MCI)** will act like a KYC for both individual and households. The Master Client Index will connect to CRVS system for identification, authentication and form filing purposes. National Household Database (NHD), National ID and different health, economic and education surveys will be interoperable with MCI to help agencies with targeting and to measure the impact of the SSNP that they are running. This module will have several data repositories and functions i.e. demographic data, KYC data, bio-metric data, ID mapper and the household data.

The other core component **Service Manager** will only keep data about a service enrollment either by a citizen or by a household. The Service Manager will only keep who is providing witch service to whom (individual and household) and where and for how long. The other service specific information will belong to each service provider not in SM.

Other than the MCI and SM the other IDSP modules are: Service Registry, Facility Registry, Provider Registry, Information Request Manager, Terminology Registry and Eligibility Manager.



Facility registry: Every organization who is a stakeholder of the service delivery is register within facility registry which includes but not limited to government organization, NGO, development agencies, private organizations etc. Facility registry will also use a unique ID to that facility with a routing number so that facilities can also send/receive messages/information/r

request within the ISDP platform through information service bus. Upon registration every facility will have their own management dashboard.

Provider Registry: Every individual who is providing a service is part of provider registry. A provider like UDC entrepreneurs will also be a part of provider registry. There will be a formal process for being a provider which will include NID verification, signing of agreement and role table mapping. This is a registry of all identified individual stakeholders with access rights and roles management. Upon registration every provider will have his/her own dashboard.

Master Beneficiary Index: The master beneficiary index will be the central database for management of all the beneficiaries.

Service registry: Service registry is where Facilities will register a service that they will be providing to a individual or a household. This registry will have detailed information about a service i.e. eligibility criteria, area, frequency, service length, who can deliver the service, service description, expected outcome etc. The registry will generate a unique service ID which has to be used by providers during enrollment and deliveries.

Information Request Manager (IRM): The IRM will be used while a Facility required more information about a delivered service (i.e. transaction data, individual information outside CCDS etc.). Any facility will be able to request other facility about the details of the service the facility is delivering. ISDP will route the request to the agencies and also track the replies.

Eligibility manager: This is an analytical tool that can be used by service designers. The tool will be designed in such a way so that the facility can analyze and simulate a service they are planning. This tool will also manage the relationship between services if there is any i.e. if an individual is already enrolled in service "X" then he/she is not eligible for service "Y". Facilities will be able to do more pro-active data driven decision making using this tool. Over time we can expand this tool to capture knowledge and enable continuous improvement which is an absolute necessity.

Terminology Registry: All the terminologies, coding practices, standards will be within this registry. This registry will manage common standards across all stakeholders. In terms of coding practices, protocols and standards our policy is to adopt international standards as much as possible. CRVS secretariat is facilitating related stakeholders to standardize their respective coding practices and for publishing in to terminology registry. Since managing these are continuous process therefore, the secretariat is also advocating and facilitating in implementing these processes within respective organisations.

At the infrastructure level there will be several services which are certificate manager, process manager, content management, notification services, payment gateway, eForms, version control, analytics etc. The platform will also perform full audit trail and complete record management across the entire platform.

Management of Privacy and confidentiality across the platform

The ISDP will not keep any data other than the enrollment information and the ID information, however, Cabinet division is in a process of preparing sets of security policy to protect personal information. The Purpose of the policy will be to govern the collection, use and disclosure of personal information by organizations in a manner that recognizes both the right of an individual to have his or her personal information protected and the need of organizations to collect, use or disclose personal information for purposes that are reasonable."

The Personal Information is broadly defined within CRVS as “information about an identifiable individual.” Examples of personal information: Name, ID, Age, Medical records, Ethnic Origin, Opinions, Name, Income, Disciplinary Actions, Credit Records, ID Numbers, Blood Type, Medical Records and documents provided during enrollment etc. All stakeholders and connected agencies must comply with the requirements.

Once on-boarded organizations are required to develop (and follow) policies and practices to meet the obligations that the policy will outline. Organizations are also going to be required to make their policies available. An organization must protect personal information that is in its custody or under its control by making reasonable security arrangements against risks such as unauthorized access, collection, use, disclosure, copying, modification, disposal or destruction.

The secretariat will also publish policies on audit trail requirements, record management best practices and information management requirements in coming days.

Quality Control

This is a very important component of the platform since lot of stakeholders are taking service for a single system therefore, a uniform quality control management has to be in place. Like policy for privacy and confidentiality CRVS secretariat is also in process of developing a guideline for quality control as will. The proposed quality framework frame work for ISDP/CRV is provided below.

Interoperability

Interoperability is the core of both CRVS and ISDP initiatives. To ensure interoperability we the secretariat has already published CCDS and working closely with related stakeholders so that they stay interoperable. The policy is to adopt international/community standards as much as possible i.e. for health we are proposing FHIR and OpenHIM, for mobile health MHD (IHE), OpenCRVS etc. The secretariat has also decided to stay connected with international community while localizing coding practices, protocols, API's and data standards.