Cambodia National ID Program Strategy

Fifth meeting of the Regional Steering Group for CRVS in Asia and the Pacific on 17-19 September 2019, Bangkok.

Mr. THEY Kheam

Overview

- > Inclusiveness
 - Everyone should be identified
- > Uniqueness
 - Everyone should have just one unique identity
- Universal
 - Provide service delivery to all



National Strategic Plan for Identification

Vision and Mission

Vision for Identification in Cambodia

"A mission-focused, service-oriented and modern area of public administration in Cambodia that manages data about population identity and vital events and produces reliable population and vital statistics."

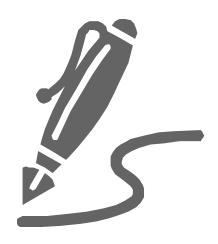
Mission for Identification in Cambodia

"To register all individuals and vital events in a transparent, nondiscriminatory and efficient manner in order to issue proof of identification for ensuring equal rights in society and for providing reliable and protected data for good governance and for the development of the private and public sectors."

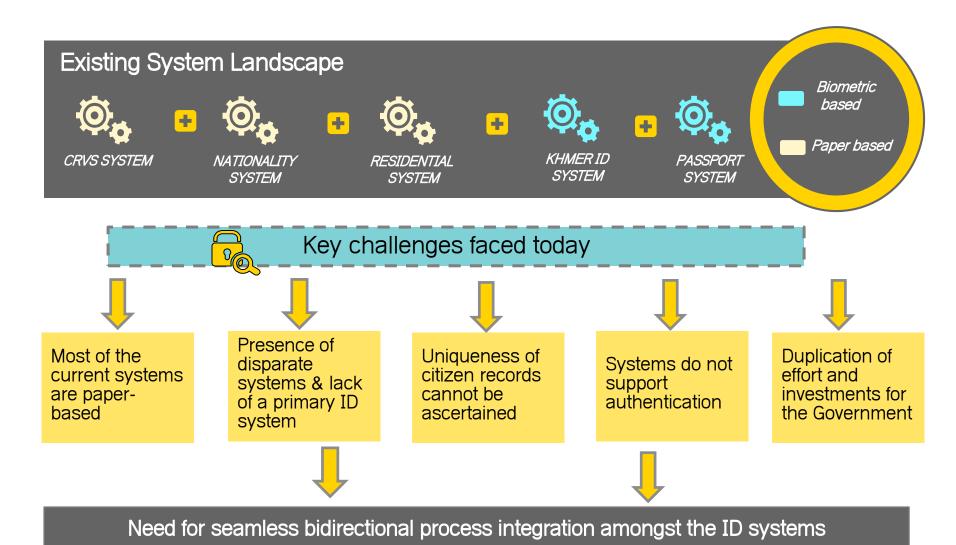
Goals of NSPI (2017-2026)

Develop an enabling legal environment for personal identification Establish a universal and responsive ICT based CRVS system Establish the Integrated Population Identification System Launch the unified data distribution system about population Align organization and introduce e-services for client-oriented, efficient and transparent service delivery

Program Approach



ID systems in Cambodia - Current state



Design Considerations for IPIS



KIdC issued by IPIS system will become the single point of truth for identity of a resident in Cambodia to be used by various government departments for extending services and benefits



IPIS should try to restrict the scope of KIdC to "verification" of identity. The role of managing other attributes and entitlements could be done by respective departments & systems.



Once IPIS is operational across Cambodia, RGC should consider making KIdC a mandatory requirement for all residents within a certain prescribed timeframe.



CRVS system is integral to successful establishment of IPIS. Hence, IPIS solution development should also be supplemented by ICT enablement of CRVS system, to facilitate seamless integration between the two.

Design Considerations for IPIS



IPIS solution should attempt to re-use any viable existing components and infrastructure, that is currently available with the other five supplementary systems, to the extent possible

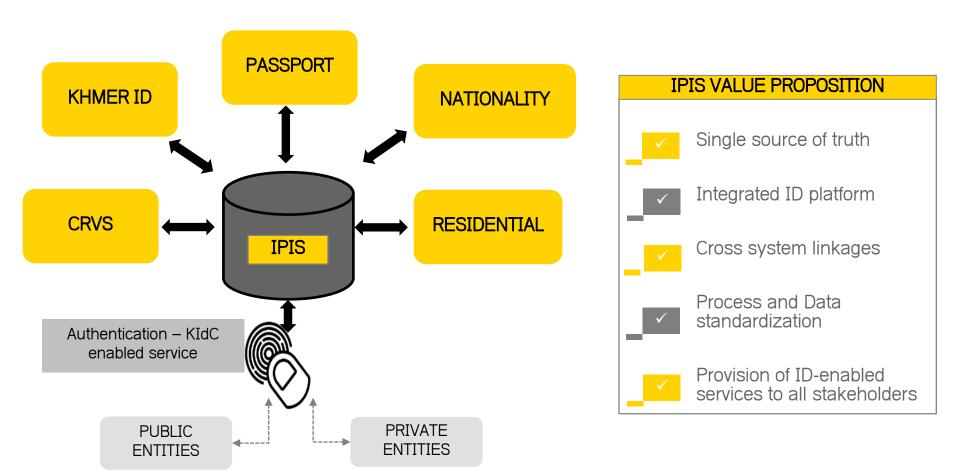


KIdC generated from IPIS should be completely random and not carry any information that will enable profiling of the holder



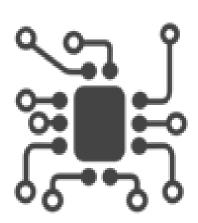
Raw biometric images collected for each individual should be stored without any loss in compression, independent of the service provider or the technology used. Access to the raw image should be available to only to authorized agency and it should not require involvement of existing service providers.

ID systems in Cambodia – Future state



IPIS is proposed to be a common integration platform and primary data source on population information

Building the integrated ID platform

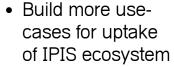


Phase-wise Implementation plan





Phase 4



 Integrate with passport system



- Policy and legal frameworks
- Build IPIS, CRVS, Residential system and Nationality system
- Migrate Khmer ID data
- Build interface between IPIS, CRVS, Residential system

 Build data centres and disaster recovery site

Phase 2

- Pilot
- National roll-out
- Complete enrolment

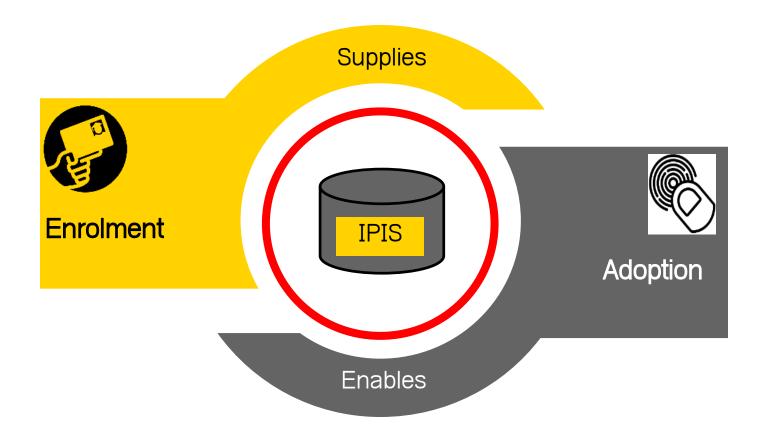
 Fully integrate with Khmer ID

Phase 3

- On-board public & private sector agencies
- Integrate with Health System and other governmental agencies

- - and Nationality system
 - Build authentication services
- ► For an effective deployment plan that will ensure a gradual rollout of this integrated ID platform across the country, it is important the implementation strategy is devised a "phase-wise plan"
- ▶ Will ensure allocation of adequate time and resources necessary to facilitate the effective rollout of ID systems in Cambodia, along with effective training of users on the ground

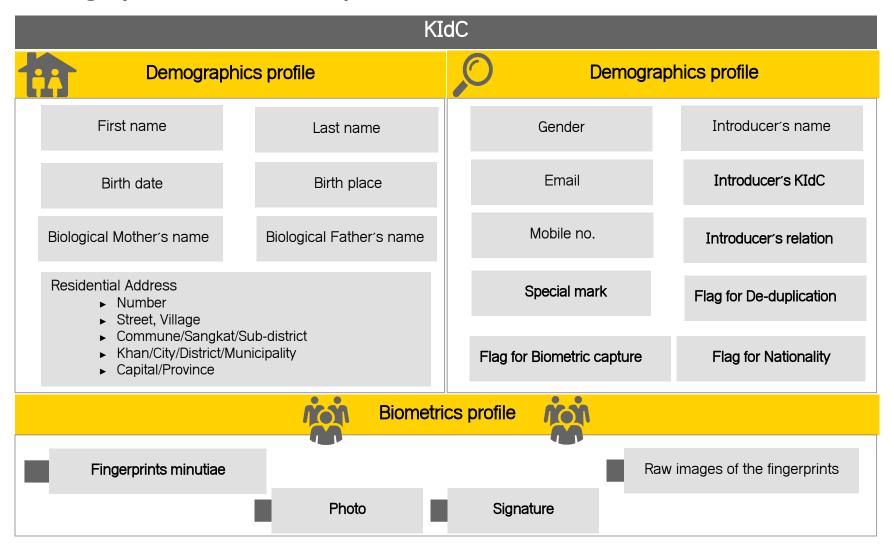
Core services of IPIS



IPIS enrolment promotes usage (authentication) and vice-versa

IPIS Data structure

Demographic and Biometric profile



IPIS - KldC Number

Proposed plan - KId Code: 123456789-Y



- 123456789 -> 9 random digits
- Y -> One Checksum digit
- KIdC generated should not have intelligence built into it so that privacy and security of an individual is not compromised. Generation of random numbers will limit the profiling of the KIdC
- The numbering scheme should be able to accommodate necessary population growth over the years, as KIdC can never be re-used.
- A nine digit randomly-generated number with the last number as checksum digit is recommended as the KIdC nomenclature
- It is proposed that a more complex algorithm than modulus 11 may be considered to reduce potential data entry errors
- Data field depicting Nationality will be part of the IPIS data structure instead of the KIdC

IPIS Implementation Option

Data migration from Khmer ID system & enrolment though the IPIS enrolment system

Step 1

All demographic and biometric data in Khmer ID be extracted and stored in the IPIS. All the records in the Khmer ID system will be migrated to the IPIS system.

Step 2

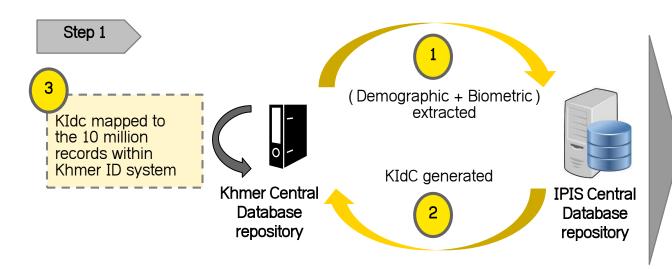
Additional data fields of IPIS to be updated when an individual comes to collect the KIdC number

Step 3

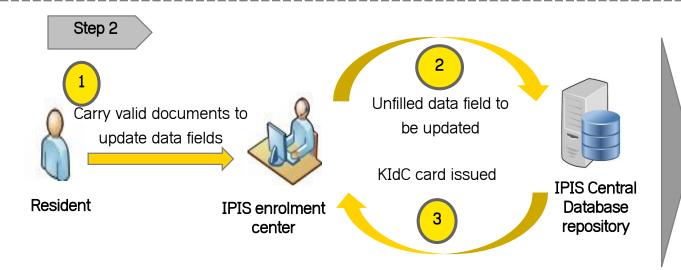
Resident visits IPIS The enrolment KIdC is The application KIdC and other agency checks for checks for generated and unfilled data enrolment centre valid documents and duplicates issued to the fields updated IPIS checks for resident if the in IPIS DB based on quality of combination of identity is biometrics captured. unique. Else, parameters -The request is sent for the request is biometric and enrolment of the demographic rejected resident

IPIS Implementation Options

Option 3 - Data migration from Khmer system & enrolment though the IPIS enrolment system (1/2)



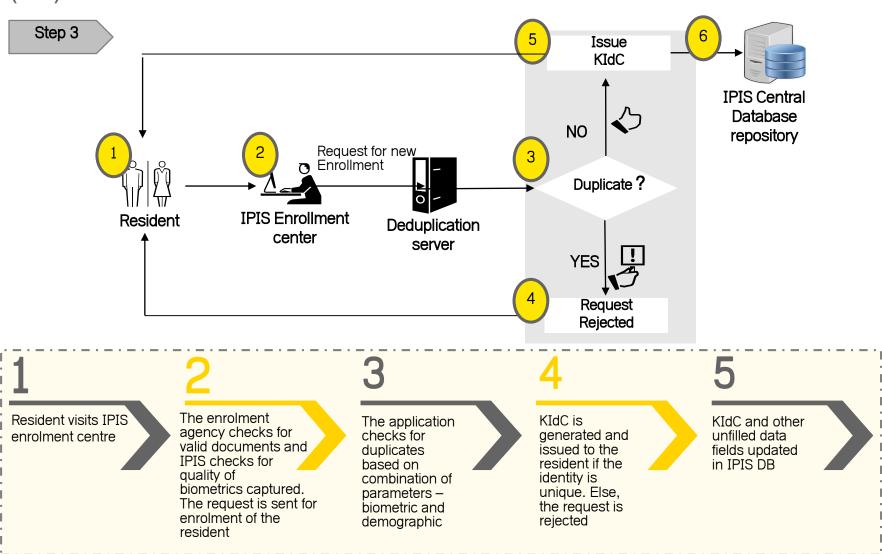
All demographic and biometric data in Khmer ID be extracted and stored in the IPIS. All the records in the Khmer ID system will be migrated to the IPIS system. The additional data fields in the Khmer ID system would be deleted.



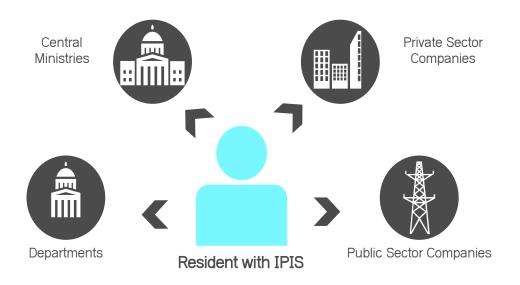
Additional data fields of IPIS to be updated when an individual comes to collect the KIdC number

IPIS Implementation Options

Option 3 - Data migration from Khmer system & enrolment though the IPIS enrolment system (2/2)



IPIS Ecosystem



The driving principles to foster innovation and creating a vibrant IPIS ecosystem are:

- ▶ Developing KIdC service as a ubiquitous utility anytime, anywhere available and easy to use
- ▶ Resident should be able to enroll once and avail services upon KIdC issuance
- ► Instant activation of KIdC enabled services
- ► Empower service agencies to KIdC–enable their services

CRVS System

Step 1

The demographic data in IPIS be extracted and stored in the CRVS system once the unique identity of the resident is confirmed.

Every record will have a corresponding record in CRVS system.

Step 2

Additional data fields of CRVS system to be updated when a resident comes to collect the KIdC number

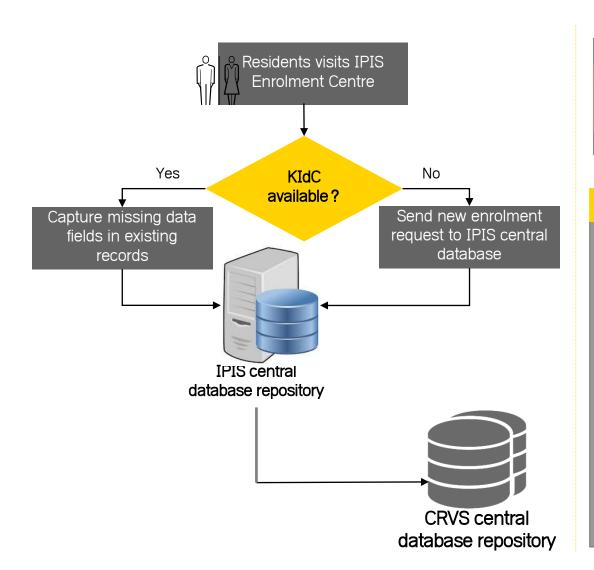
Step 3

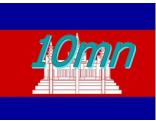
Registration of new births:

- ->Resident will visit the CRVS enrolment center
- ->The relevant fields will be sent to IPIS to generate the KIdC
- -> The birth certificate with KIdC will be provided to the resident

CRVS implementation approach

Step 1: Migration of legacy data





Cambodian citizens enrolled in Khmer ID system

- Only the data not available in digitized form from IPIS and Khmer ID system will be digitized from the legacy ~ 10 mn scanned birth certificates
- Update missing fields on Birth record using search keys from already 6 million digitized records
- Missing data fields on legacy records updated when citizen visits enrolment centre
- The missing fields can be manually digitized from the physical registers kept in CRVS department, Phnom Penh

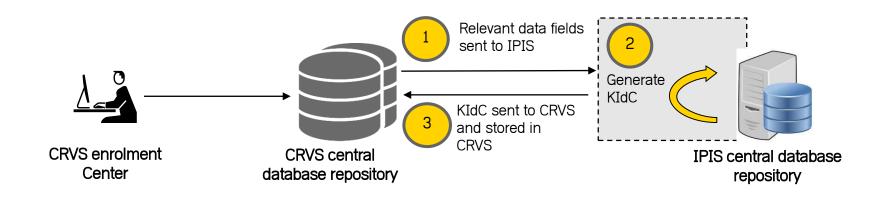
CRVS implementation approach

CRVS System

Access Mode	Online
Access Channels	Web
Enrolment Start Date	2017
Number of Enrolment Stations	1 at each commune
Current Status of Enrolment	14 million records
Demographic Details Captured	Name, Address, Gender, Parent's name
Biometric details captured	None
Number of enrolments	25000-30000 enrolments per month
Form Factor	Acknowledgement letter of application
Services	Birth, Death, Marriage, Vital Statistics
Integration points	Events, APIs

CRVS implementation approach

Step 2: Registration for new births



Requirements for CRVS enrolment

Hospital certificate if born in the hospital

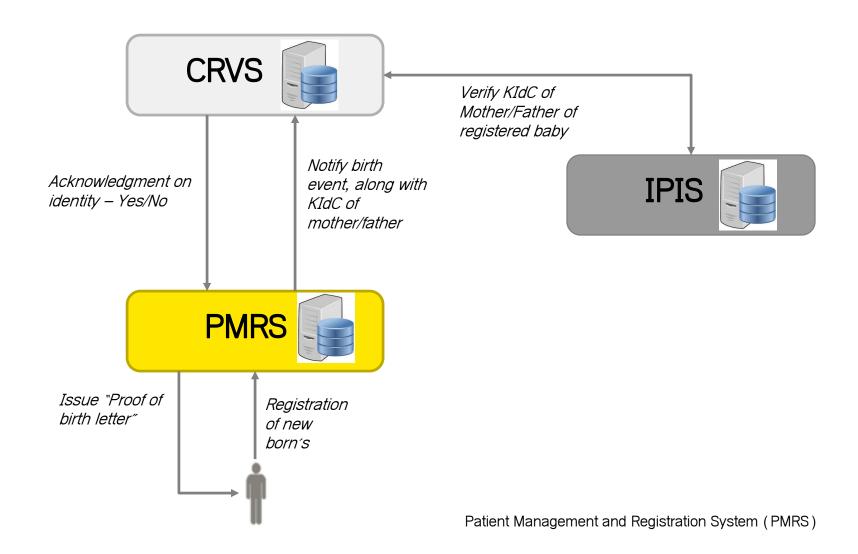
Village chief certification if born at home

Parental residential book or residential book

Enrolment form for CRVS

KIdC of the parent/guardian/introducer

Integration with health



Residential system

The Residential Management system will be the single source of information on individual addresses for IPIS. It is mandatory for all citizens to enroll in the residential system.

Step 1

The demographic data in IPIS be extracted and stored in the residential system once the unique identity of the resident is confirmed.

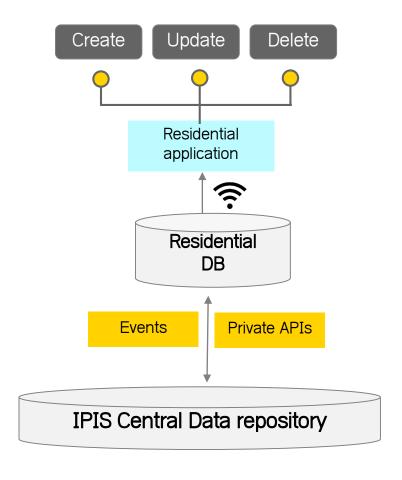
Every record will have a corresponding record in Residential system

Step 2

Additional data fields of Residential system to be updated when a resident comes to collect the KIdC number

Residential system

The Residential Management system will be the single source of information on individual addresses for IPIS. It is mandatory for all citizens to enroll in the residential system.



Residential System	
Access Mode	Online
Access Channels	Web
Enrolment Start Date	2018
Number of Enrolment Stations	1 at each commune
Current Status of Enrolment	16 million records
Demographic Details Captured	KIdC, Name, Address, Gender etc.
Biometric details captured	None
Number of enrolments	2000-3000 enrolments per month
Form Factor	Acknowledgement letter of application
Services	Enrolment, update, delete and MIS
Integration points	Events, APIs

Nationality system

The nationality system will act as the front desk functionality to process all related requested concerning nationality issues. The nationality system enrolls the foreigners who are granted with Khmer nationality through the various ways that the law has determined.

Step 1

The legacy data of 1,700 records is digitized in the excel format

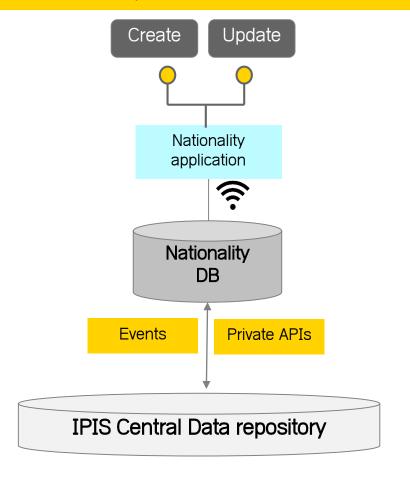
The data in the excel format will be migrated to the nationality system database

Step 2

Individuals will be asked to visit the nationality system to seed their KIdC

Nationality system

The nationality system will act as the front desk functionality to process all related requested concerning nationality issues. The nationality system enrolls the foreigners who are granted with Khmer nationality through the various ways that the law has determined.



Nationality System	
Access Mode	Online
Access Channels	Web
Enrolment Start Date	2018
Number of Enrolment Stations	1 at Phnom Penh
Current Status of Enrolment	1,700 records
Demographic Details Captured	KIdC, Name, Address, Gender etc.
Biometric details captured	None
Number of enrolments	Few enrolments per month
Form Factor	Acknowledgement letter of application
Services	Enrolment, update, delete and MIS
Integration points	Events, APIs

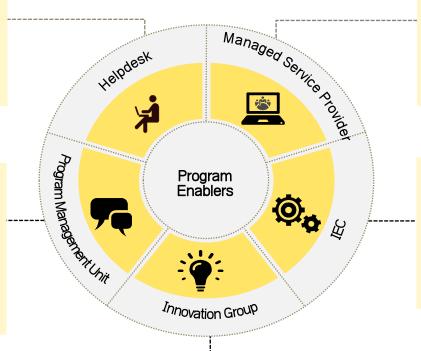
Program Enablers



Program Enablers – ID platform

Technical Help Desk and call center will be a convenient way to facilitate program intervention support tasks

Perform project monitoring and evaluation activities to consistently assess project progress, quality management and provide technical support



Mandate would be to implement and manage the end-to-end implementation of ID platform

An IEC group will guide the development and implementation of an overall awareness and communication strategy for the NSPI program

The Innovation Group would generate new ideas/suggestions from external stakeholders, as well as from within and provide handholding support