



# 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, non-discriminatory 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

1

Establish a universal and responsive ICT based CRVS system

2

Establish the Integrated Population Identification System

3

Launch the unified data distribution system about population

4

Align organization and introduce e-services for client-oriented, efficient and transparent service delivery

5

# Program Approach



# ID systems in Cambodia – Current state

## Existing System Landscape



## Key challenges faced today

Most of the current systems are paper-based

Presence of disparate systems & lack of a primary ID system

Uniqueness of citizen records cannot be ascertained

Systems do not support authentication

Duplication of effort and investments for the Government

Need for seamless bidirectional process integration amongst the ID systems

# 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



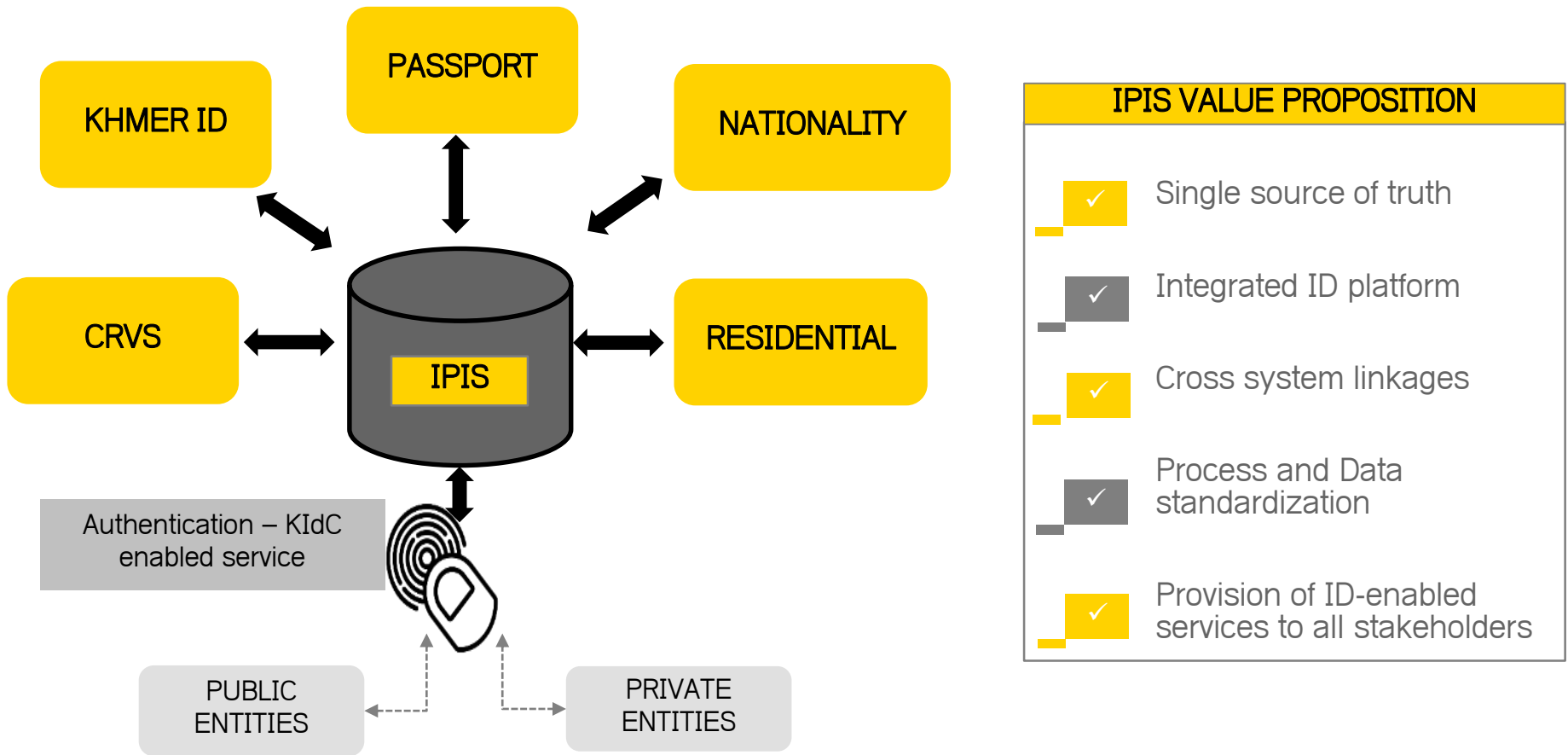
KIdC generated from IPIS should be completely random and not carry any information that will enable profiling of the holder



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.

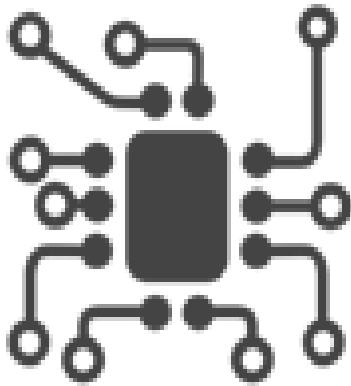


# ID systems in Cambodia – Future state

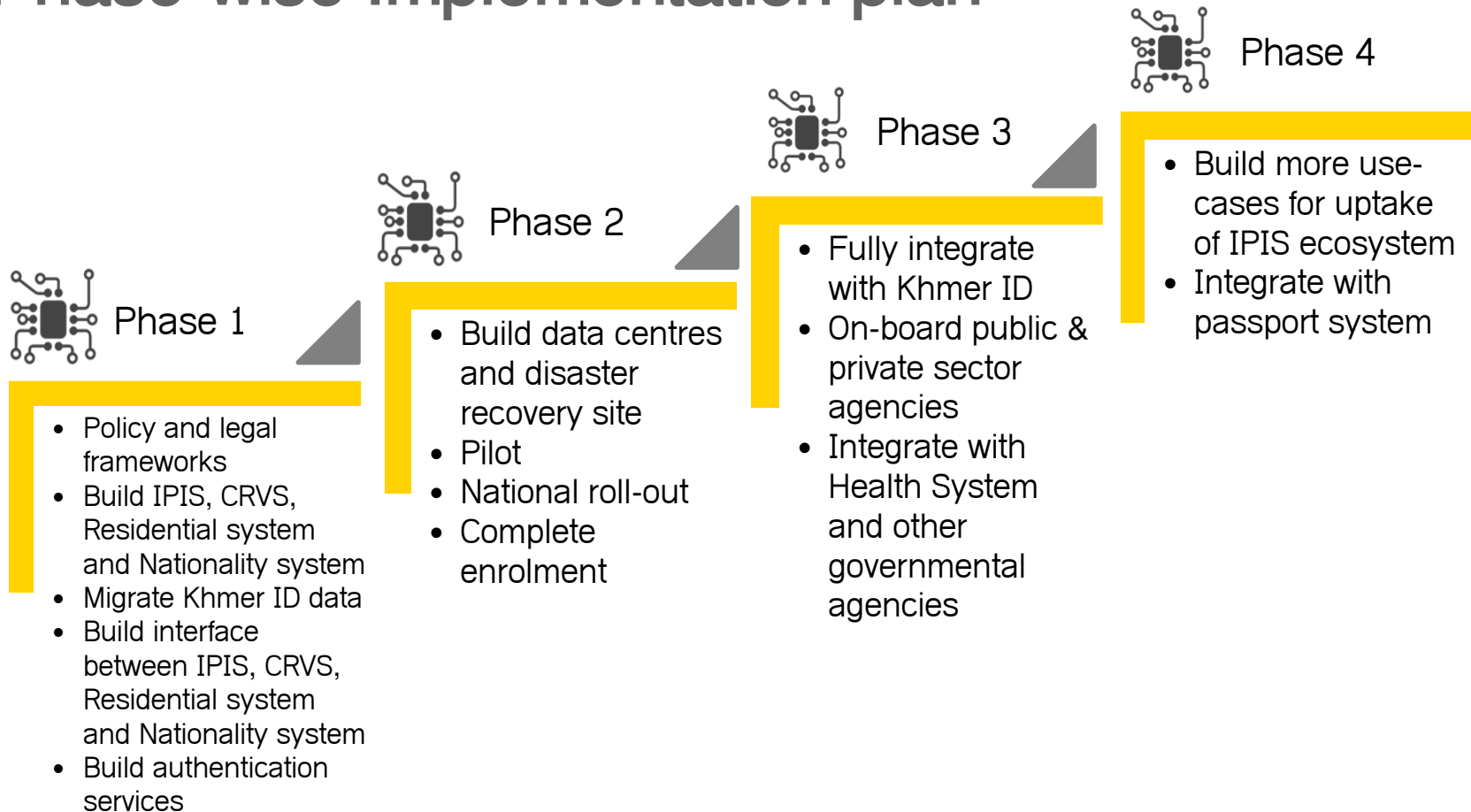


IPIS is proposed to be a common integration platform and primary data source on population information

# Building the integrated ID platform



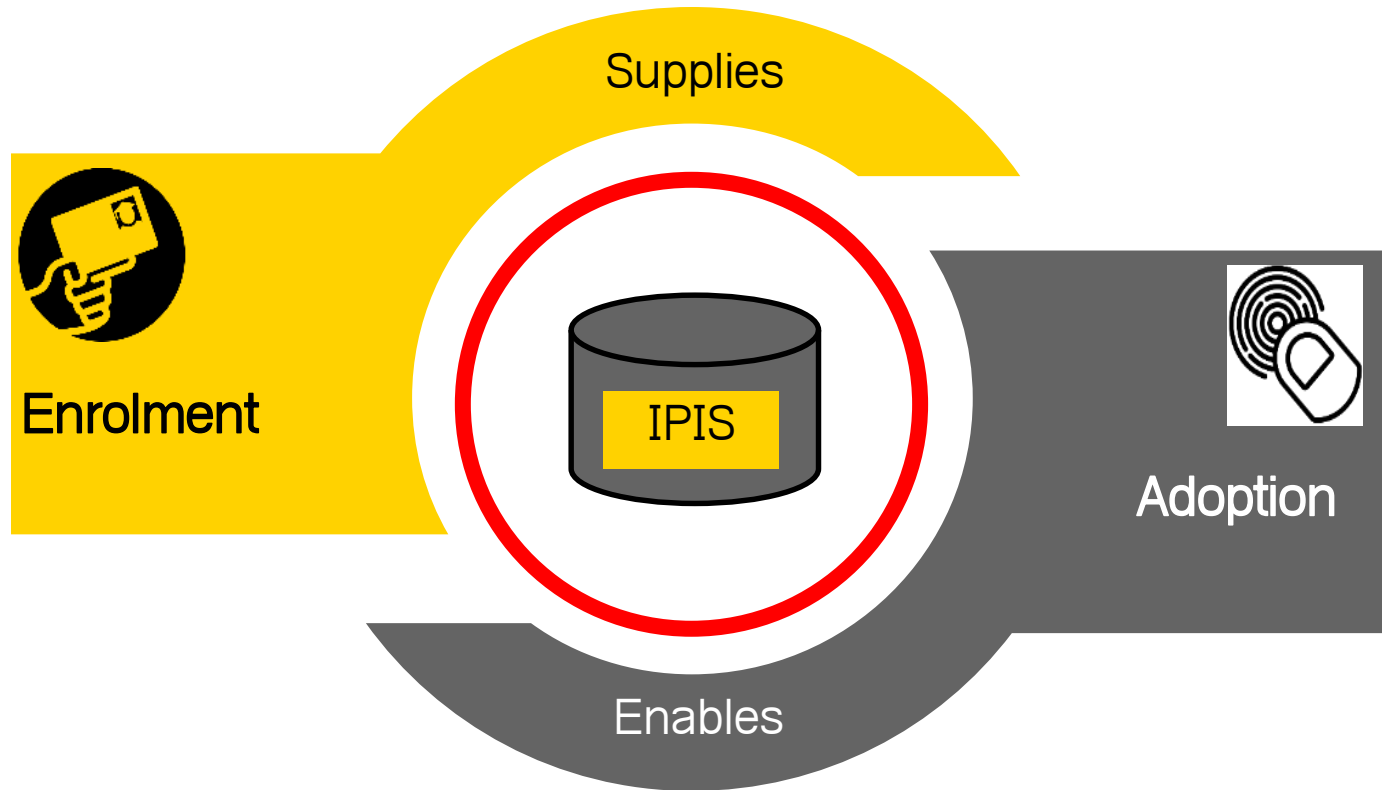
# Phase-wise Implementation plan



▶ 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

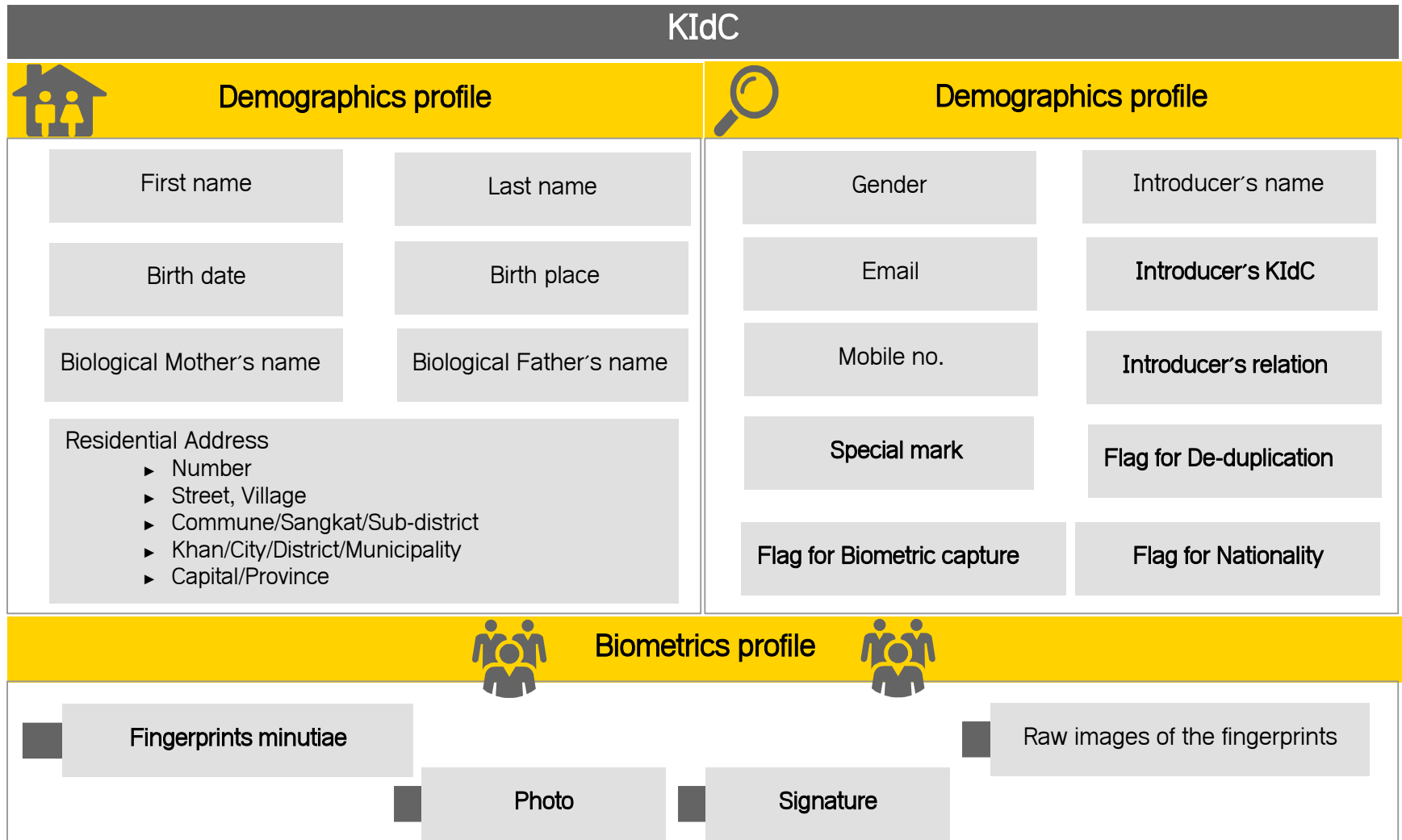
# Core services of IPIS



IPIS enrolment promotes usage ( authentication ) and vice-versa

# IPIS Data structure

## Demographic and Biometric profile



# IPIS – KIdC 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 through the IPIS enrolment system

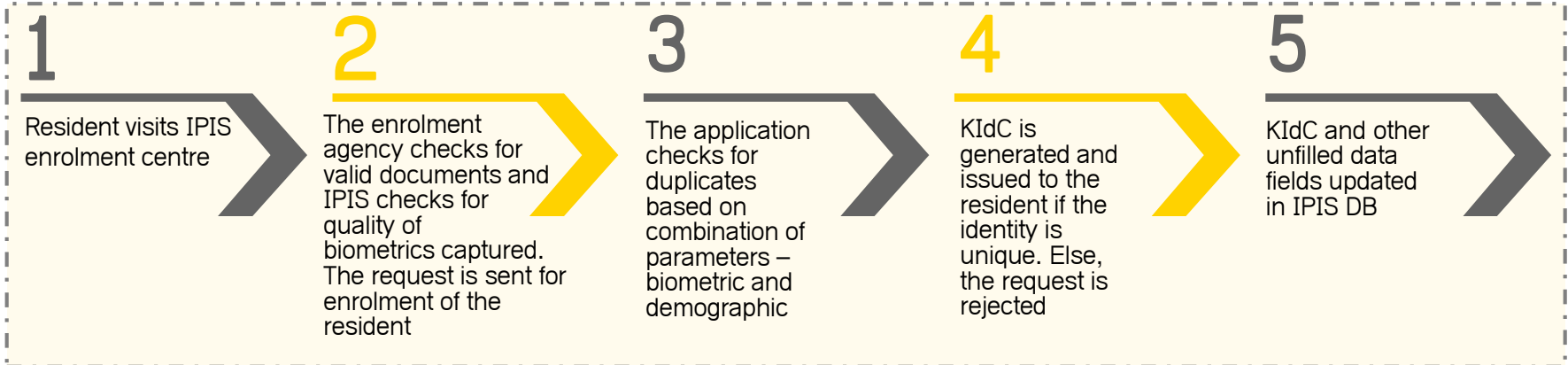
## Step 1

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

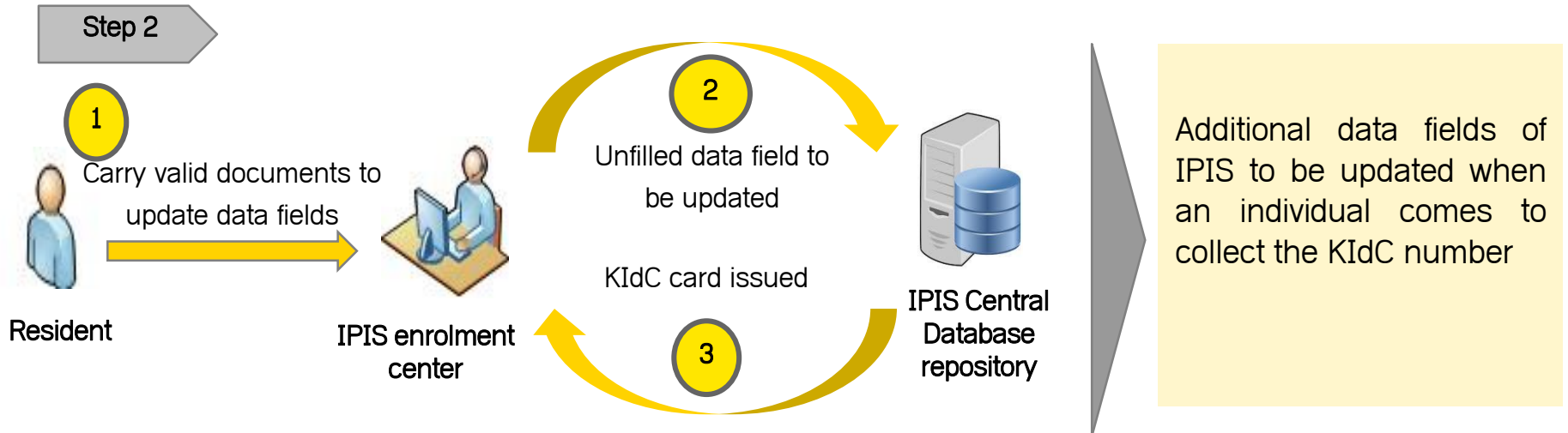
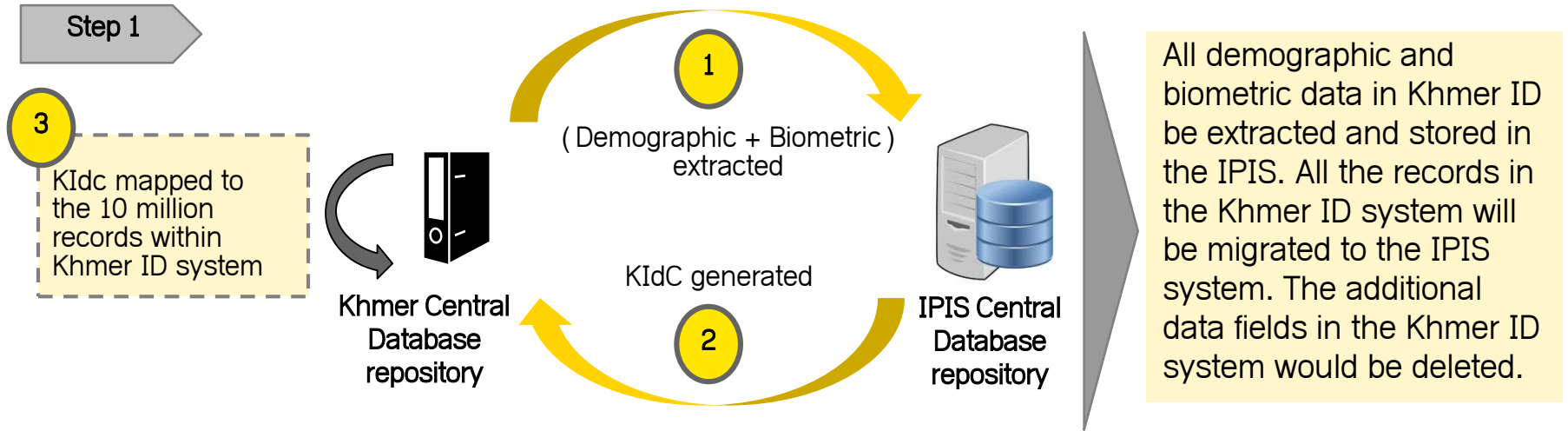
Additional data fields of IPIS to be updated when an individual comes to collect the KIdC number

## Step 3



# IPIS Implementation Options

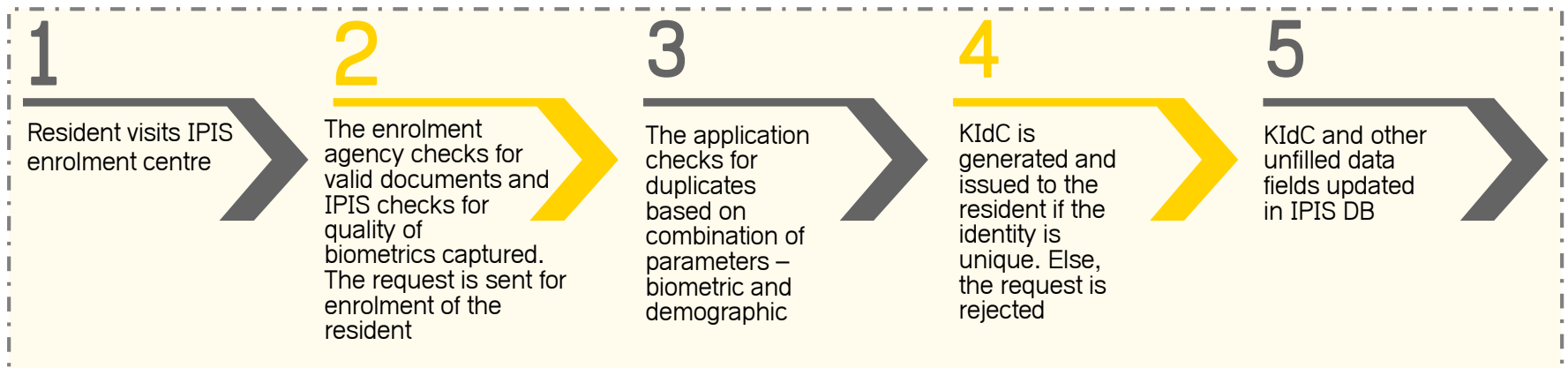
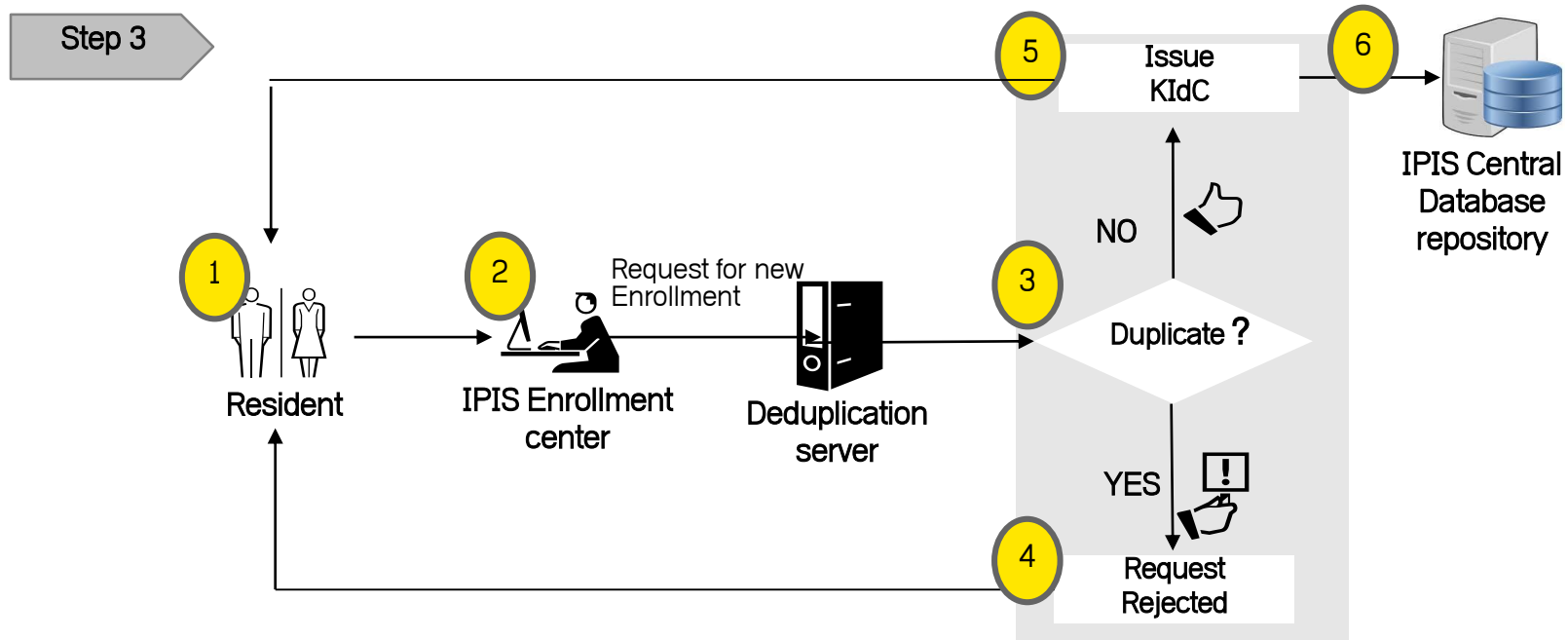
Option 3 - Data migration from Khmer system & enrolment through the IPIS enrolment system ( 1/2 )



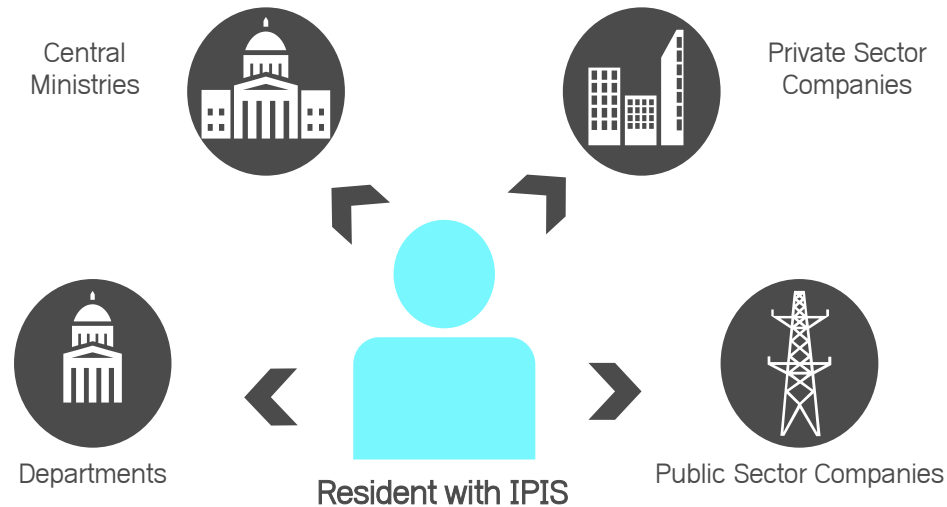


# IPIS Implementation Options

Option 3 - Data migration from Khmer system & enrolment through 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

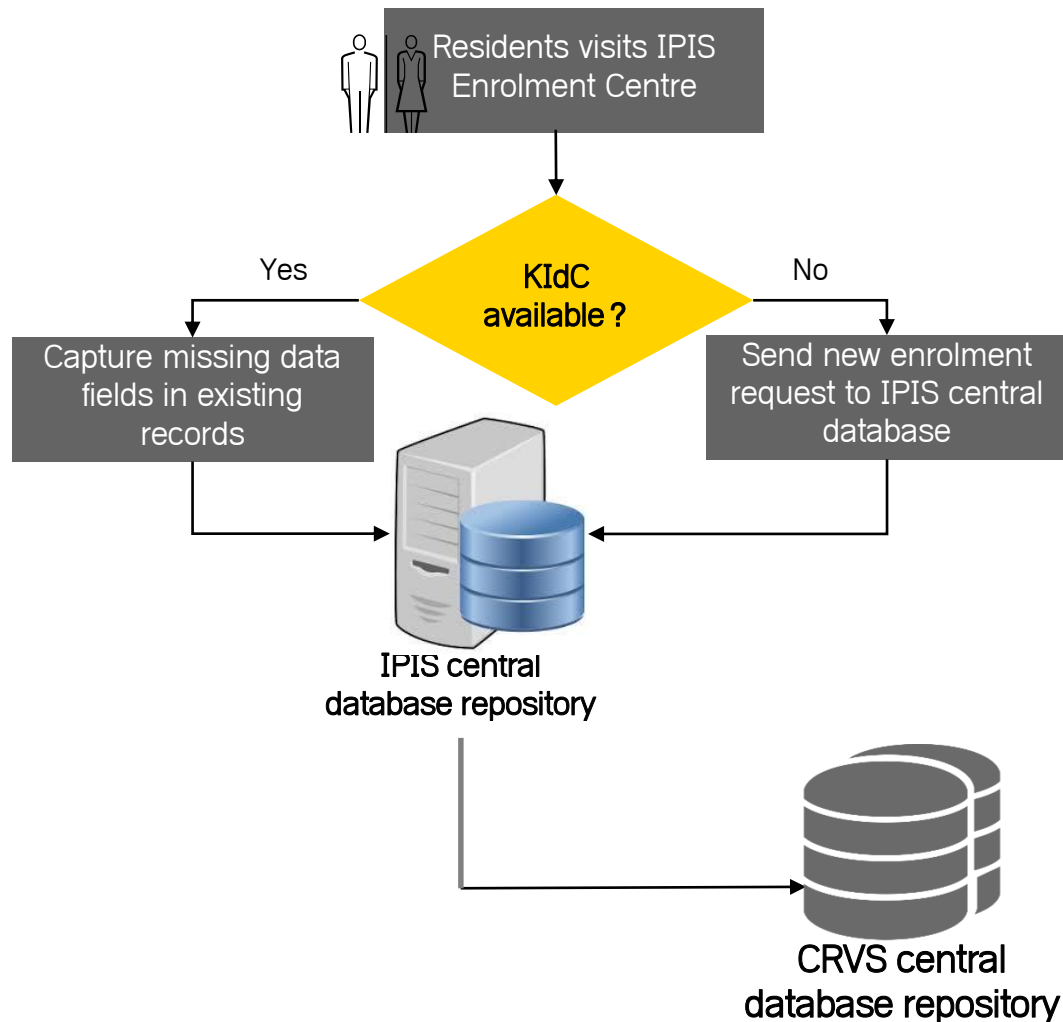
## Step 3

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*

1

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

2

Update missing fields on Birth record using search keys from already 6 million digitized records

3

Missing data fields on legacy records updated when citizen visits enrolment centre

4

The missing fields can be manually digitized from the physical registers kept in CRVS department, Phnom Penh

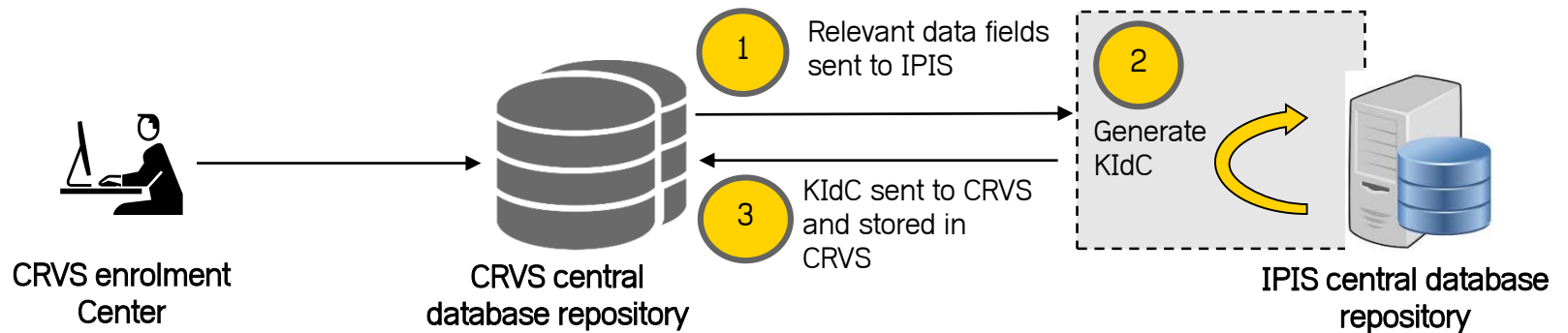
# CRVS implementation approach

## 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

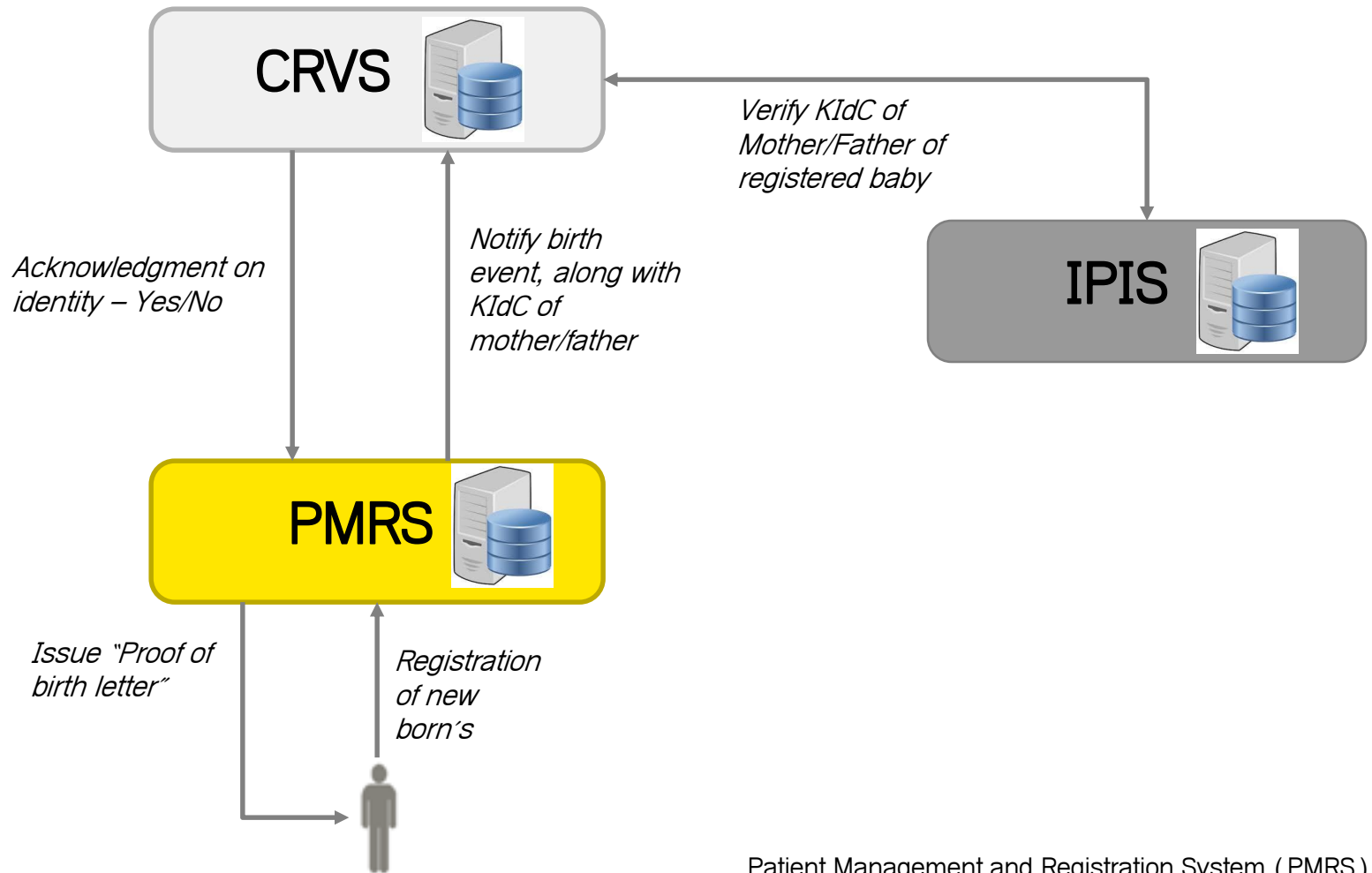
Enrolment form for CRVS



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

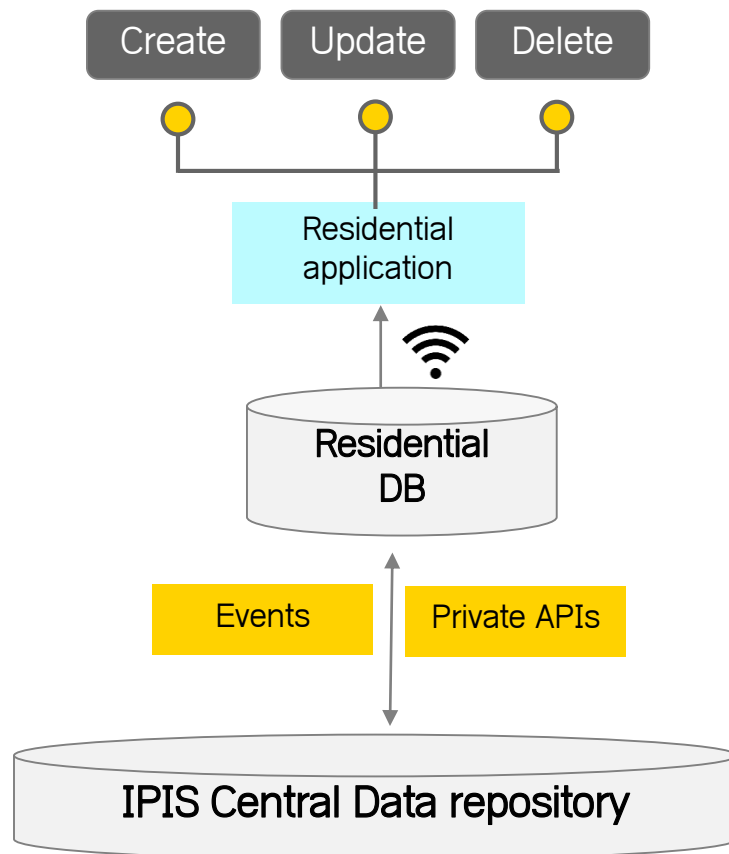
## Step 2

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

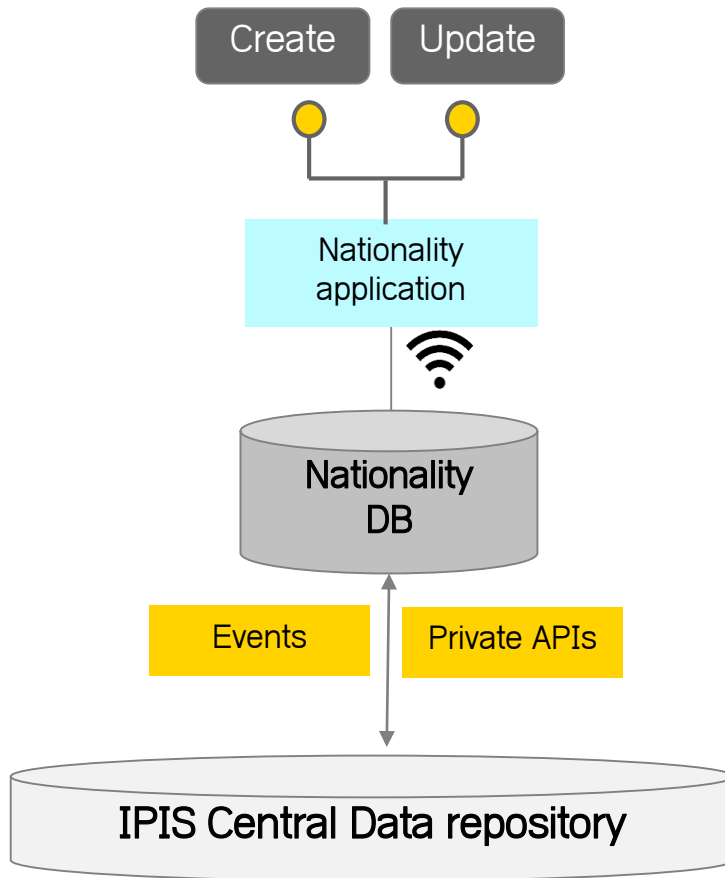
The data in the excel format will be migrated to the nationality system database

## 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

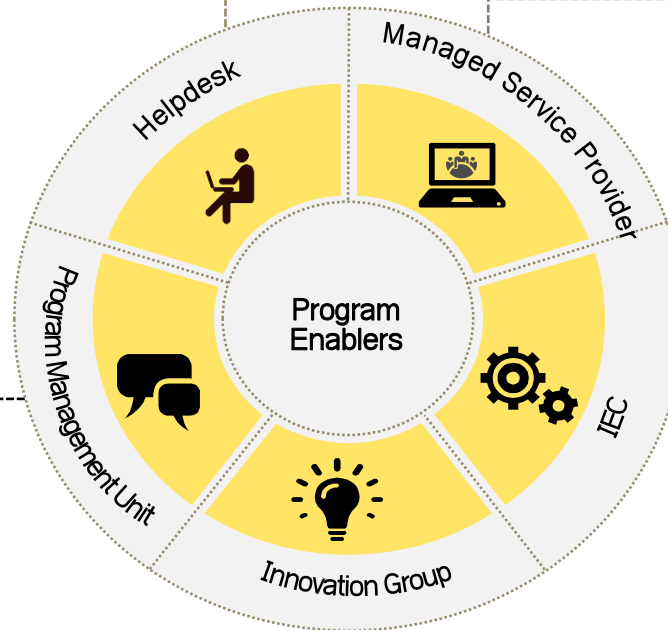
# Program Enablers



# Program Enablers – ID platform

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

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



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

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