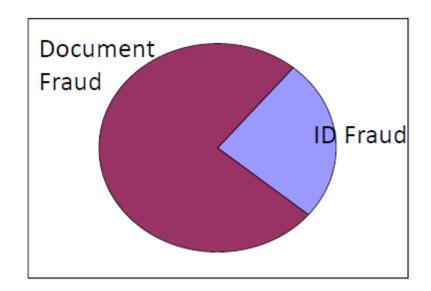


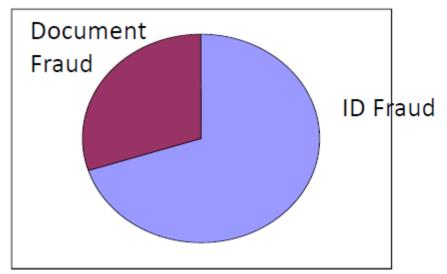
# Integrated Population Register a key pillar in a holistic approach to citizen identification

## Civil Aviation Security threats Shift to ID Fraud



2006 Identity fraud – 31% Document Fraud – 74% 2010 Identity fraud – 71% Document Fraud – 29% Intergraf Study 2010





As travel document security and issuance processes have significantly improved, criminal focus worldwide has increasingly shifted from travel document fraud to passport issuance and identification fraud.

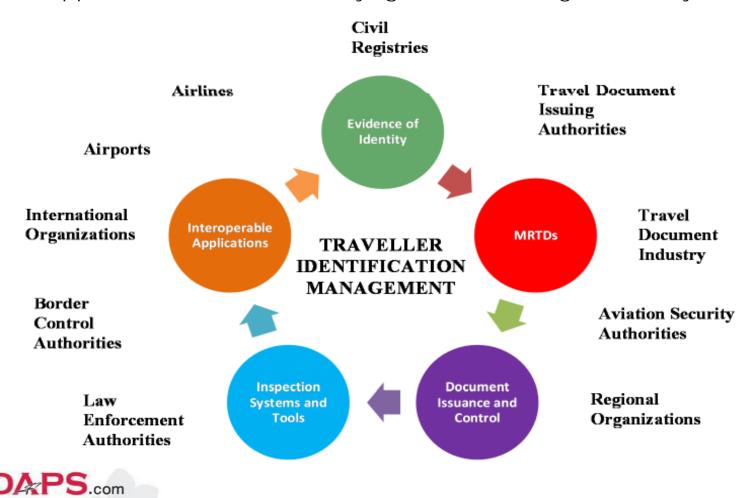
Identity fraud is an enabler for a range of criminal activities, from organized crime to terrorism.



## Holistic approach to traveller identification management: five dimensions



The key point of the ICAO TRIP Strategy is a recognized need for a holistic and integrated approach in relation to identifying and conforming the identity of travellers.



## Kenya's Case: The Integrated Population Registry (IPRS)





"Kenya is the only country in Africa with a functioning automated population database that compiles details of citizens living locally or in the Diaspora, as well as non-citizens in the country. It is the most thorough database in the continent."

George Anyango, Director IPRS



#### WHAT IS IPRS?

- The Integrated Population Registration System is a collection of registries from various government agencies located in the MIRP Kenya
- it comprises of a central database (The National Population Register NPR) containing information of registered citizens and registered foreign nationals residing in country





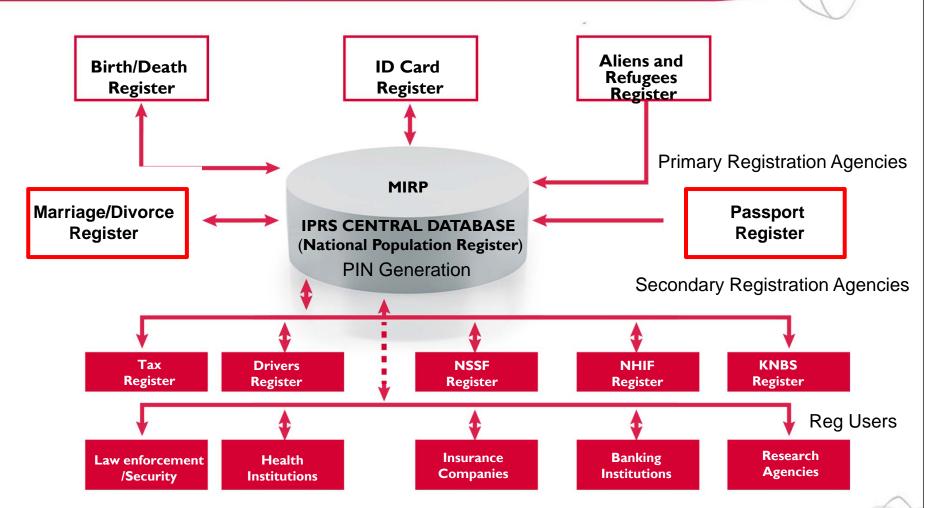
#### ITS MAIN OBJECTIVE?

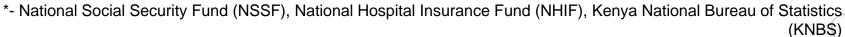
- to establish and maintain a comprehensive central database with the citizens' data and registered foreigners resident of the country
  - to be a single point of truth of information regarding all residents.
  - to "strengthen national security, reduce crime, improve safety"





## What exactly is IPRS?







## Kenya IPRS: Data Sheet



- Owner Ministry of State for Immigration and Registration of Persons
- IPRS brings together:
  - 5 primary/source registers held by government agencies
  - 6 secondary registers to compile details from
  - 30 clients / entitled users
- Scale 25 million records held in National Registration Bureau (ID Card register), 22 million held in IPRS
- Average 100,000 requests processed daily
- Target: to enter records of 90 percent Kenyans into the system by the end of 2014.

Technical Infrastructure.

Client Environment:

- •Windows XP, 7, 8, 8.1
- •NET Framework 4.0.3 Server Environment:
- •Oracle 11g R2 Enterprise Edition DBMS
- Microsoft Internet Information Services
- •NET Framework 4.0.3
- •Supported OS: Windows Server 2003/2008/20012

**Development Tools:** 

- •Microsoft Visual Studio 2012
- PL/SQL Developer
- •Live finger scanner





## **IPRS: Ongoing Development is National Priority**



2009 > 2010

2011

2013

2013

2015 > 2015

Central Database Primary registries: Clients connected:

Disaster

Mobile

ID card register

Alliens register

Banks

recovery site:

Verification Solution

Passport register

Credit bureaus

Telecom

Biometric verification

solution:

Authentication

**PKI-based Clients** 

register

120 fingerprint verification

Solution

(Civil Registry)

Birth and Death

points integrated

#### **Revolution in the Border management systems**



On August 14, 2014, the acting Director General of the Kenya Citizens and Foreign Nationals Management Service (KCFNMS), Ms Mwende Gatabaki:

#### Why we don't know who enters our country and when?

- Systems at the existing registries and at border points are not linked.
- Further provision of services by NDRS will facilitate crime scene finger print matching, **border management systems** and cyberspace security.



#### Biometric verification – trusted identification









IPRS allows to identify Kenyans by matching their biometric and photographic details with documents in their possession and provide services:

#### •Qualification integrity checks:

Fake educational certificates, not paying taxes

#### Voter verification:

Only valid voters could cast their vote, as it will be virtually impossible to use another person's IDs

#### Health care:

Help improve hospital reporting: use of electronic reporting system as per the Health Information Policy

#### Instant Mobile Banking

PRS data +SIM card details -> Mshwari instant loans

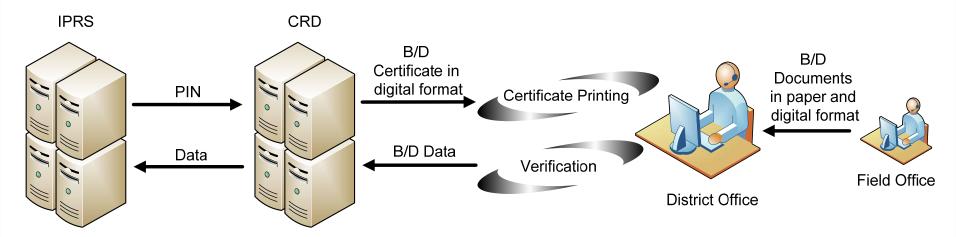
#### ■ Border security – tbd:

Country's exit and entry points at the border to be connected to the system, making the use of fake passports impossible



## IPRS: Strengthening foundational identification documents





A stolen, counterfeit or altered foundational document may allow the holder to fraudulently obtain genuine government documents, including travel documents.

The management and protection of foundational documents by national authorities is integral in the **protection against identification fraud**.

250 district offices deployed.

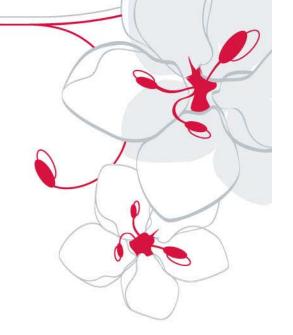




## IPRS: facilitating trusted identification for banking (instant loans)

M-Shwari is the revolutionary new banking product for M-PESA customers that allows to save and borrow money through your phone. With M-Shwari, you are also entitled to affordable emergency loans.



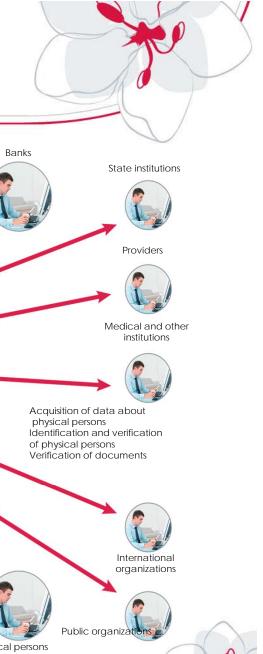


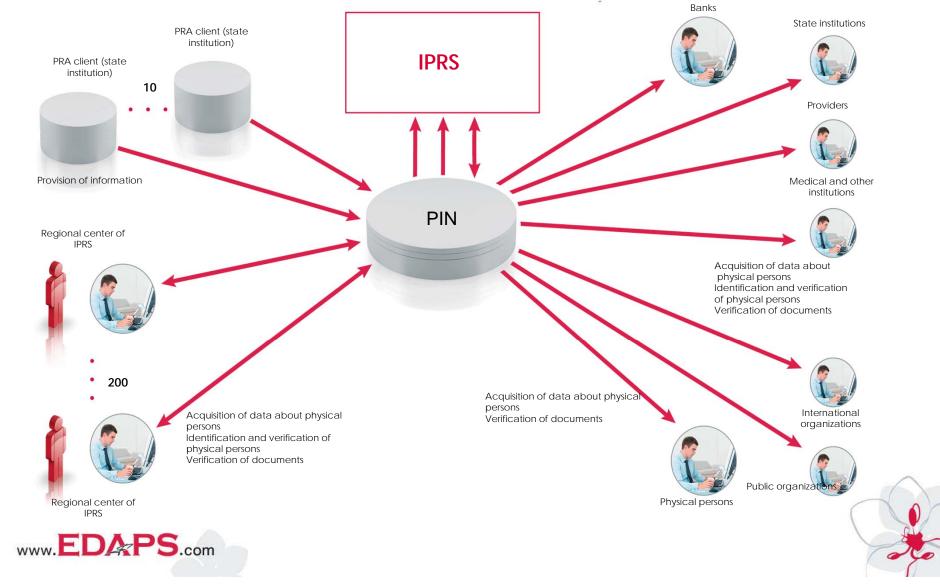
The IPRS combines data from Central Reference Bureaus (CRBs) on the borrower's Credit history with SIM card details as collected by the Communications Commission of Kenya (CCK) made it impossible for borrowers with fake ID or bad debts to access credit.





## The IPRS - 360 degreed view

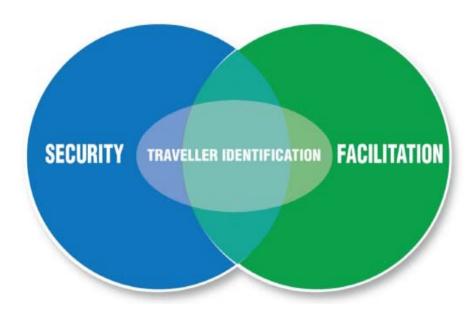




## Objective - Global Security and Facilitation



IPRS matches the ICAO new Strategic Objective - Enhance Global Security and Facilitation



ICAO's mission: Aviation security, facilitation and related border security.



IPRS response: CIA Triad - core concept playing a vital role in database security.







## Thank You

Merci

Shukran

Spasibo

Xie Xie

Gracias