OVERCOMING IDENTITY SYSTEMS DEPLOYMENT CHALLENGES IN SOUTH SUDAN

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RSS
The Directorate of Nationality, Passports and Immigration was established vide the section 6 (1) of Nationality Act 2011 pursuant to Presidential Decree No. 09/2011 dated 26/08/2011 with a mandate to register and issue South Sudan National Documents to citizens of South Sudan, manage and control the country’s borders and movement of foreign nationals into and out of South Sudan.

Questions arising out of the mandate

- How do we go about capturing data with almost non-existing infrastructure?
- How do we quickly capture the required data to ensure issuance of travel documents due to the prevailing political environment?
- How do you include the citizens in various states & embassies?
- Centralised or silos?
- Individual Data consistency?
THE BEGINNING

- Inheritance of no infrastructure from the previous Sudan prior to Independence
- No available registrations existed
- Human capital was at a premium in the arena of digital data collection
- ICT development in the country was and still is way behind the regional ratio
THE INITIAL SETUP

- DNPI started with the drafting of appropriate regulation (The Immigration act, the Nationality act, the Passport act. (The civil registration bill is pending in parliament))
- Decision times: Connect the Civil Registration Database to the national travel and Identification databases
- Establish the Integrated Border Management System
- Questions:
  - How to connect the vast and many borders
IT Infrastructure
SAMPLE DOCUMENT ISSUED
The model of the devices to be installed
The States in the country are to be in offline mode
Arising questions from this setup:
How to transfer the questions from the states to the Headquarters?
The connection between the Headquarters and the embassies to be online
Arising questions:
How to maintain the connectivity in the face of the changes in the nation’s economy
The establishment and operationalization of the national Database led to the realisation that other agencies need to be connected to the Databases to provide other necessary services.

Hence the establishment of a third party interface.

Services first offered under the 3rd party interface are: the Organised Forces Card & the National Driving License.
PICTURES OF THE THIRD PARTY INTERFACE CONNECTION

OFC System

- OFC SDMS
- OFC DB

DNPI System

- SDMS Snapshot DB
  - Port: 1533
  - Refined data from main system.
  - No table only views with restricted data.
  - No fingerprints, no document data etc.
  - Main SDMS database not accessible from OFC system.
  - Switch allows only access through port 1533.
  - Port 1521 will be blocked.
  - SDMS credentials are not known in OFC system.

Database link with read-only user

Switch, only port 1533 open

Access through read-only user
As mentioned earlier, the Directorate had no infrastructure to speak off at its founding.

Human capital was at a premium and this was later solved by the massive recruitment drive by the first Director General of the institution.

The institution also incorporated those that were working in the previous incarnation prior to independence.

The recruitment was primarily done by bringing in fresh graduates and first time workers in to the fold.
This presented its own set of challenges as outlined below:

- The integration of the two systems and the two languages
- Sudan was primarily Arabic while the new country was leaning towards English as a medium of work and instruction
The country has no Internet and telephone backbone.

Data transfer, voice transfer and electronic communication in general is done over satellite.

This adds a cost factor to the equation making available bandwidth small, speeds rather slow and costs very, very high.

ICT infrastructure in general is still lacking.

There is a dearth of highly skilled software engineers, electronic engineers and system analysts and designers.
The Civil Registry bill is still languishing in the National Parliament.

The prevailing security situation in the country added to much needed resources being diverted to end the security predicament.

The collapse of the country’s economy due to the collapse of the world oil market further exacerbated the woes facing the Directorate in particular and the country in general.

Lack of awareness of the need for digitalization.
Recent ground breaking of the national fibre optic line that shall be connecting to Uganda will be a much needed relief

Regional initiatives to strengthen IT uptake by governments and the countries at large

Participation in regional and international forums on digitalization and Civil registry systems to enhance development and reduce poverty
Work hand in hand with development partners to reduce the capital injection shortfall due to competing government priorities

Plans underway to do mass enrolment to capture the entire country’s population

Make free the basic citizen identification card to entice people to register and enroll

South Sudan to use the mass enrollment data to establish the basis of a national population census

The collected data shall be used to build the voter registration database for any future elections
CONCLUSION

- South Sudan may have gotten its independence on the 9th of July, 2011 but since then:
  - Completely biometric passports and Identification cards with all 10 fingers encoded on the documents
  - 3rd party interface to connect other government agencies and private sector to provide faster and much more efficient services to the populace
  - The current National Database system is being updated, that is both hardware and software to lay the groundwork for a complete future national Data Centre
Thank you for listening!!

We welcome any questions 😊

This presentation was prepared by Lieutenant Colonel Deng Kuol Deng, Director for ICT for the Directorate of Nationality, Passports & Immigration Ministry of Interior, Republic of South Sudan