

Sixth Conference of African Ministers responsible for Civil Registration

A Decade into APAI-CRVS

Reflecting on progress and accelerating
efforts towards 2030
through transformed systems.

24-28 October
Addis Ababa



APAI-CRVS
Everyone visible in Africa



Decade for Repositioning
of **Civil Registration and
Vital Statistics in Africa**
2017-2026

Rwanda's journey in developing a home-grown end to end digitized CRVS System

Mukesh Josephine

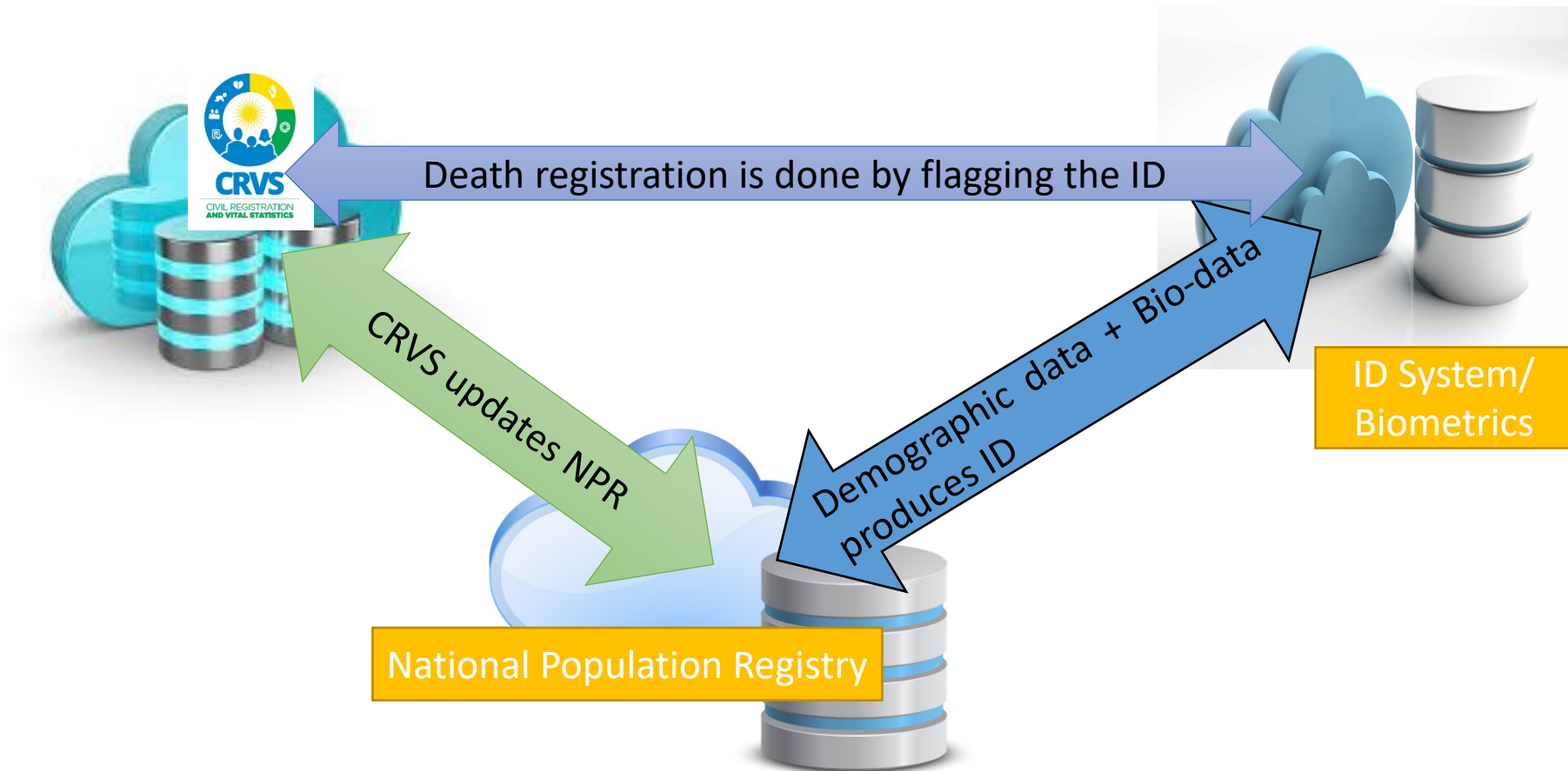
National Identification Agency (NIDA)

RWANDA

Content of presentation

- Data Flow – systems integration
- NCI-CRVS system features
- Infrastructure and technology
- Procurement steps recommendations
- Vital statistics reports
- References

Data flow – CRVS & ID systems integration



NCI-CRVS System

Business processes that are particular to Rwanda

Business rules embedded into the system

Integration with existing systems for data inputs and validation (Population Registry and ID system)

Multi-stakeholder platform to collect “all-in-one” platform to avoid multiple inputs for same individual by same operator

BI Dashboard for viewing live statistics for vital events

External interface design to allow for data streaming and issuance of records (IREMBO)

Graph database – relationship display - design centred around the individual entity

Technology stack - allowing scalability and high availability

Infrastructure and technology

- **Software choices:**
 - Microservices architecture;
 - Real time streaming data;
 - Auto-scalable infrastructure
 - Integration with existing systems: Statistics, HMIS, Irembo,...
- **Hosting options:** Infrastructure at Remote hosting in collocation (primary and redundancy)





Procurement steps

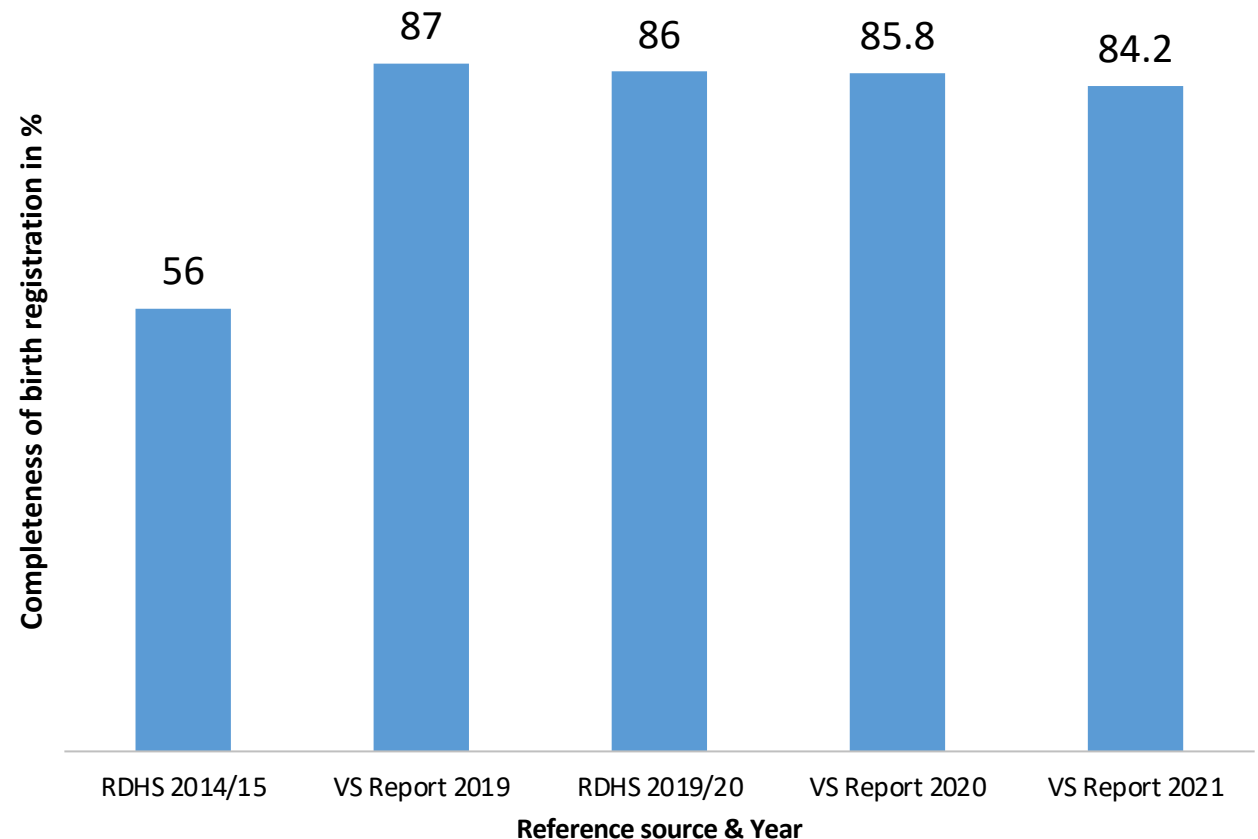
- Adapted to the environment
- System users capacity
- Contextualisation of solution
- Flexibility to implement requirements
- Affordability
- Knowledge of internal teams to manage the system post-delivery

Vital statistics reports

Vital events registration status in figures, 2019-2021

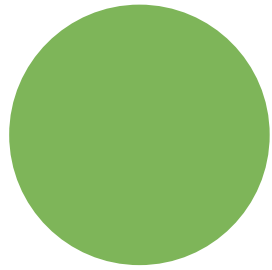
Registration status	2019	2020	2021
Completeness of birth registration in %	87	85.8	84.2
Percentage of timely registered births	78	72.3	93.7
Completeness of death registration in %	31.4	29.9	26.2
Percentage of timely registered deaths	68.6	62	68
Number of official marriages registered	48,526	30,859	33,809

Change in completeness of birth registration over time



References

- NCI-CRVS demo: <https://www.youtube.com/watch?v=m4ycPdho3CI>
- Irembo:
<https://support.irembo.gov.rw/en/support/solutions/47000523242>
- Vital statistics reports:
<https://www.statistics.gov.rw/statistical-publications/subject/vital-statistics/reports>



Thank You