## Identification for Development (ID4D)

## **Identification Systems Analysis**



## Country Assessment













**ZAMBIA** 



# Identification for Development (ID4D)

**Identification Systems Analysis** 

Lusaka, August 2016



© 2016 International Bank for Reconstruction and Development / The World Bank 1818 H Street NW Washington DC 20433

Telephone: 202-473-1000 Internet: www.worldbank.org

This work is a product of the staff of The World Bank with external contributions. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of The World Bank, its Board of Executive Directors, or the governments they represent.

The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

#### **Rights and Permissions**

The material in this work is subject to copyright. Because The World Bank encourages dissemination of its knowledge, this work may be reproduced, in whole or in part, for noncommercial purposes as long as full attribution to this work is given.

Any queries on rights and licenses, including subsidiary rights, should be addressed to World Bank Publications, The World Bank Group, 1818 H Street NW, Washington, DC 20433, USA; fax: 202-522-2625; e-mail: pubrights@worldbank.org.

Cover photos: *Top left:* A boy holds his birth certificate, outside African Development Bank Zanzan II Primary School, in Bondoukou, Côte d'Ivoire. © UNICEF/NYHQ2011-2489/Asselin; *Center:* Identification cards for women in a local finance cooperative. © Simone D. McCourtie / World Bank, SDM-IN-046 World Bank; *Bottom left:* A refugee filling an application at the UNHCR registration center in Tripoli, Lebanon. © Mohamed Azakir / World Bank, \_ZAK6881F; *Top right:* Fingerprint. © Jose Luis Gutierrez; *Right center:* Man guiding another in using a fingerprint scanner. © leezsnow; *Bottom center:* Using smartphone. © mihailomilovanovic.

# TABLE OF CONTENTS

ACKNOWLEDGEMENTS
ACRONYMS
EXECUTIVE SUMMARY
1 INTRODUCTION
<b>2 OBJECTIVES</b>
3 CIVIL REGISTRATION AND IDENTIFICATION VITAL SIGNS
3.1 CIVIL REGISTRATION
3.2 Civil Identification
3.3 Elections and Voter Registration
3.4 An Integral Vision of Identity Management
4 POLICY, INSTITUTIONAL, AND REGULATORY FRAMEWORK
4.1 Introduction
4.2 Long- and Medium-Term Policy Framework for e-Governance and Identity
4.3 Institutional Framework Governing National Identity Management
4.3.1 Ministry of Home Affairs
4.3.2 Ministry of Local Government and Housing
4.3.3 Ministry of Health32
4.3.4 High Court, Local Courts, and Councils
4.3.5 Electoral Commission of Zambia
4.4 Legal Framework Governing National Identity Management
<b>5 INSTITUTIONAL DEMAND FOR IDENTITY SERVICES</b>
5.1 Introduction
5.2 Institutional Clients for Identity Services
Public Sector Clients
5.2.1 Bank of Zambia

5.2.2 Central Statistics Office	9
5.2.3 Electoral Commission of Zambia	.0
5.2.4 Ministry of Community Development, Mother, and Child Health (MCDMCH) 4	.0
5.2.5 Ministry of Education	12
5.2.6 Ministry of Home Affairs	12
5.2.7 Ministry of Health	ا2
5.2.8 Zambia Revenue Authority (ZRA)	4
5.2.9 Ministry of Transport, Works, Supply, and Communications (MTWSC)	4
Semi-Government Sector	-5
5.2.10 National Pension Scheme Authority	-5
5.2.11 ZAMTEL	-6
5.2.12 Zambia Information and Communications Technology Authority 4	-6
5.2.13 Zambia State Insurance Corporation (ZSIC)	-8
Private Sector	-8
5.2.14 MTN	-8
5.2.15 Barclays Bank, Citibank	-8
5.3 Institutional Client Demand for Trusted Identity in Summary	.9
ANNEXES	51

## **ACKNOWLEDGEMENTS**

This report is part of the World Bank Africa Vice Presidency effort to **Support Developing Identification and Registration Systems in Africa**.

The WBG team wishes to thank all those involved in the course of preparing the Identity Management System Analysis in Zambia, especially the Ministry of Home Affairs, Department of National Registration, Passport and Citizenship, for the coordinating role of the Registrar General, Mathews Nyirongo, and Deputy Registrar General, Martin Nyahoda.

The WBG team also wishes to thank MOHA for organizing the opening workshop and the workshop participants for their contribution.

The team thanks all individual professionals who offered their time to meet with the WBG team, and for the valuable information they provided.

Krishna Pidatala, World Bank, Team Leader of the Report Jaap van der Straaten, Civil Registration Centre for Development—CRC4D, Team Member Linda C. Kasonde, Mulenda, Mundashi, Kasonde Legal Practitioners, Team Member Charity Inonge Mbangweta, World Bank, Program Assistant

### **A**CRONYMS

3G Third generation mobile phone technology

APAI-CRVS African Programme for Accelerated Improvement of Civil Registration and Vital Statistics

BAZ Bankers Association Zambia

BOZ (Central) Bank of Zambia

CDC (US) Centers for Disease Control and Prevention
CEEGICT Centre of Excellence for e-Governance and ICT

CCC Children's Clinic Card

CEC Country Code Top Level Domain
CEC Copperbelt Energy Corporation
CIA (US) Central Intelligence Agency

CRVS Civil Registration and Vital Statistics

CSO Central Statistics Office

DNRPC Department of National Registration, Passports and Citizenship

DOC-IT (Digital) document management system (MOHA)

DSL Digital Subscriber Line

EASCS East Africa Submarine Cable System

ECT Electronic Communications and Transactions

ECZ Election Commission of Zambia
e-ID ID card with electronic microchip

FCR Financial Crime Risk

FIC Financial Intelligence Centre

FICA Financial Intelligence Centre Act

FT Terrorist Finance

FDI Foreign Direct Investment
GFF Global Financing Facility

GPO General Post Office

GRZ Government of the Republic of Zambia

HARID Home Affairs Research and ICT Department
ICT Information and Communication Technology

IDA International Development Association (World Bank Group)

IFMIS Integrated Financial Management Information System

IMSA Identity Management Systems Analysis

INRIS Integrated National Registration Information System

ITU International Telecommunication Union (UN)

KYC Know Your Customer
LAN Local Area Network

LASF Local Authority Superannuation Fund

MCDMCH Ministry of Community Development, Mother and Child Health

MICS Multi-Indicator Cluster Survey

ML Money Laundering

MLGH Ministry of Local Government and Housing

MNO Mobile Phone Network Operator

MOE Ministry of Education

MOH Ministry of Health

MOHA Ministry of Home Affairs

MOU Memorandum of Understanding

MTWSC Ministry of Transport, Works, Supply and Communications

NAPSA National Pension Scheme Authority

NBFIs Non-Bank Financial Institutions

NPS National Pension Scheme
NRC National Registration Card

NSAP National Strategic Action Plan

PIA Pensions and Insurance Authority

PIN Personal Identification Number

PPP Public Private Partnership

PSRP Public Service Reform Program
PSPF Public Service Pension Fund

PTC Post and Telecommunication Corporation

RMNCAH Reproductive, Mother, Newborn, Child, Adolescent Health

RTSA Road Transport and Safety Agency

SAVVY Sample Vital Registration with Verbal Autopsy

SIM Subscriber Identification Module

(R-) SNDP (Revised-) Sixth National Development Plan

TPIN Tax-PIN

UKAID United Kingdom AID

UN United Nations

UNDP UN Development Programme

UNESCO UN Educational, Scientific and Cultural Organization

UNICEF UN Children's Emergency Fund
UNSD United Nations Statistics Division

USAID United States AID

WHO World Health Organization

ZAMPOST Zambia Postal Services Corporation
ZESCO Zambia Electricity Supply Corporation

ZICTA Zambia Information and Communication Technology Authority

ZIRP Zambia Institutional Reform Program

ZNPF Zambia National Provident Fund

ZPF Zambia Police Force

ZRA Zambia Revenue Authority

ZSIC Zambia State Insurance Company

ZTIS Zambia Transport Information System

### **EXECUTIVE SUMMARY**

Zambia provides a distinctive case of national identity management. Even from before independence in 1964 the identity card has played a prominent role and by 2010 the National Registration Card (NRC) covered more than 83% of the population of 16 and above. At the same time civil registration (the registration of births, deaths, marriages, divorces and other vial events) has remained underdeveloped, inter alia because of a lack of utility perceived by many, poverty among large parts of the population and a centralized process anchored in the law of 1973. Coverage has remained below 15%, making Zambia the country with the 4th lowest birth registration rate for under-five children in the world. Combined, half of Zambia's population has a legal identity either because of birth registration or because of the possession of the national ID. The country is now embarking on a reorganization of its civil registration operations and is on the brink of introducing a new national ID. The implementation of the new ID-project could set the country back by affecting the current coverage level of the National Registration Card. This could impact elections, which have been held thirteen times since Independence, because the NRC is a voter identification requirement.

This report of the World Bank's mission on its Identity Management Systems Analysis (IMSA) in Zambia should be seen against the backdrop of the rapid introduction of information and communication technology in all spheres of life, including in e-government and in the digital economy across the globe, and in Africa witness the theme of the 2016 World Economic Forum held in Rwanda. Hence the World Bank's World Development Report, titled "Digital Dividends." This year marks also the start of a new global development agenda running until 2030, and the historic inclusion of a legal identity for all by that year (Sustainable Development Target 16.9). The report provides a detailed analysis of the status of the foundational identity systems of civil registration and identification (national ID and elections), as well as of other existing functional identity systems such as the one for taxpayers or mobile phone users.

While the registration of birth and death in Zambia would amount to less than 800,000 registration events *annually*, the use of identity in present-day Zambia is probably in the multi-millions *daily* for financial transactions, obtaining a SIM card, entering offices and many more activities in daily life. The yearly cost of the registration of 800,000 vital events has a return every time of the many millions of times annually an identity token is reliably and successfully used. This voluminous, and largely pent-up personal and institutional demand for trusted identity deserves a robust response by government. Cost of living, cost of doing business and international competitiveness will all benefit, if also accompanied by pro-poor policies and tackling the digital divide between urban and rural parts of the country. The elections of 2016 will imply a new episode in Zambia's development for which the new government will develop new medium-term plans. The report comes to the following recommendations.

#### On the Organization of Civil Registration

1. Data on the correlation between birth registration rates and poverty rates by province provide a clear indication that the financial sacrifice to obtain a birth certificate (at least twice a visit to a district registration office) is too great for many poor Zambians. Any government service that is reaching the poor and could support civil registration service delivery and provide the poor with benefits is a potential vehicle to boost birth registration rates. Public health and social protection delivery provide these benefits and the service delivery infrastructure. South Africa provides an appropriate model for how to realize this intersectoral response with success.

- The mission commends the intended devolution of the birth and death registration certification authority to district registrars, which will help boost registration rates and close the gap between birth registration and birth certificate possession.
- 3. Zambia has taken the right steps by rationalizing the service network for civil registration as existed in the 1990s (reduction from almost 2,000 registration points to 105). This includes replacing decentralization by a deconcentrated service with clear, shorter lines of command to a manageable number of offices. This did not lead to less registration—though it did not lead to an increased coverage either which the devolution of certificate issuance authority will now address. It is recommended that Department of National Registration Passports and Citizenship (DNRPC) will maintain a manageable number of registration offices and points that are each organizationally and economically viable.
- 4. The improvement of security and "storage of registries" (already identified as a need in 1994) still requires attention, especially for the oldest records—some of which require restoration. This restoration work could be a small project that UNESCO or UKAID could be requested to fund, with advisory services being requested from the International Records Management Trust. The Trust is also a resource for the permanent preservation of electronic records irrespective of continuously changing software.
- 5. The mission's single most serious concern is that the civil registration service currently suffers from a lack of budget for day-to-day operations. In order to sustain new investments, the operating budget of the registration service must increase. World Bank/World Health Organisation investment estimates for civil registration reform include an additional budget for recurrent cost at the tune of USD 1.40 per capita out of the USD 4.00 for countries like Ethiopia and Zambia, spread out over ten years. This is equivalent to about USD 2 million annually, with the country's share rising to 100% in ten years. The mission estimates the under-budgeting of investment in civil registration in the order of USD 25 million to USD 35 million. This shortfall needs to be overcome.
- 6. Since GRZ is investing in an Integrated National Registration Information System (INRIS), the already developed National Strategic Action Plan for the Civil Registration and Vital Statistics (CRVS) budget could be combined with the investment in the new e-ID for a more comprehensive and coherent investment plan. The investment in national identity management is an essential element in the development of Zambia's e-government (Center of Excellence for e-Government and ICT and "Smart Zambia Now"). It is recommended that the MOHA works closely with the spearheading agency CEEGICT to ensure that the national identity systems are seen as a priority. MOHA should work closely with CEEGICT to explore the possibility of incorporating some of their requirements into any new potential ICT investment projects that CEEGICT is preparing.
- 7. It is recommended that DNRPC and Central Statistics Office (CSO) start reporting annually to the United Nations Statistics Division civil registration coverage based on primary, administrative data, using date of event occurrence statistics. Refer to the UN Vital Statistics Questionnaire.

#### On the Organization of Civil Identification

- 8. The mission has not been able to ascertain the value of the contract with Dermalog Identification Systems GmbH, but is concerned that the cost of a quality national ID project may have been underestimated. As a benchmark, the budget for South Africa's new ID could be used. The South African budget was USD 507 million for 38 million IDs (i.e. USD 13.33/card) to be issued over 5–8 years (including enrollments of newly eligible persons turning 16) and replacement of lost, stolen and damaged cards. This is also within the range of revenues reported by the ID industry. The mission's estimate puts the necessary investment for Zambia at USD 125 million for a smart card ID on par with South Africa's new national ID. An investment much lower than this may render the new e-ID at risk of being not viable and sustainable. The mission estimates the **under-budgeting of investment in the national ID at USD 100 million** (under the assumption that the present investment budget is USD 25 million). This is another financial shortfall that needs to be resolved.
- Government of the Republic of Zambia (GRZ) may wish to consider a progressive policy change towards using the extraordinary demand for mobile phones, and hence identification for SIM cards, among the

- poorest and rural segments of the population, as well among young Zambians. Mobile phones offer an attractive entry point to help and achieve universal birth registration and national ID coverage. It could be considered that the age for the NRC is lowered, for example to the age of twelve, and SIM cards could be issued upon evidence of one's own (rather than the parent's) NRC also for the 12–15 years of age.
- At purchasing power cost, elections in Africa, since 2000, have become more than ten times as costly as the world average. The cost of the elections scheduled in 2016 in Zambia is estimated at about USD 90 million (ZMW 1 billion). This is, per registered voter, 60% above the average for 23 elections in Sub-Saharan Africa held since 2000 (USD 9.05 per registered voter, uncorrected for inflation), and more than double the cost of general elections held in 2009 in South Africa. Elections in Zambia—twelve since independence in 1964—have been held regularly and, generally, in a peaceful way. This is an important accomplishment to be proud of for both the people and government, and ECZ in particular. However, in the absence of a well-functioning civil registration system—which would keep cost for identity documents and voter rolls down—the country has been drawn into an unsustainable cost spiral to hold those elections. Development partners will contribute less, if at all, in the future. Therefore, achieving universal civil (birth and death) registration as a foundation for affordable national identity management deserves a high policy priority.

#### On the Legal Framework for Civil Registration and Identification

- 11. The birth and death registration law (1973) is largely aligned with international best practice. However, the law could be improved. This law and the national registration law could be better aligned while certain updates for digitisation, privacy and security and the collection of vital statistics (e.g., cause of death) could be included. The mission recommends that MOHA undertakes a review of the Births and Deaths Registration Act in an integrated way with the National Registration Act (Cap 126, 1964), and that the fusion into one law is considered. The move towards digital civil registration and identification requires amendment of both laws, and alignment with amended privacy and the cybersecurity law, which reportedly is in process at the Ministry of Transport and Communications.
- **12.** Lower-level recommendations are:
  - a. The future versions of the analog and digital versions of the record of birth could include an entry of the mobile phone numbers of the parents or guardian and Children's Clinic Cards, and the digital medical record could include entries to monitor birth registration and certification as well as the mobile phone numbers of the parents or guardian.
  - b. In the amendment of the Births and Deaths Registration Act the order in which death certificates and burial permits are issued and NRCs are revoked may be reviewed to establish proven good practice, such that burial permits are issued contingent upon prior death registration.
  - GRZ may consider changing current practice and the role of courts and councils in officiating marriage. These functions may be just as well in good hands when conducted by principal district registrars.

#### ON THE NEED FOR INTEGRATED NATIONAL IDENTITY MANAGEMENT

- 13. The mission estimates that through an investment of USD 50 million to USD 60 million in civil registration, the country will save between USD 140 million and USD 330 million in civil identification (national ID and elections) operating and capital expenditure over a period of ten years. The mission recommends applying a holistic identity management approach with civil registration development at the heart of identity systems development.
- 14. While elections depend on a functional e-ID system, there is a broader, **pent-up institutional demand for a digital identity system**, both from the public sector—for e-government services—as well as from the private sector, for authentication of identities (KYC—Know Your Customer). While only 800,000 births and deaths require registration annually, **the use and verification of identity by individuals and**

- **institutions in the private and public sector run into the millions of transactions—currently analog but online e-verification in the near future**. It is important that institutional actors in the private and public sector are treated and consulted as important clients of identity services delivered by DNRPC, for which they in the future will pay for, leading to a generation of substantial revenue by DNRPC. DNRPC needs to know its institutional customers.
- 15. Zambia faces a difficult policy decision. It wants to replace a low-tech, low-cost ID system that has adequately supported voter registration for many years by a high-tech, high-cost ID system that may fail to support elections for one or more election cycles when the experience of other countries is repeated in Zambia. Given the serious political (think of elections) and financial consequences of the program of identity management reform, the Government of Zambia could consider conducting a thorough technical and financial review of its integrated civil registration and identification project (feasibility or cost-benefit study), within the larger context of the support the government has sought from the World Bank for its Smart Zambia Now program. Such a study would include the validation of the mission's finding of possible under budgeting for necessary investments in civil registration and identification.

#### ON THE NEXT STEPS

16. It is recommended that the Ministry of Home Affairs (MOHA) engages the Ministry of Finance and National Development Planning to raise their awareness of the investments DNRPC needs to undertake, and works jointly with them to explore World Bank support (technical assistance and/or financial support) for identity management systems in Zambia. This could be done in two ways: (a) a request for a free standing Identity Management project, and/or (b) a request for the inclusion of identity management elements in projects for other sectors, such as Health, Social Protection, Information and Communication Technology (ICT) or other.



Source: CIA World Factbook.

Zambia is a relatively stable democracy with a population of 15.7 million (2014), of whom 52.8% are under 18 years of age. The estimated median age is 16.7 years (2015), which is one of the lowest in the region and globally. A high fertility rate of 5.7 children per woman contributes to the annual population growth rate of 3.1% (2013).

While 60% of Zambia's people live in rural areas, the trend is being reversed as urban population growth significantly outstrips rural growth: between 2000 and 2010, the urban population increased by 51% while rural population grew by 23%. Zambia's rapid population growth and urbanization are increasing pressure on the periphery of urban settlements, where challenges include scant infrastructure, high poverty rates and inequities in access to and quality of services in comparison with urban areas.

In 2013, Zambia was reclassified from the low-income to the middle-income country category. In 2014, the country also moved from the 'low' to the 'medium' human development category measured by the Human Development Index. Strong economic growth has recently slowed, mainly due to the deterioration in global copper prices, but was still estimated to be 6.0% in 2014.

With three quarters of its population estimated to be living on less than USD 1.25 per day, this lower-middle-income country also has a high level of inequity in income distribution. Data suggest that income inequality is

increasing, with the GINI coefficient moving from 0.507 in 2010 to 0.575 in 2014. Growing income inequality especially impacts rural households with larger numbers of children. Extreme poverty in rural Zambia is, at 58%, quadruple the urban rate (13%), with wide geographic disparities. While poverty rates have been declining, the absolute number of the poor has been increasing, with an estimated 1.9 million more Zambians living in poverty in 2010 than in 1991. Of the 42% of Zambians who live in extreme poverty, 59% (3.3 million) are children, and 85% of those live in rural areas.

The former British South Africa Company administered the territory of Northern Rhodesia (now Zambia) from 1891 until it was taken over by the UK in 1923. During the 1920s and 1930s, advances in mining spurred development and immigration. The name was changed to Zambia upon independence. In the 1980s and 1990s, declining copper prices, economic management, and a prolonged drought hurt the economy. Independent since 1964, Zambia has experienced five successful multiparty elections since the return to multiparty politics in 1991. The latest elections in September 2011 were peaceful and further strengthened Zambia's democratic credentials. Zambia has a British style parliamentary democracy. Government consists of the President and the 158-seat national assembly. Elections are held every five years and the presidency is limited to two, five-year terms. There are also traditional chiefs and their headmen, who still command a great deal of respect but hold little decision-making power except when it comes to land distribution. Edgar Lungu won the Presidential Election in 2015, completing deceased President Sata's term, which expires in late 2016. General (tripartite) elections have been set for 11 August 2016.

ZAMBIA IN A NUTSHELL			
Population (2014)	15,721,343		
Area (km²)	752,610		
Population density	21/km²		
Income per capita (2014, GNI, market prices)	USD 1,680		
Income classification of countries per 1 July 2015 (WB)	Middle Income (USD 1,045–USD 12,736)		
HDI (2015)	0.586 (#139 out of 188, "Medium Human Development")		
GDP growth (2014)	6.0%		
Doing business rank (2016)	60.50 (#97 out of 189)		
BCG vaccination coverage (at birth)	94% (2013/2014)		
DTP1 vaccination coverage (6 weeks after DOB)	95% (2013/2014)		
Hib3 vaccination coverage (14 weeks after DOB)	82% (2013/2014)		
At least one antenatal care visit (2009–2013/2014)	99%		
Skilled attendance at birth (2009–2013/2014)	64%		
Institutional delivery (2009–2013/2014)	68%		
Death occurrence in health facility	48%		

# **OBJECTIVES**

This analysis of the identity management system in Zambia is conducted upon request of the Registrar General of Zambia, Mr. Mathews Nyirongo, Ministry of Home Affairs (MOHA) in Zambia. MOHA is seeking a third party assessment of its systems to inform future decision making as the Zambian government is in the process of developing its civil registration and vital statistics system and replacing its national ID (National Registration Card).

The request from MOHA is aligned with the priorities of Zambia's Vision 2030, the Revised Sixth National Development Plan, and the "SMART Zambia Now" digital society initiative all of which depend on the capacity of the citizens and residents to have their identities verified and authenticated. The strategic intention of Vision 2030 is that by 2030, Zambians aspire to live in a strong and dynamic middle-income industrial nation that provides opportunities for improving the well-being of all, embodying values of socioeconomic justice, underpinned by the principles of: (i) gender responsive sustainable development; (ii) democracy; (iii) respect for human rights; (iv) good traditional and family values; (v) positive attitude towards work; (vi) peaceful coexistence; and (vii) private-public partnerships. The assessment of the communication infrastructure has led the vision document to establish that "there is a need to establish communication channels which ensure that every citizen has access to information as a basic human right" and that Vision 2030 transforms Zambia into an "information and knowledge-based society by 2030."

In addition to providing the requested technical support for the assessment of the identity and identification system, the Ministry of Home Affairs had also requested an Identity Management workshop as part of the mission. This Identity Management workshop was held on the 9th of February 2016, and brought together 30 representatives from across government, the private sector and development partners (cf. Annex 4).

The methodology used for this analysis combines web-based information collection and meetings with stake-holders relevant to the identity management environment in Zambia, structured by the IMSA tool and leading to the generation of suggestions and recommendations that are presented in this draft report and will be validated by the Zambian stakeholders. The draft IMSA report was discussed in a second debriefing and validation workshop held on the 19th of April 2016 in Lusaka, attended by 30 representatives from across government, the private sector and development partners (cf. Annex 4).

The information gathered is presented in this draft report with the key findings, conclusion and recommendations that came out of the interviews that were undertaken from February 8 through February 22, 2016. This final report is based on feedback received before and at the validation workshop and was made available by the end of May 2016.

This report first starts with an analysis of the state-of-play in the domain of national identity management, which is its prime focus, in Chapter 3. It then moves on to an analysis of the policy, institutional and regulatory frameworks for delivering e-government and identity services in Chapter 4. Chapter 5 then presents an analysis of institutional demand for identity services, covering some major public and private sector actors, such as Zambia's Revenue Authority, Bank of Zambia and the Ministry of Community Development and Social Welfare, and private sector actors such as banks, insurance companies and MNOs. The report's last section in Annex 6 presents conclusions and recommendations.

#### Zambia During Its Colonial Days: Introduction of Civil Registration

Northern Rhodesia, as Zambia was called before independence, was a 'protectorate', formed in 1911 by amalgamating the two earlier protectorates of Barotziland-North-Western Rhodesia and North-Eastern Rhodesia. It had since 1891 been administered, as were the two earlier protectorates, by the British South Africa Company, (BSAC), a chartered company on behalf of the British government founded by Cecil J. Rhodes. His name was lent to (Northern and Southern) Rhodesia, or present-day Zambia and Zimbabwe. From 1924 it was administered by the British government as a protectorate under similar conditions to other British administered protectorates, and the special provisions required when it was administered by BSAC were terminated. Although under the BSAC charter it had features of a charter colony, the BSAC's treaties with local rulers and British legislation gave it the status of a protectorate. The territory attracted a relatively small number of European settlers, but from the time these first secured political representation, they agitated for white minority rule, either as a separate entity or associated with Southern Rhodesia and possibly Nyasaland. The mineral wealth of Northern Rhodesia made full amalgamation attractive to Southern Rhodesian politicians, but the British government preferred a looser association to include Nyasaland. This was intended to protect Africans in Northern Rhodesia and Nyasaland from discriminatory Southern Rhodesian laws. The Federation of Rhodesia and Nyasaland formed in 1953 was intensely unpopular among the African majority. It hastened calls for majority rule. As a result of this pressure, the country became independent in 1964 as Zambia. Under colonial rule the first laws for civil registration were enacted in 1905 for the nonnative population (mandatory birth and death registration) and for the native population (voluntary birth and death registration) in 1908. In Sierra Leone, also formerly a British dependency, compulsory registration of births and deaths for all had already been introduced in 1801, though confined to Freetown and Granville only. Laws for the rest of the country and its native population were actually introduced later there than in Zambia, in 1914.

First births register for 1908–1928. First entry is the registration of the birth of a boy born in Shesheke on 14 May 1907, registered on 19 June 1909 by Deputy Registrar F.C. Macaulay. This report suggests that the legacy records will be restored to a good state with help from UNESCO as they are of historic importance and by UN standards are permanent records.



# CIVIL REGISTRATION AND IDENTIFICATION VITAL SIGNS

#### 3.1 CIVIL REGISTRATION

Countries have an international obligation to report civil registration coverage and vital statistics to the United Nations (UN). If they do not report, the United Nations Statistics Division (UNSD) will collect these data through questionnaires issued before regional meetings are held. Zambia's latest reported data for civil registration coverage dates from 1994 for death (10%, reported at a conference held in Addis Ababa) and from 2008 for birth (10%, reported at a conference held in Blantyre). The latter actually was obtained from survey data for 1999 rather than from a primary, administrative (i.e. from a Ministry of Home Affairs civil registration report) source. Zambia's birth registration rate has been virtually stagnant. In 1999 the registration rate of under-five children measured by sample survey was 9.6%. Another survey held in 2007 registered 14% while the most recent survey for 2013/14 showed a rate of 11.3%. It is fair to say that the change in birth registration coverage was statistically insignificant. This is in contrast with the increase of the under-5 registration rate for Africa over the same period from 41% to 47%. However, Zambia is not the only country struggling with its birth registration. Almost 1 out of 4 African countries have seen a stagnant registration rate, or even a decline in the same period. When dissecting the latest overall birth registration rate of Zambia we find common disparities between urban and rural rates (urban three times rural) and between rates for children from the richest versus the poorest quintile (six times), while disparities between provinces are even more pronounced (Lusaka and Copperbelt versus the Northern and Western province). What adds further to the problem of low coverage of birth registration is that only 1 in 3 of the few children who are registered have a certificate of birth registration. We will come back to that below, but note here that these disparities are much smaller for the country's national ID, the National Registration Card (NRC), which is not only much more widely but also much more inclusively and equitably held.

The data indicates that birth registration coverage increases moderately with age within the under-5 age group. The latter is further confirmed by data collected in the 2010 population census: the census found that 17% of children and youth (0–17 years of age) have a birth certificate. The census data suggest that the percentages of children and youth that have a birth certificate for one-year age brackets between the bracket of 0 years and the bracket of 17 years vary only between 16.0% and 17.8%. This makes the population census data highly suspect; the data appears synthetic. The population census data differs too much from three household survey results to be credible. We volunteer as an explanation that the average percentage of 0–17 years old having a birth certificate may have been applied to one-year age groups. Based on this assumption and the Multi-Indicator Cluster Survey (MICS) survey data we suggest that the proportion of the 17 years of age with a birth certificate is about 40%, derived from the proportion of 17% for the average aged children youth from 0 to 17 (8½ years old) and the proportion of 4% for the average aged 0–4 years old children (2½ years old).

The "Births and deaths registration (general) rules (Cap. 286)" of 1973 have established up to one month from birth for current registration, from one month to one year for late registration and registration beyond one year as delayed registration (this is to conform with international recommendations, although the terminology used in Zambia is not aligned with current international convention). A cursory review of birth registration in one district office, Livingstone, showed the following not representative frequency distribution of actual birth registration (n = 210; 1st of January through 11th of February 2016): 40% is current (within 1 month), 37% is late (from 1 month to 1 year) and 23% is delayed (after 1 year). The oldest person whose birth was registered in Livingstone in this period was 32½ years old. If there was any association with obtaining the NRC (at 16 years of age) we would see

a peak close to this age, but there is no such peak visible. This confirms that if an affidavit can be easily obtained, people will not make the effort to obtain a birth certificate to support their application. Neither is there an indication in the data that school admission has an ascertainable influence. Data for Lusaka collected under auspices of the USAID-funded Zambia Institutional Reform Program showed that all registration and certification was within a year from birth; i.e. in those few cases that birth is registered there is tendency to register within a year.

What is striking is that the information on the profession of the father is showing similarity with the professions mentioned at the start of civil registration in Zambia in 1905/08: middle class professions dominate then and now. The rather large share of late registration (1–12 months), especially in Livingstone district, may indicate delay because of the name-giving practice but whether this is true would have to be confirmed by more research. A general remark can be made here that it is useful to understand why people do register birth (rather than why they do not) and why they do so late or delayed. Asking why people do not register vital events (the common convention) is putting them on the defensive and may therefore lead to answers that do not reflect people's true motivations (e.g., when they are aware or assume that theirs may not be law-abiding conduct). Research done in 2008 with support from UNICEF Zambia, and the questions in the Multi-Indicator Cluster Survey (MICS) of 1999 suffer from this weakness.

Obviously, for the 18 years of age, when 40% have a birth certificate this cannot mean that three times as many (120%) are registered as applies to the under-five (11.3% registered versus 4.1% having a birth certificate). There is another than merely numerical, logical reason why birth registration rate and birth certificate possession will converge at a higher age of the registered person: at a higher age it really is to obtain evidence of birth registration, for example for emigration or travel abroad, or for admission to higher education—no matter how cumbersome obtaining this evidence may be. In Zambia birth certificates are still only produced and signed in Lusaka, and the process from birth registration in a district office to receipt of the birth certificate can take weeks or months. This can and in fact proves also to be a serious obstacle for the poor, those with less education and those living in rural areas that have to bridge greater distances, which is clearly visible in the data.

**Key Message:** The intended devolution of the birth and death registration certification authority to district registrars will help to close this gap between birth registration and birth certificate possession.

Will this devolution also boost birth registration rates, as the recent civil registration and vital statistics (CRVS) action plan foresees? The devolution would transfer authority to the 105 district offices. Coupled with an intended reduction of paperwork required for registration, another proposed measure in a draft statutory instrument currently at the justice ministry for review, this could have some effect, although the magnitude of impact may disappoint. Why is this so?

Zambia is a large country (752,610 km²) with a population density of just 21 persons per square kilometer (well below Africa's population density of 39) and an urban population of 40% of the total. In 1994 a report from Zambia for a regional conference mentioned that the country had 1,772 "gazetted sub-centres registration offices" (sic) besides district centres as registration points and town clerks (District Secretaries) as registrars. Zambia had a population then numbering 9 million people and an annual total of 487,000 births and deaths to register. The 'math' is clear. When we limit ourselves to the 1,772 registration points, a registration point would have had a maximum of 275 vital events to register on average but in fact registered less than 10% of this, or just one event per two workweeks on average. Many of these registration points will not have been viable at all. Note that also back then birth certification was confined to Lusaka. The challenges for the central registration authority to manage and control this sprawling landscape of registration points and registrars without proper training and incentive and minimal workload must have been daunting. The report states: "All the registered vital events (i.e. births, deaths and marriages) forms (sic) are sent to the office of the Registrar General. However the flow of forms is very slow and the coverage is low."

Registration points then would have had a service area of 135 km² on average—translating into a service area perimeter at 11 kilometers from the registration point. This service network may just have been dense enough to be within reach of the majority of people, but the protracted process of producing a birth or death certificate and the necessity to visit the registration point more than once will not have helped. While at the time some of the

causes of low registration were identified, one possible cause was surprisingly absent: "demand." It is common for the registrar community to point out that the population needs to be "educated" (as in the 1994 report), or "made aware of the importance of birth registration" (as in the CRVS National Strategic Action Plan 2015–2019). We believe that the widely held NRC (National Registration Card)—at more than 83% of the population over 16 years—is evidence that a majority of the Zambian population does not need education or more awareness when it comes to the importance of availing of an identity document that has utility and actual importance and can be obtained without much difficulty. NRCs are being issued by the approximately 100 currently functional district offices without the need for a due diligence process that loops through Lusaka first. Moreover, on a five-year basis mobile NRC registration campaigns held prior to elections act as a safety net for those that do not or cannot obtain the NRC at a district office (about one in four NRC holders—see next section). That drive to bring NRCs to people's doorsteps accounts for about one-quarter of the coverage of the NRC. About 60% of people eligible for the NRC are willing to put in the effort themselves.

If birth and death certificates had the same *felt* importance and were offered to the public in the same way as NRCs, coverage would be similar as well. In fact, the authors of the 1994 report wrote: "The chain of command seems to be too long and needs (*sic*) to be decentralized up to district level only" and "provide a correct chain of command so that registration officers at whatever level of responsibility, are responsible directly to the Registrar-General and not as at present, being registration officers responsible in the first instance to another Ministry of Government." Note that the other ministries of government then were the education and health ministries: teachers and nurses were registrars at the frontline and registers were kept in school buildings. The compensation for these registrars was tokenistic leading to reluctance to conduct civil registration services.

**Key Message:** Zambia has taken the right steps by rationalizing the service network for civil registration and replacing decentralization by a deconcentrated service and clear, shorter lines of command to a manageable number of offices. If anything it does not seem to have led to less registration—though it did not lead to an increased coverage either.

Conventional wisdom prevailing among partners of DNRPC and the public at large exerts a constant pressure on the department to (further) decentralize its services. The dismal experience with a highly decentralized service during the 1973–1994 period is probably unknown to present stakeholders and may have slipped out of the institutional memory of DNRPC. However, the Ministry of Home Affairs has a Memorandum of Understanding with the Health Ministry. DNRPC partners with the Ministry of Health and with support from UNICEF is establishing Health Facility Birth Registration desks in 177 health centres in Luapula, Eastern, Southern, Copperbelt, Lusaka and Central provinces, an initiative which is planned for further expansion. In Lusaka at the University Teaching Hospital a system has been set up to register births and deaths directly as a module of INRIS. This is in line with global, common best practice. The health sector generally has a better footprint in a country than the civil registration service, and so is the case in Zambia. Vaccination coverage is 95%, 94% of pregnant mothers receive at least first time antenatal care, and about 50% of deliveries take place in hospitals or are attended by a skilled attendant. About half of deaths take place in health facilities, and more are brought to a hospital after their death.

The gold standard for civil registration is that, besides declaration of birth by one of the parents, the health sector provides a notification of birth (and similar for death), such that registrars obtain their information from two independent sources. Zambia complies with this standard in principle but—forced by current conditions on the ground—cannot yet enforce it in practice. DNRPC has received support from USAID and (US) Centers for Disease Control and Prevention (CDC) as well as UNICEF and other partners to improve office facilities as well as know-how for cause of death data gathering. The SmartCare initiative (cf. Section 4.3.3) includes the electronic generation of the notification forms for birth and death registration, including the medical certificate of the cause of death. DNRPC, together with MOH, with technical support from CDC, is currently piloting the electronic transmission of birth and death forms from two selected health facilities in Livingstone (Maramba and Livingstone Central Hospital). It is important that—besides the MOU—the performance of the notification task and the provision of cause of death information is written into the accountability of the health ministry and into the job descriptions of health personnel. If DNRPC can withstand the pressure to offer services in too many registration points or offering registration service in health facilities that would have a non-viable, small workload, then developing the notification role of the health sector is a strategy that deserves support. The increasing collaboration between

the ministries of home affairs and health has now led to a first generation of cause-of-death data, after a period of about twenty years of no production of vital statistics sourced from civil registration data (the 1994 report mentions that the Central Statistics Office (CSO) did produce—but did not publish—some vital statistics because coverage was too low). World Bank data shows that among 74 developing countries Zambia did worst in terms of statistical capacity development over the 1999–2009 period, i.e. CSO has also been a challenged institution.

In an 'orthodox' setting such as is found in most countries with complete coverage of civil registration, certificates of birth and death serve as breeder (source) documents to obtain other tokens of identity such as national IDs and passports or other important documents such as burial permits. There is a tendency towards verification of records in the civil register (which is more reliable in case of document fraud). This is not the case in Zambia. The birth certificate is a breeder document for NRC and passports but in the absence of the certificate an affidavit filled out and signed by a registrar (who is also a Commissioner for Oaths) will suffice as well. Vaccination records (under-five heath card, officially named the Children's Clinic Card in Zambia) are accepted as a surrogate birth certificate to obtain NRC or passport, and notices of death are accepted as surrogate death certificates, e.g., by insurance companies. As is also a UN recommendation, legal sanctions for not complying with compulsory birth or death registration are not enforced when service coverage is still this low. This all affects demand for birth and death certificates, but is basically a normal and rational public response to a service that has very low coverage and provides the public with too little benefit for too much effort or sacrifice.

Presently the good coverage of the NRC is also evidenced by the variance in coverage rates across provinces, which is very small in comparison with the variance for birth registration; see table below. The data shows that differences between provinces in birth registration rates are, in relative terms, far larger than for NRC coverage. The two most important reasons for these differences are that: 1) before every election mobile campaigns are organized to enroll eligible citizens without NRC in the NRC system, or provide those who do not have their NRC with a replacement NRC, which eliminates the indirect cost (travel cost, time and lost production) element, and 2) the difference in utility between NRC and birth certificates in relation to people's level of well-being. The table includes data on extreme poverty levels. The correlation coefficient for the relationship between poverty and birth registration rates is high (–0.77), even while the number of provinces for which there is data is only nine. If the base data of the population census can generate birth registration rates then these could be correlated to the poverty count at the district level produced recently by the World Bank and the correlation between poverty and birth registration rates could be examined in further detail.

**Key Message:** Data provides a clear indication that the financial sacrifice to obtain a birth certificate (at least twice a visit to a district registration office) is too great for poor Zambians.

The extreme poor account for almost half of the population of Zambia. This means that an efficient and dense service network would help, or mobile registration campaigns as done for NRCs would help, but there are limits to what is financially and organizationally viable. What it especially conveys, though, is that birth registration is NOT as important for, especially, poor people and that "educating" those citizens that birth registration is important could be seen as patronizing and disrespectful to them and the vital decisions they need to make to survive. There is no doubt that *society* at large would benefit greatly from universal civil registration, but the individual benefits are insufficient for especially poor people to outweigh the costs. If civil registration is worth more to society than it is to individuals, especially when they are poor, then society should make civil registration more worthwhile for poor people.

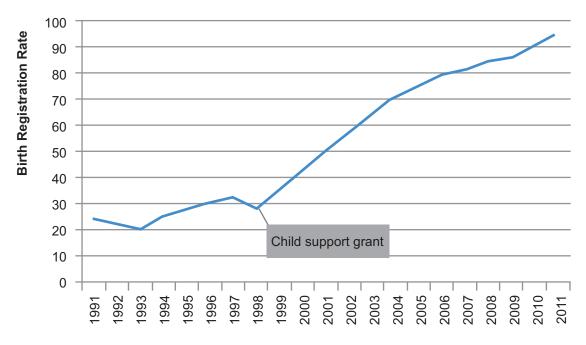
**Key Message:** Any government service that is reaching the poor and could support civil registration service delivery as well provides the poor with benefits is a potential vehicle to boost birth registration rates. *Public health* and *social protection delivery* provide these benefits and the service delivery infrastructure.

An excellent example of best practice—the child support grant of South Africa prepared during Mandela's single presidential term (1994–1998) and introduced in his last year in office—has boosted birth registration rates there to reach completeness levels by 2010 as the graph on the next page shows.

PROVINCE	NRC COVERAGE, 2010	BIRTH REGISTRATION RATE UNDER-5, 2013/14	EXTREME POVERTY %, 2010
Copperbelt	87.5%	23.6%	18.3%
Luapula	86.5%	5.7%	64.9%
Lusaka	85.0%	20.8%	11.5%
North Western	82.9%	4.4%	46.1%
Northern	82.8%	2.3%	55.8%
Southern	82.1%	12.0%	47.3%
Muchinga	81.2%	3.7%	
Western	80.9%	2.6%	64.0%
Eastern	80.9%	13.4%	58.7%
Central	80.6%	4.6%	36.7%
Standard Deviation	2.3%	7.4%	18.2%
Mean	83.0%	9.3%	44.8%

Source: Population Census 2010, DHS 2013/14.

#### Birth Registration Rate South Africa 1991–2011



A start has been made with the digitisation of civil registration in Zambia. This is necessary and should be rolled out in a judicious way, supported by power and Internet connectivity, financial resources (especially for long-term running cost and replacement investment) and technical standby support to sustain this. The law needs to support digitisation and provide safeguards for data privacy and security. With support from UN Development Programme (UNDP) and others, DNRPC and the Home Affairs Research and ICT Department (HARID) have

developed the software for INRIS—the Integrated National Registration Information System. GRZ has contracted a German vendor, Dermalog Identification Systems GmbH, to help develop the system. This mission has not been able to assess in detail what the system will encompass, other than that it will cover both civil registration, village registration, citizenship registration and passport issuance as well as a next generation national e-ID (now the NRC). The registration and development of villages act (Cap 289) provides for village chiefs and headmen to keep record of births, deaths and migration of villagers, thereby assisted by district secretaries. However, the village registration system is weak and underfunded, as the mission observed in Mukuni village in Livingstone district. Reportedly birth and death registration modules of INRIS are ready for use and a dummy e-ID is being used to test the national ID module. The launch of INRIS is said to come after the August 2016 elections so as not to cause any confusion, which is judicious policy. This will be further discussed in the next section on the national ID.

With USAID support, in 2013, the Zambia Institutional Reform Program (ZIRP) helped the DNRPC achieve recognition by the national government as the most improved public service institution in the fight against corruption, for which it received an award. DNRPC reported that service turnaround for the issuance of birth certificates was reduced from 41 days to 1–5 days for Lusaka-based applications and 13 days as the average for up-country applications. This reduction was the cumulative product of a number of interventions mainly within the framework of physical and adaptive changes to institutional practices. They were not influenced by any form of automation, which was delivered at the tail end of ZIRP. Customers reporting having paid a bribe dropped from 6% to 0.4% over the 2011–2013 period. DNRPC now has a client charter. A document management system (DOC-IT) was installed and all birth certificates from 1990 and onwards were filed, catalogued and indexed as an "active" database for birth records. The program also included the production of a training curriculum, manuals and standards. A website for e-service was up-and-running (but is not functional currently). The European Union also contributed financially to the program activities.

**Key Message:** The improvement of security and "storage of registries"—identified already in 1994—still requires attention, especially for the oldest records, of which in part requires restoration. The latter might be a small project that UNESCO or UKAID could be requested to fund, and the International Records Management Trust based in London could be asked for advice.

Zambia has been an early adopter country of the African Programme for Accelerated Improvement of Civil Registration and Vital Statistics (APAI-CRVS). The country conducted a CRVS assessment in 2014 and developed a costed—USD 26 million—national strategic action plan (NSAP) for 2015–2019. A break-down of the action plan budget is shown below.

The ministry is looking towards development partners to fund part of the cost of implementing the NSAP. USAID/CDC and UNICEF are expected to fund USD 6.6 million and USD 555,000 respectively, leaving 72% for financing by GRZ (17%) and others (55%). The European Union is not mentioned in the plan, although it has supported DNRPC. The World Bank and the World Health Organisation (WB/WHO) in their Scale-up Plan for CRVS have given unit cost estimates for country investments, and a range within which investment cost could vary, viz. between USD 1.00 and USD 4.00 per capita. The higher end cost is based on estimates for Ethiopia, which in 2005 (latest data) had a birth registration rate of 7%, hardly different from Zambia's 11.3% in 2013/14. With a population of 15 million Zambia would need about USD 60 million in investment. This could be adjusted downward because of investments done in recent years—for example in the development of INRIS which is designed to serve both civil registration as well as the new national ID—though only by a relatively small amount.

The investment estimates provided in the report of The World Bank and World Health Organization allow also to evaluate some of the above estimates per budget item. The estimate for item (7) is about right (WB/WHO: USD 250,000); reportedly the Births and Deaths Registration Act (Cap 51, 1973) has been reviewed, requires only minimal amendment, can be put into effect as statutory instrument (at minister's level) and is at the Ministry of Justice for review. The delegation of authority to district registrars for the certification of vital events, and the change of the current NRC by a new smart card e-ID (seen as a change of "form") may be within the purview of the Home Affairs Minister, the determination of which is currently with the Attorney General.

Key Message: The birth and death registration law of 1973 is largely aligned with UN standards. However, the law could be improved, and this law and the national registration law could be better aligned while certain updates for digitisation, privacy and security could be included. A suggestion the mission would like to make is that the review of the Births and Deaths Registration Act is done in an integrated way with the National Registration Act (Cap 126, 1964), and that the fusion into one law is considered as an option. The move towards digital civil registration and identification requires amendment of both laws and review of privacy and cybersecurity laws reportedly underway at the Ministry of Transport and Communications.

#### Budget for National Strategic Action CRVS Plan 2015-2019

BUDGET ITEM	BUDGET ESTIMATE	
Organisation and management	USD 47,600	0.2%
2. Death registration and cause of death	USD 1,996,800	7.7%
Vital events registration for refugees and minority groups	USD 104,100	0.4%
4. ICT	USD 22,138,100	85.2%
5. Vital statistics production	USD 1,233,200	4.7%
6. Communication, awareness and public education	USD 174,600	0.7%
7. Policy and legal framework	USD 274,600	1.1%
Total	USD 25,969,000	100.0%

This may then also justify the budget allocation for legal work. The estimate for (6) is (very) low in comparison to the USD 0.20 per capita used for Ethiopia (equivalent with USD 3 million for Zambia). However, as should have become clear above, it is believed that Zambia's birth registration rate is low not for a lack of awareness, but for a lack of incentives. Hence a modest budget for (6) is judicious.

Estimates for items (2) and (5) cannot be compared with WB/WHO estimates as these are either included in WB/WHO estimates for infrastructure and equipment investment, capacity building or outreach activities. The presently low coverage of birth and death registration and the relatively short duration of the NSAP seem to indicate that within this timeframe the allocated investment budget appears high. Reaching universal coverage of birth and death registration (>90%) is required for the production of reliable vital statistics. It is therefore somewhat unclear whether an amount of over USD 3 million would be money well spent c.q. spendable over the plan period. Re (3), Zambia has a refugee population of around 50,000 people, for which about 1,500–2,000 vital events annually require registration; when other vulnerable groups are included as well, budget for (3) seems right.

The predominant item in the Zambia NSAP is (4)—ICT investment. The WB/WHO estimate is USD 0.30/capita, equivalent to USD 4.5 million, while the Zambia NSAP estimate is USD 22.1 million. It is believed that the WB/WHO estimate is too low. An estimate for Côte d'Ivoire (20 million inhabitants, 770 sites for computerisation) in 2010 came to USD 1.00/capita. While ICT cost has come down since then and the number of digitised sites can be smaller, it is believed that the Zambia estimate is only somewhat on the high side, and part of the ICT investment may support the new national e-ID as Zambia is developing an integrated civil registration and identification system.

**Key Message:** The single most important concern the mission has is that already presently the civil registration service suffers from a lack of budget for day-to-day operations. In order to sustain the new investments, the operating budget of DNRPC must increase. The World Bank/World Health Organization investment estimates include extra budgeting for additional recurrent cost, about USD 1.40 per

capita out of the total of USD 4.00 for countries like Zambia and Ethiopia, spread out over ten years. This is equivalent to about USD 2 million annually.

Another concern is that Zambia may not yet have fully complied with the conditions for GFF (Global Financing Facility) or IDA (International Development Association) funding. The conditions are:

- Completed CRVS assessment
- 2. National coordinating mechanism
- Demonstrated national financial and legal commitment to strengthening CRVS systems as reflected by increasing share of public expenditure

Added qualifying advantages:

- 4. Draft legislation to support the proper functioning of national CRVS institutions
- National plan with Reproductive, Mother, Newborn, Child and Adolescent Health (RMNCAH) in support of Every Woman Every Child entry points

Regarding the last, additional qualifying "condition" it is important to note that there is a phased schedule for funding of countries.

**Key Message:** Since GRZ is investing in an integrated civil registration and identification system (INRIS) the budget for the National Strategic Action Plan for CRVS might have to be seen in combination with the investment estimate for the new e-ID, and the funding of the investment in both may have to be put in the broader context of the development of e-government (Center of Excellence for e-Government and ICT and the presidential "Smart Zambia Now" initiative).

Zambia is a signatory to the Convention for the Rights of the Child, Article 7 and 8 of which require the country to register its children so that they will have a legal identity, a name and a nationality. The United Nations High Commissioner for Human Rights commented on the low birth registration rate in its Concluding Observations of Zambia's first report to the Commission on the Rights of the Child in 2003, proposing decentralized birth registration. Zambia was late in submission of subsequent reports and bundled its 2nd to 4th report submitted ten years later in 2013. In that report Zambia has mentioned the work done on INRIS and the inclusion of the right to a name and nationality in the Constitution. The now proposed decentralisation of the certification of birth and death to district level was not reported as yet.

#### 3.2 CIVIL IDENTIFICATION

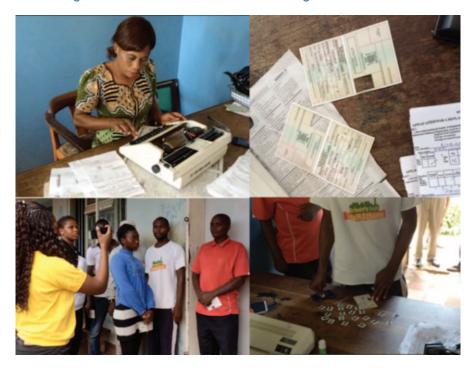
The National Registration Act dates from 7 July 1964, preceding independence day which was on the 24th of October 1964 as well as the the civil registration law of 1973. Several informants have stated that already in the early days the NRC was an identity document that had important, though not necessarily voluntarily chosen, utility. There have been times that travelling in Zambia and navigating checkpoints was virtually impossible without the NRC according to these informants. Zambia's ID has a colonial predecessor, the *chitupa* (plural: *fitupa*), and former Rhodesia had passed laws similar to those in South Africa. The UNIP political party of Zambia's first president (1964–1991) Kenneth David Kaunda issued its own card, which during the 1960s provided evidence of party loyalty.

Unlike birth and death registration coverage, most Zambians aged 16 and older hold the national ID, or "National Registration Card" (NRC). In the present time the NRC has unrivalled utility, whether it is to become registered and issued a voter ID, to open a bank account, to obtain a SIM card for a mobile phone or for virtually any other transaction of importance. In this regard Zambia does not differ much from South Africa where traumatic association of identity documents with suppression and colonial rule has been overcome. In sharp contrast with birth and death certificates, the NRC is issued in district offices without pre-issuance involvement of DNRPC headquarters. There were 72 district offices until 2013 and another 33 were opened since then to rise to a total of 105 (not all of the new district offices are operational as yet). The central office only receives a copy of the NRC application form for storage, while another copy is kept in the district office. With support from multiple donors over 8 million records of NRCs are now digitised and entry of data for location and retrieval of NRC records has taken place in order to migrate to a new digital ID system. Biometric data is planned to be added.

The present NRC is low-tech and requires a minimum of biographic information besides a right-hand thumb print, which is also required on the application form. In the Livingstone district office, during the month of January 2016, the number of NRCs issued was 336 first-time issuance cards and 475 replacement cards, for a total of 811 NRCs. The number of births registered was only 128 in comparison. In a "steady state" situation and ignoring fertility, mortality and migration within the age group of the 0-16-year-olds, universal and timely registration of birth and issuance of the first NRC would have to result in virtually equal numbers. Instead we find a ratio which is at least 2.6 NRCs for one birth certificate (336 versus 128), but very likely (much) higher: replacement numbers are too high to be credible and at least part will be first applications. NRC issuance is a more prevalent activity in a district office than birth registration. Note that the month of January 2016 followed a five-yearly mobile NRC registration campaign over the 7 September-3 December 2015 period, which precedes general elections (planned for August 2016). In Livingstone district a total of 13,828 NRCs were issued, or a multiple of 17 of the January issuance of new NRCs, representing about six times the normal production per month. This campaign makes use of regular staff of DNRPC, the ministry and other line ministries, and vehicles already in use by government. The per diem cost per issued NRC is about USD 5.50 (there is some revenue from replacement cards, but this is very small—a few percent—in comparison to cost). Livingstone district had a population of 134,000 in 2010, of which about half is 16 years of age or above. The issuance during the last three months of 2015 thus represents about 20% of the NRC-eligible population in Livingstone district. Livingstone's population is also about 1% of Zambia's population measured in the 2010 census (12.5 million). Hence, for the whole country the mobile NRC registration exercise might cover about 1.4 million new and replacement NRCs (not very different from new voters registered) and the campaign might cost between USD 5 and 10 million in per diem, fuel and other cost. The minister confirmed an amount of ZMW 25 million (USD 2.2 million) in the 2015/2016 budget "to this very important exercise in this year's budget. The money will be used to procure registration materials, equipment, procurement motor vehicles and out-boat engines, and on maintenance and insurance," i.e. per diem was not mentioned, which is the largest cost item but is not in the MOHA budget as applies to salaries in general.

A problem with the present system is that the "NRC register" or "NRC database" is analog and consists merely of duplicate application forms which will not be of much help when the issuance date of a lost NRC is not known. Recently, however, duplicate forms at headquarters have been scanned and data of 8.2 million NRC records have been entered in a database with support out of the election basket fund managed by United Nations Development Programme (UNDP), which in 2011 promised 90% of a USD 15 million amount for a new national ID. The total budget of the UNDP electoral cycle project 2009–2012 (extended to 2014), amounted to USD 25 million. It included support for INRIS, scanning of documents and other activities.

#### Issuance of NRCs in Livingstone, Southern Province, February 2016



GRZ has called on the services of German ID vendor Dermalog Identification Systems GmbH to provide the country with a new e-ID to replace the present NRC. INRIS will function as the database for the new e-ID, besides hosting civil registration (birth and death registration, marriage registration and adoption registration), village registration, citizenship registration and passport issuance. According to UNDP information from 2011 DNRPC has been planning to issue national registration cards "on a real time basis." Connectivity would be via a combination of communication technologies, i.e. Digital Subscriber Lines (DSL), Optic Fiber and VSAT (two-way satellite ground station). However, more recently the decision has been made to print the national ID centrally and not use DSL and VSAT connectivity. Reportedly this is because of the personalization equipment, which has a large daily output of 5,000 cards (personalization equipment comes in a range of daily output numbers). Mobile registration will be implemented through periodic registration campaigns undertaken while using mobile registration kits capable of uploading/downloading data to and from a central database. The INRIS project is part of a broader e-government program that originates in the Public Service Reform Program (PSRP) of 1993 pertaining to the use of ICT by government services, and is guided by the more recent (2009) ICT policy. Within this context the Ministry of Home Affairs has embarked on an ambitious program of computerizing its processes within its headquarters as well as its departments and specialized agencies. The Home Affairs Research and Information Department is spearheading the digitization program, while DNRPC was targeted as one of the qualifying departments. In 2008 Legend Consultancy carried out a study for the purpose of Business Process Re-engineering to determine how best to carry out modernization of procedures and work processes in the department. INRIS was devised as part of the re-engineering exercise in order to improve on the registration of all nationals of 16 years of age and above, as well as improve upon the registration of voters in conjunction with the Electoral Commission of Zambia (ECZ). DNRPC relies on HARID for its ICT services which spearheads the design, implementation of INRIS, hosting of the system and disaster recovery management through its mandate to facilitate provision and development of ICT services and ICT capacity building in all the ministries, departments and specialized agencies. HARID provides ICT backstopping and training to the departments and specialized agencies of the ministry. The published INRIS specifications are shown in the box below. UNDP provided more recent and detailed information, which is included in the box.

#### FEATURES OF THE PROPOSED INRIS SYSTEM

DNRPC is in the process of introducing a new and secure national registration card issued on a continuous basis using a hierarchical network topology. The system, comprising back-end servers, front-end workstations and mobile kits will be required to issue national registration cards on a real-time basis. Connectivity will be via optic fiber cable. Periodic, mobile registration campaigns will be undertaken using mobile registration kits capable of uploading/downloading data to and from a central database. INRIS will run on an Oracle database platform and use an Automated Fingerprint Identification System (AFIS) to eliminate double issuance of cards.

#### Technical characteristics and requirements of the system (slightly revised later)

- 1. Must seamlessly integrate all modules within the proposed solution
- Must have an architecture allowing third party product integration and scalability
- 3. Able to interface with other systems and must run on open standard technology platform using 4GL, RDBMS/OOD standard such as Oracle 11g or later
- 4. Complete module integration, open standard compliant hardware independent of operating system
- 5. Able to run third party reporting products such as Crystal Report Generator (CRG)
- 6. Able to migrate legacy data
- 7. Have a user friendly/easy to use graphical user interface (GUI)
- 8. Able to facilitate output to either printer or screen file or any other electronic media
- 9. Capable of producing ad-hoc and predefined reports as required
- 10. Capable of online real time and batch processing
- 11. Capable of harnessing special output media for production of National Registration Cards and other national documents
- 12. Capability for online query/retrieval facility
- 13. Report on log-on and attempted security violations, maintain a comprehensive audit trail
- 14. Able to integrate with Automated Fingerprint Identification System (AFIS) to guard against double registration
- 15. Able to provide an accounting facility to track fees paid where applicable

The development of the INRIS software was done in stages. First, sessions of stakeholder consultations were held to determine their needs and requirements. The stakeholder consultations included Government Ministries and Departments such as the Ministry of Health, Education, Chiefs and Traditional Affairs, Land Registry, Road Transport and Safety Agency, pension funds, and financial Institutions. Thereafter, the output of the stakeholder consultations was key input into a joint application design (JAD) session looking at existing formats, and from there the software was designed to meet the needs of stakeholders. Hardware choice was based on cost, human capacity and demand of services. Several studies were conducted.

Enrollment of the 16 years of age and above for the national ID can be undertaken in fixed stations or by the use of mobile kits. All district offices of DNRPC will have stationary enrollment equipment as well as mobile equipment. In the short term, a large number of mobile kits would be required and kits of the Electoral Commission of Zambia are likely to be deployed. Only the AFIS enrollment units may need to be procured. INRIS has inbuilt capacity to interface with other legacy systems. Banks, pension funds will not directly

(continued)

#### CONTINUED

interface with INRIS because a handheld unit can authenticate the biometrics of the holder of the card against the biometrics stored on the card. The birth and death registration modules will be linked to enrollment stations situated in health facilities. INRIS has a capacity to generate a unique identifier for newborns. The personalization of cards is currently centralized. Card production will not be done at district centres because fingerprints of each applicant have to be compared against all in the database (1:N). Though it would be possible to conduct verification online, it was decided to centralize personalization of cards because of cost and mitigation of security breach risk. The card's microchip can hold various data. The system will include a disaster recovery site to secure data in case of physical damage to the central data center. There will be servers at central, provincial and district levels that will have data limited to their respective service areas. INRIS has an interface with the Electoral Commission of Zambia facilitating removal of deceased persons from the electoral register, and provision for GIS. Transmission between offices can be real-time. However data can also be transmitted via CD or USB. In all cases data is encrypted to avoid illegal access.

Zambia is not alone in upgrading its national ID system—it is one of many African countries to do so. Two in three African countries accounting for 85% of its population and over 90% of African GDP are doing the same. Zambia is also one of many African countries that intend on doing so with the purpose for the new ID to make costly voter registration campaigns redundant. It is judicious that some skepticism is exercised in that regard. Tanzania and Ghana are among a larger group of countries where those expectations have been dashed. Zambia has a remarkably well functioning national ID system now, and the mobile campaigns that are conducted prior to general elections on a five-yearly basis, though costly, help to establish credible voter rolls and relatively high election integrity. One of the problems in Tanzania is the very low coverage of civil registration, just as is the case in Zambia, and the low population density both countries have in common as well. Without universal civil registration and a functioning population register, enrollment in a new ID system is cumbersome, and without an existing office network to sustain a continuous ID issuance operation, an initial countrywide enrollment campaign will generate an ID database that will be quickly out of date.

Tanzania's NIDA was established in 2008 and the use of the national ID was planned for the elections of 2015, a result it failed to achieve. In Ghana a similar program failed when its National Identification Authority established in 2006 will not be able to deliver in time for the elections of November 2016. In both countries management of the ID agencies was replaced out of dissatisfaction with these failures. In contrast, South Africa's new national ID rollout is planned over a period of 5–8 years, after 13 years of preparation, and the current green bar-coded ID remains valid, while South Africa has two centuries of experience with IDs and a well functioning, integrated civil registration and identification office network. National ID projects are inherently complicated to implement.

**Key Message:** The Government of Zambia faces a difficult policy decision where it wants to replace a low-tech, low-cost ID system that has adequately supported voter registration with a new high-tech, high-cost ID system that may fail to support elections for one election cycle or more if the experience of other countries, e.g., Ghana and Tanzania, is repeated in Zambia.

Key Message: While the mission has not been able to ascertain the value of the contract with Dermalog Identification Systems GmbH, the mission is concerned that the cost of a quality national ID system may have been underestimated. As a benchmark the budget for South Africa's new ID could be used. The budget was USD 507 million for 38 million IDs (i.e. USD 13.33/card) to be issued over a 5–8 year period (including enrollments of newly eligible persons turning 16 years old) as well as replacement of lost, stolen and damaged cards. This cost amount is also within the range the ID industry uses for its revenues from ID systems. The mission's estimate puts the necessary investment for Zambia at about USD 125 million for an e-ID system on par with South Africa's new ID system. An investment much lower than this may render the new e-ID at risk of having a short useful life.

Reportedly, the organization of the new national ID project will imply a central issuance, at least in the early stages. The terms of reference (see text box above) speaks of "real-time issuance." This terminology has been used also in the UNICEF annual report for 2014 ("All provincial, district and some suboffices were online and connected to the center, enabling them to process civil registration certificates in real-time"— which is referring to a study visit of DNRPC to South Africa and Zimbabwe, supported by UNICEF). The term "in real time" probably means immediate at a first visit at a district office. This is what is (generally) the case now for the NRC; it is unlikely to be feasible in the case of an e-ID. In many countries, including South Africa, production of an e-ID is not possible immediately, and the phenomenon of not-collected IDs is as real there as it is in other countries. This phenomenon now applies for birth (and death) certificates in Zambia. While the utility of the new e-ID will not be less than the present NRC and likely will be even more useful, central personalization of cards, for which Zambia has chosen more recently, and hence the business process loop between headquarters and district offices, will likely be a real problem affecting ID-coverage in coming years and will require special measures for voter registration for the next elections in 2021, and perhaps even also in 2026 when the experience in Ghana and Tanzania is repeated in Zambia (see also next section). The mission has not been provided by information that would allay concerns that card distribution will not be plagued by the same problems as experienced in Ghana. Tanzania, Nigeria, Uganda, and even, to a smaller extent, in South Africa. This will have major consequences for the cost of elections, which are already high even by African standards (per elector Zambia's elections are twice as expensive as elections in South Africa). The 2016 elections will cost about USD 90 million. In the long term though, a well functioning national ID will make voter registration largely redundant and will significantly reduce election cost. The savings from such an e-ID for institutional customers (government and private banks, insurance companies, MNOs, etc.), which partly can be monetized by DNRPC, will be substantial as well.

**Key Message:** Given the serious political (think of elections) and financial consequences of the program of identity management reform, the Government of Zambia could consider conducting a thorough technical and financial review of its integrated civil registration and identification project, within the larger context of the support the Government has sought from the World Bank for its Smart Zambia Now program. Not only elections depend on a functioning e-ID system, but there is also a considerable pent-up institutional demand from government and private sector for a digital identity system.

#### 3.3 ELECTIONS AND VOTER REGISTRATION

The first elections in Zambia were held in 1918 when the country was still a British dependency and suffrage was restricted to British subjects who were 21 or older, had lived in the territory for at least six months and owned at least GBP 150 of property. Sixteen more elections were held before independence in 1964. In the before-last elections held before independence, in 1962, the United National Independence Party (UNIP) won enough seats to form a coalition and govern. The last elections before independence held in 1964 brought UNIP a majority (55 of 75 seats). Hon. Kenneth David Kaunda became Prime Minister, and then President from independence (24 October 1964). Post-independence twelve elections were held, of which four in the 1973–1991 period were conducted while Zambia was a one-party (UNIP–Kaunda) state, and two were snap-elections to replace a president who died before the end of their term. This year (11 August) the 13th election since independence will be held with president Hon. Edgar C. Lungu being one of the contenders.

Currently the elections and Zambia's election management body, the Electoral Commission of Zambia (ECZ) are governed by the Zambia Constitution of 1991 (including the amendment of 2014 and Electoral Commission of Zambia Bill 2016), the Electoral Act No. 12 of 2006, the Local Government Elections Act Cap. 282 and the Amendment Act of 1997, the Referendum Act, the Electoral Commission Act No. 24 of 1996, as well as by various statutory instruments.

Voter turnout and the number of registered voters as well as the proportion of the voting-age population registered for the last five elections are shown in the table below.

#### Voter Registration and Voter Turnout 1996-2011

YEAR	VOTER TURNOUT	ELECTORS	VOTER REGISTRATION RATE	REGISTERED VOTERS	VOTING AGE POPULATION*
1991	44%	1,325,154	77%	2,981,895	3,869,520
1996	51%	1,779,668	51%	2,267,382	4,467,520
2001	69%	1,785,485	52%	2,604,761	5,035,404
2006	71%	2,788,211	69%	3,941,235	5,746,899
2011	54%	2,772,264	79%	5,167,154	6,561,053

Source: IDEA International.

The data shows that a secular, significant improvement has taken place in the Electoral Commission of Zambia's (ECZ) voter registration performance, which is what it is primarily accountable for and given control over. The 1991 elections brought an end to one-party rule, against which important political backdrop the voter turnout and high voter registration rate in that year should be seen. Voter turnout is a result of complex factors few of which can be controlled by ECZ.

For the upcoming elections ECZ and DNRPC have conducted mobile registration drives. Electors are required to have both the green NRC and a voter ID. Smartmatic has been hired for the delivery of voter registration kits as they were in 2010 as well (contracted by UNDP). Smartmatic is a vendor that commenced business operations in Venezuela, subsequently incorporated in Delaware, USA, has its current headquarters in London and has a Dutch registration as Smartmatic International Holding BV. In 2010 the Smartmatic service to ECZ reportedly included a complete solution, including the creation of a digital voter register and the biometric enrollment of voters.

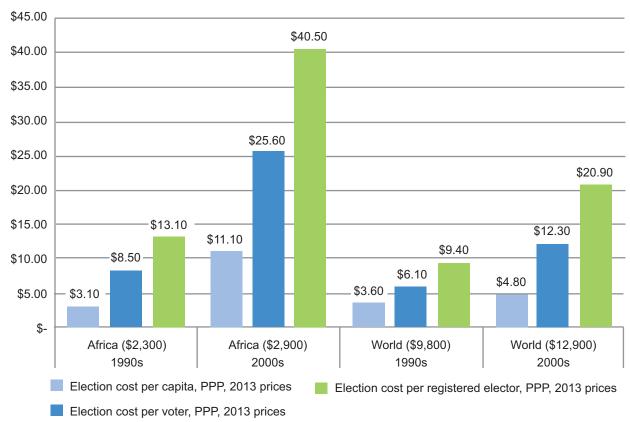
The voter registration campaign of 2015/2016 has resulted in a current electoral roll counting 6.9 million potential voters, but ECZ is still in the process of cleaning the register (as reported to the mission on 9 February 2016). ECZ is using various methods to remove erroneous entries in the voter register, including information from villages and village registers to account for people who are deceased or have left, but it has no magic bullet to guarantee complete accuracy as yet. The absence of a well functioning civil registration system that feeds a population register and provides up-to-date information about the population requires ECZ to resort to second-best solutions. With support from UNDP and other development partners the emphasis has been on aligning the NRC system and the voter registration system, rather than prioritizing the establishment or a reliable civil registration system. Pragmatic as that may be it shifts sustainable solutions further into the future. One of the problems that results is that Zambia can only rely on the population census as a source of data for the age-structure of the population. According to the data (obtained from IDEA International) in the table above the voting age population in 2011 was 6,561,053. While IDEA states that it uses data for the voting age population based on the population census, Zambia's population census gave a number of 5,888,013 (5,857,806 in the table for voter registration) for the population 18 years and above in 2010. The 2010 Census of Population and Housing was conducted between 16th October and 15th November 2010. Complete enumeration in all parts of the country was achieved by 30th November 2010. Hence the results of the population census came too late to be used by ECZ to establish the size of the universe from which to register voters. The actual number of voters on the—by that time digital voter register was therefore about 88.2 percent of the voting age population (5,167,154 ÷ 5,857,806). The mobile registration drive may not have been captured fully in the population census, which measured 62.8 percent as registered voters (3,677,092). The difference is quite large, approximately 1.5 million, typically the number of new voters added to the voter register prior to elections—see below. The digital register created in 2010 also allowed

<sup>\*</sup>Voting age population 2006 obtained from UN Population division data, as IDEA data is erroneous.

a simple variant of de-duplication; the single thumbprint taken and the photo would not have been advanced enough for high-accuracy de-duplication. This will still be the case for the 2016 elections.

The 6.9 million gross number of voters ECZ has now on file represents 90% of the United Nations Population Division estimate for the population of 18 years of age and above for 2015 (7,677,084), and about 86–87% of the number that could be estimated for mid-2016. The mobile registration drive reportedly yielded 1,593,840 new voters as of 13th December (included in the gross number of 6.9 million), representing 93% of the targeted 1.7 million voters. Another planned mobile registration drive to be held from 16th through 29th February had to be called off for a lack of funds. Above was mentioned that DNRPC probably issued approximately 1.4 million new NRCs.

## Election Cost 2000s versus 1990s, 80 Elections in Total (GNI per capita at purchasing power parity, prices of 2013)



Source: United Nations Development Programme. Electoral management bodies as institutions of governance. New York (2000). Lopez-Pintor, Rafael and Jeff Fischer. Center for Transitional and Post-Conflict Governance. Cost of registration and elections. Madrid and Washington (2005). Evrensel, Astrid (Ed.). Voter registration in Africa. A comparative study. Electoral Institute for the Sustainability of Democracy in Africa. Johannesburg (2010).

**Key Message:** The cost of the elections of 2016 is estimated at about USD 90 million (ZMW 1 billion). This represents a significant cost level. When the ultimate electoral roll would number 6 million voters, the election cost amount translates into USD 15 per registered voter. This is 60% above the average for 23 elections in Sub-Saharan Africa held since 2000 (USD 9.05 per registered voter, uncorrected for inflation), and more than double the cost of general elections in 2009 in South Africa.

Still, the comparison with other African countries does not sufficiently reflect a more serious situation and development, shown in the graph above: election cost across Africa has risen much more than anywhere else in the

world, and at African cost levels (purchasing power parity) is now also higher than anywhere else in the world. Zambia is not an exception.

Key Message: When looking at what elections cost the African public at large (per capita cost) elections held before 2000 were a little lower in cost than in the world at large. After 2000 they have become more than two times as expensive, while the income of the average African person in purchasing power is less than one-quarter of the world's average. Measured in terms of what people can afford, elections in Africa held before 2000 put a toll on its people of almost four times the world average. Since 2000 this has increased to more than ten times the world average. Elections in Zambia—twelve since independence in 1964—have been held regularly and, generally, in a peaceful way. This is an important accomplishment to be proud of for the people, the Government and ECZ in particular. However, in the absence of a well functioning civil registration system—that would keep cost down—the country has been drawn into an unsustainable upward cost spiral to hold those elections. Development partners will contribute less, if at all, in the future. Applying a holistic identity management approach that puts civil registration development at the heart of identity systems development is recommended.

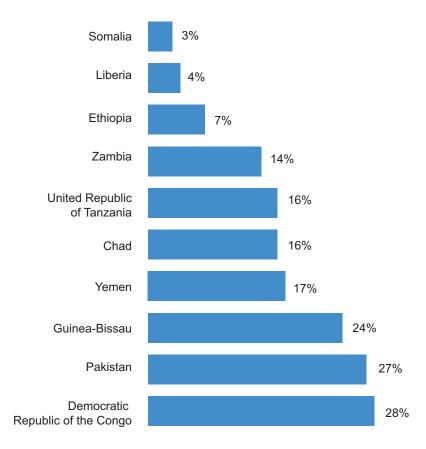
#### 3.4 AN INTEGRAL VISION OF IDENTITY MANAGEMENT

Zambia presents a unique case of identity management in the world. It defies some of the basic laws of identity management. There have been global UNICEF-published data for the status of birth registration for under-five children on an annual basis for more than a decade. Judged on the basis of Zambia's birth registration rate Zambia is lowly ranked. According to a major UNICEF publication (2013) Zambia scored only better than Somalia, Liberia and Ethiopia (see graph below). We saw in the previous chapter that this does not do justice to the actual situation in Zambia, especially not when Zambia is being judged on where its baseline for a legal identity for all by 2030 (sustainable development target 16.9) stands at this moment, in 2016. Seventeen percent of the under-18 years old have a birth certificate according to the 2010 population census (and a higher percentage have been registered but do not have a birth certificate). More than 83 percent of Zambians 16 years of age and older have a national ID. Both are prima facie evidence of legal identity in Zambia according to the respective laws. In Tanzania, which scores just better than Zambia on birth registration coverage, only 2.5 million of its citizens of 18 years and above have been issued an ID, or less than 10% of the 26 million adult Tanzanians (2015). Obviously Zambia is well ahead of its larger neighbor Tanzania in reaching a legal identity for all.

It is rare for a country to have a better coverage of its national ID than it has for its civil registration. In Europe and the Americas (both Northern as well as Middle and South America), as well as "Eurasia" (Australia and New Zealand), civil registration was developed first before IDs were introduced. In some of those countries great resistance against national IDs and their association with fingerprinting, crime and government surveillance blocked the introduction of national IDs. However, passports for international travel became a necessity for the issuance of which birth certificates provided the necessary "breeder documents," while population registers were developed to obtain a database of the population organized by the place of their residence, which then could also serve to support a database for national IDs. Prior to independence a number of countries in Africa did have ID systems for native male Africans as a measure of controlling labor movements and "ensuring security," e.g., South Africa, Rhodesia (chitupa) and Kenya (kipande). Civil registration only covered the expatriate population, including Asians and Arabs, whose numbers were smaller. In South Africa this carried over into the Apartheid period, until Mandela's election. In Zambia the chitupa got its post-independence successor (through a pre-independence law) without apparent resistance, although just as in South Africa (Sharpeville) before independence. In 1960 chiputa cards and marriage certificates that native women were obliged to carry had been publicly torn in protest. There are a few other countries that have had national IDs with better coverage than birth registration, e.g., Pakistan since the last ten years and Indonesia for longer.

### Most of the 10 Countries with the Lowest Levels of Birth Registration Are Found in Sub-Saharan Africa

Percentage of children under age five whose births are registered, in the 10 countries with the lowest birth registration levels worldwide



The issuance of an identity document to an older person, 16–18 years old or older, who does not have another identity document and was not earlier registered or included in an identity system, causes the establishment of identity to be less reliable and more costly. Witnesses to the identity of the person may be less reliable and age may not be established with accuracy. Filiation, date and place of birth are more accurately determined when and where a child is born. This is one of the reasons why international standards recommend a distinction between "current," "late" and "delayed" registration, with increasing degrees of due diligence required (and penalties applied) to establish the person's identity. When death is registered in a similar timely way the status of the population at any moment can be known. Certificates obtained from civil registration, or verification of the register, allow at a later stage to issue national IDs, passports or other identity documents with greater accuracy and reliability of a person's identity credentials, at relatively low cost. This includes providing people with evidence of eligibility to vote.

Data collected from across Africa has shown that South Africa is providing the lowest cost benchmark for identity management encompassing civil registration, national ID operations and voter registration. The average other African country with 20 million inhabitants can save substantially when it builds its national ID operation and voter registration on a well functioning civil registration system, just as South Africa has done, instead of operating the three identity systems in a silo fashion. The magnitude of savings over a ten-year period is shown in the table below, for a country with a population of 20 million. Zambia's investments and savings would be about USD 40 million (in civil registration) and USD 100–250 million respectively. To obtain this return on investment Zambia needs to get the foundation of its identity management—civil registration—in order as soon as it can. This will include building a civil registration infrastructure that makes civil registration as effortless as possible without expensive mobile registration campaigns and by infusing demand with real incentives especially for the poor through linkage with social protection schemes.

COUNTRY INVESTMENT CASE (20 million people; 10 years, in million USD, market prices of 2013)		
Civil registration investment (central estimate, m. USD)	USD 54	
National ID and voter registration cost savings High	USD 330	
National ID and voter registration cost savings Central	USD 230	
National ID and voter registration cost savings Low	USD 140	

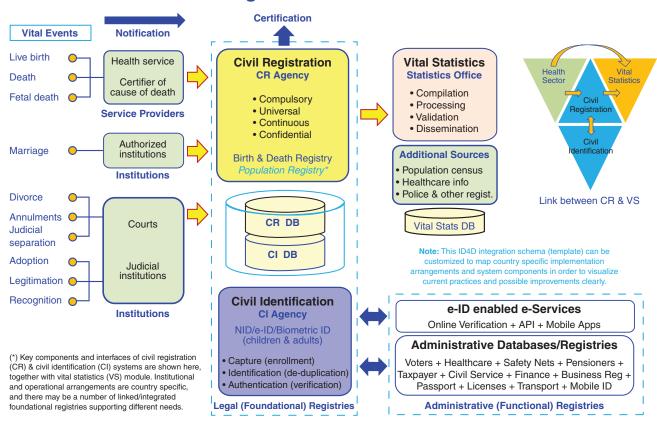
Source: CRC4D.

The schema below shows what an integrated national identity system would look like:



#### **ID4D Integration Schema (Template)**

#### **Civil Registration & Identification**



# Policy, Institutional, and Regulatory Framework

#### **4.1** Introduction

This chapter presents both the broader policy, institutional and regulatory framework within which the government of Zambia conducts its governance and is transitioning towards e-governance, and within that broader framework zooms in on the country's identity management that provides the very foundation on which governance and e-governance rest, and which itself (cf. previous chapter) is in transition from an analog system-of-systems towards digital identity systems the integration of which is pursued. The text box below introduces some of the key concepts and definitions for the subject matter of this chapter.

Governance is the exercise of economic, political, and administrative authority to manage a country's affairs at all levels. It comprises mechanisms, processes and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations, and mediate their differences (UNDP definition). Electronic governance or e-governance is the application of information and communication technology (ICT) for delivering government services, exchange of information communication transactions, integration of various stand-alone systems and services between government-tocustomer (G2C), government-to-business (G2B), government-to-government (G2G) as well as back-office processes and interactions within the entire government framework. E-government is the use of ICT in public administration—combined with organizational change and new skills—to deliver public services to citizens. In this definition there is no provision for governance of ICT requiring regulation, expertise and stakeholder consultation. E-governance thus implies the use of technology that transforms the governing process while its use is itself subject to appropriate governance. Through e-governance, government services are made available to citizens through electronic means. The three main target groups that can be distinguished in governance concepts are government, citizens (or "customers," "consumers") and the business sector. There are six models of electronic communications and transactions: governmentto-citizen (or customer, consumer, G2C), government-to-employees (G2E), government-to-government (G2G), government-to-business (G2B), business-to-business (B2B) and citizen-to-citizen (C2C). Information and communication technology (ICT) is an extended term for information technology (IT). The latter stresses the role of unified communications and the integration of telecommunications (telephone lines and wireless signals), computers as well as necessary software, storage, and audio-visual systems, which enable users to access, store, transmit, and manipulate information. The term ICT also encompasses the convergence of audio-visual (radio, television) and telephone networks with computer networks through a cabling or link system.

This chapter presents the current policy environment and institutional framework for e-governance (Section 4.2), the institutional framework for the establishment of the (legal) identity of natural persons (as distinguished from "legal persons" such as corporations, foundations) in Section 4.3 and the regulatory framework governing identity management (Section 4.4).

### 4.2 Long- and Medium-Term Policy Framework for e-Governance and Identity

In 2006 Zambia embarked on its first long-term plan and Vision for 2030 to accomplish a country with the status of "A Prosperous Middle Income Nation by 2030." Among the measures to achieve the vision are:

- i. Establishing a knowledge-based economy that is fully competitive, dynamic, robust and resilient in an integrated global and liberal environment;
- ii. Establishing a progressive society that is an innovative and forward-looking contributor to the scientific and technological advancement of the future.

For economic growth and wealth creation the sector vision for science and technology is "A nation in which science, technology and innovation are the driving force in national development and competes globally by 2030," the goals (targets) for which are:

- Acquire and upgrade infrastructure required for training in science and technology and R & D academic institutions by 2030;
- ii. Build and sustain human resource capacities and capabilities by 2030;
- iii. Promote development of enterprise using outputs from science and technology and R & D activities by 2030;
- iv. Strengthen linkages between productive sectors and research institutions in the economy by 2030;
- v. Establish and strengthen practical application of science and technology in all areas.

For economic growth and wealth creation the sector vision for information and communication technology is "An information and knowledge-based society by 2030," the goals (targets) for which are:

- i. Increase connectivity to fibre optic (telecommunication infrastructure rollout) and other high capacity transmission technologies (networks) from 7 to 72 districts by 2030;
- ii. Increase access to phones per 100 people from 0.9 to 8 by 2015 and to 50 by 2030;
- iii. Increase access to ICT services such as Internet users from 35,000 in 2005 to 100,000 by 2015 and to 1,000,000 by 2030.

In order to attain economic growth and wealth creation, Vision 2030 considers as a necessity social investment and human development, including education and social protection, and an enabling environment with a sector vision for information services that includes attaining computerization and networking in all sectors of the economy. The sector vision for social protection is "A nation that promotes and provides sustainable security against deprivation and extreme vulnerability by 2030." Zambia has a serious and persistent problem with income inequality and Vision for 2030 shows that more inclusion is planned for "leaving no one behind."

Zambia's Vision for 2030 has an end year that coincides with the end year for "Agenda 2030"—the global program for sustainable development that includes target 16.9: "Legal identity for all, including birth registration, by 2030." As was shown above Zambia has an adult population that is largely (83.6% for 16 years of age and older) covered by a national identification document that according to the law is a *prima facie* evidence of legal identity that by its color confirms citizenship of the country. But the country has some way to go before children and youth will have that same evidence, since only 17% of those 18 years of age and younger have a birth certificate (a higher percentage will have been registered).

Vision for 2030 has been further concretized in the country's national development plans, the latest of which is a revision of the **Sixth National Development Plan 2011–2015 (SNDP).** This plan provided for investment in infrastructure development, including road and rail infrastructure, as well as in ICT and connectivity. All across the educational sector the government planned for inclusion of ICT in curricula. The plan for 2011–2015 was revised when a new government took the helm. The **Revised Sixth National Development Plan 2013–2016** 

**(R-SNDP)**—which will likely be followed by a successor 7th national development plan after the elections of August 2016—includes programs for e-government and public service transformation:

"Electronic-Government (e-Government) is the means of delivery of Government products, services, policies and engagement with stakeholders through the use of Information and Communications Technology to interface Government to citizens and businesses. It would also strengthen intra-Government interaction and transactions. E-Government has been identified worldwide as a powerful enabler of good governance and catalyst for socioeconomic development and promotes competitiveness. During the Plan period, a link between ICT applications, in ensuring the achievement of important social development goals, will be established and mainstreamed in major Government operations. The Government will also put in place measures to facilitate access to ICT through the e-Government reform process by all citizens, particularly the disadvantaged and vulnerable groups, in order to bridge the gap in accessing Government services by maximizing the utilization of Government services online." The Government also committed to governance reform, inter alia by "Building an economic governance regime that promotes the creation and strengthening of a stable macroeconomic environment and conducive institutional and legal framework for efficient and effective management of public resources, increased private-sector investment and employment creation," and "Developing and promoting corporate governance systems and practices based on the recognition that the organizations (public, private and civil society) that contribute to sustainable economic growth, structural transformation and poverty eradication need to be run efficiently and effectively in a participatory and transparent manner.

For the ICT sector the Government included in the R-SNDP that the focus would be on overcoming the following challenges:

- 1. High cost of service provision
- Limited broadband infrastructure across the country
- 3. Lack of content development facilities such as incubation centers for ICTs
- 4. Poor utilization of ICTs in public service delivery
- 5. Limited utilization of ICTs for commerce by private sector

The objectives, strategies and programs are shown in the table below.

### Objectives, Strategies and Programs ICT Sector, R-SNDP 2013-2016

NO.	OBJECTIVES	STRATEGIES	PROGRAMMES
1.	To develop and maintain ICT and meteorological infrastructure	<ul> <li>a) Promote PPP in the provision and maintenance of ICT and meteorological infrastructure;</li> <li>b) Expand national broadband infrastructure;</li> <li>c) Establish ICT research centres and postal officers;</li> </ul>	INCT and Meteorological Infrastructure     Development
		offices; d) Rollout ICT incubation centres to provincial centres; and e) Rollout ICT infrastructure in unserved rural areas.	

(continued)

### Continued

NO.	OBJECTIVES	STRATEGIES	PROGRAMMES
2.	To deliver integrated,	a) Implement e-services in priority sectors;	2. e-Services
	accessible and convenient e-services	b) Develop multimedia e-service delivery channels;	
		c) Implement the integration of government information management systems;	
		d) Promote ICT innovations and entrepreneurship; and	
		e) Establish e-Government technical standards and structure.	
3.	To enhance access	a) Establish provincial broadcasting stations;	3. Infrastructure Devel-
	to electronic and print media in rural areas	b) Establish Digital Terrestrial Television infrastructure;	opment for Electronic and Print Media
		c) Establish fully equipped provincial printing press; and	
		d) Establish provincial information centres.	
4.	To enhance market access for ICTs in	a) Negotiate market access for ICT services; and	4. ICT Marketing
	both the regional and international markets	b) Promote ICT services at international exhibitions and fairs	
5.	Promote FDI in the ICT sector	a) Trade and Investment Promotion Missions	

"In this regard, focus will be on expansion of ICT infrastructure through multiple delivery channels accessible to all citizens especially in rural areas. Specifically, the Government will mainstream ICT in key sectors of the economy in order to promote innovation, improve efficiency and thereby accelerate development. The Government will promote the utilization of electronic means in the delivery of goods and services."

For the implementation of the ICT program the R-SNDP identifies eight major groups of actors that make up the institutional framework, shown in the table below.

### Actors and Roles in the Implementation of the ICT Sector Plan

NO.	INSTITUTION	ROLE
1.	Ministry of Transport, Works, Supply and Communication	Telecommunication enabling environment through policy and strategic planning
2.	Ministry of Information and Broadcasting Services	Broadcasting enabling environment through policy and strategic planning
3.	Ministry of Commerce, Trade and Industry	Securing market access
4.	Zambia Information and Communication Technology Authority	ICT regulator
5.	Zambia Development Agency	Trade and investment promotion

6.	Independent Broadcasting Authority	Broadcasting regulator
7.	Private sector	Provision of ICT services and goods and e-commerce
8.	Ministries, Provinces and Spending Agencies	Implementation of sector specific e-services

Zambia's e-governance and ICT infrastructure development have been given a shot in the arm by the launch in October 2015 by the newly elected president (who used to be the minister for the Ministry of Home Affairs, including DNRPC) of the **Center of Excellence for e-Government and ICT (CEEGICT)**. The center is the successor organization to the 1968 established Centralized Computer Services Department. The GRZ identified the need for effective and efficient high-level coordination of ICT interventions across the public sector in order to achieve the ICT vision: "A Zambia transformed into an information and technology based society supported by increased access to ICTs by all citizens by 2030."

CEEGICT is expected to facilitate implementation of e-government as well as coordinate and support ICT in the public sector, effectively spearhead the implementation of public ICT policy and regulate the adoption and usage of common shared ICT systems, infrastructure and human resources in the public sector. For this transformation the Center will be responsible for:

- 1. A central point of managing all government ICT needs
- 2. Engaging citizens through multiple technology enabled channels to access civil services
- 3. Empower civil servants with cutting edge technologies
- 4. Standardize technologies and productivity processes across the entire government of Zambia
- 5. Whole of government view of relationship between public sector and citizen/business
- Engage with citizens as owners and participants in the creation of public services not as passive recipients of services
- 7. Include initiatives to enable the frontline of public service: enabling the staff that are directly involved in delivery of services such as education and health
- 8. Managing G2C, G2G and G2B interactions across multiple channels and providing a seamless single experience.

Just a few weeks before the launch of CEEGICT the president, in his first address as newly elected president to the assembly, had called for "Embracing a transformational culture for a Smart Zambia Now." The new Ministry of National Development and Planning has followed up with a request brought to the World Bank to support this new initiative.

MOHA has adopted its own strategic plan for 2013–2016, now in its last year, as the Revised SNDP is. The ministry formulated as its vision to be an "efficient and effective public service institution that provides and promotes internal security for a safer, secure and peaceful Zambia," and as its mission "To provide and promote security services in order to create a safe, secure and peaceful environment for sustainable socioeconomic development for all." In order to achieve the mission the ministry identified 19 objectives, among which three are especially relevant here:

Five core strategies for objective 1—"To manage and develop human resources in order to improve organizational performance":

- 1. Review and implement the Ministry's organizational structure
- 2. Institutionalize a Performance Management System (PMS)

- 3. Review and implement the training plan
- 4. Strengthen and implement the HIV/AIDS workplace policy; and
- Establish and operationalize integrity committees

Five core strategies for objective 9—"To provide secure national identification and travel documents to citizens and residents in order to contribute to national security":

- 1. Strengthen the program of mobile registration for issuance of national identity documents
- 2. Establish registration centres and outreach points
- 3. Implement and maintain an electronic document and records management system
- 4. Re-engineer and automate business processes; and
- Develop, implement and maintain partnerships with law enforcement agencies, community-based organizations, Electoral Commission of Zambia, NGOs and Faith-Based Organizations

The **outputs** the ministry planned for under objective 9 were:

- 1. 24 service centres and outreach points established and operationalized by 2014
- 2. National Mobile registration conducted once annually
- 3. 100% increase in the number of persons issued with National Identity through mobile registration
- 4. 80% of eligible persons issued with National Identity documents
- Integrated National Registration Information System (INRIS) fully operational by 2015
- 6. 80% of applications for passports processed within 14 working days, and
- 7. 80% of applications for other travel documents processed within 3 working days

Output (1) has been more than achieved if only through the establishment of registration desks in over 200 health facilities since 2013. Output (2), as far as the mission has observed, has not been achieved, and the mission believes that more mobile registration activities are not a long-term viable strategy. The increase proposed under (3) would by and large lead to universal coverage of the population with the NRC. Going forward, with a new e-ID, this will most probably be impossible, unless MOHA chooses for a gradual replacement of the old NRC by the new e-ID. Output (4) has actually already been achieved as witnessed by the coverage of the NRC established through the 2010 population census (83.6%). Reportedly INRIS can be launched immediately after the August 2016 elections, but will still lack some planned modules.

Five core strategies for objective 10—"To manage public records, printed publications and archives in order to preserve national memory and contribute to internal security":

- 1. Strengthen the records management system
- 2. Develop and implement a programme for safe custody of public records
- 3. Strengthen and maintain a depository centre, and
- 4. Develop and implement awareness programmes

Selected outputs for objective 10 were:

- 1. 90% of the identified inactive/semi-active records collected annually
- 2. 90% of records digitized by 2016
- 3. 90% reduction in the number of records damaged by 2016
- Records centres opened and operational in 3 provinces by 2014
- 5. 12 record surveys conducted in ministries and institutions annually

The ministry is responsible for public records, and in the process of digitization. Zambia's laws may not expressly provide for digital records and their preservation, a lacuna that would need to be addressed. Civil registration law does not expressly state whether civil registration records are permanent records (as they should be international standard). Keeping electronic records "forever" is not guaranteed given very frequent software and hardware updates, requiring to be addressed (as Australia has done).

### 4.3 Institutional Framework Governing National Identity Management

### 4.3.1 Ministry of Home Affairs

All across the world governments transition towards e-governance and ongoing digitization of their work and service delivery, while government also plays a role in laying the groundwork and foundation as well as regulatory environment. These governments have also learned that the most basic of data provide the very foundation of e-government, e-commerce or an e-society more broadly: the identity of natural persons and legal persons (corporations, foundations, etc.), their addresses of residence, doing business or incorporation, and land titles. Civil registers, national ID databases, tax registers, social security registers, company registers, cadasters and similar are the pillars under the edifice of a digital society. This Identity Management Systems Analysis is designed to support an initiative such as "Smart Zambia Now" in its inception stage.

Zambia's national identity management system encompasses civil registration which issues certificates, the civil identification register that issues the national registration card (NRC) and the immigration (citizenship) and passport division, all three located within the Department of National Registration, Passports and Citizenship of the **Ministry of Home Affairs**.

**DNRPC** is charged with the responsibility of keeping records of the births, marriages, deaths and adoptions of citizens and residents. It also processes and issues passports and other related travel documents as well as applications for citizenship. There are two sections—the National Registration Section and the Passports and Citizenship section.

The role of DNRPC is to provide National Registration Cards, passports, and travel documents, and facilitate acquisition of Zambian citizenship in order to contribute to the maintenance of internal security.

To undertake its role DNRPC has the following functions:

- To effectively and efficiently provide increased accessibility to services for national identify documents
- To decentralize the operations to all Provincial and District Centers and Missions Abroad in order to increase accessibility to services
- To maintain an effective and efficient records management system for easy retrieval of information and provision of services
- To provide and disseminate information on the operations of the department in order to create public awareness and increase community participation
- To promote cooperation and collaboration with other specialized agencies and relevant organizations in order to enhance information flow
- To initiate the review of legislation and policies related to National Registration, Passports and Citizenship in order to conform to the prevailing conditions
- To digitize national identity and travel documents in order to enhance their security.

DNRPC has offices in all provinces and districts (except in some recently formed districts) in order to take the services closer to the public. DNRPC's internal organization is currently under review in order to support CRVS reform.

The roles of the two DNRPC sections and units are:

### The National Registration Section (NRS)

The Section is responsible for registration of births, marriages, deaths and adoptions as the issuance of national identity cards. It is headed by a Chief Registrar who is responsible for the National Identify Unit (NIU) and the Births, Marriages, Deaths and Adoptions Unit (BMDAU) respectively.

**National Identity Unit (NIU)**—The role of the Unit is to timely and accurately issue National Identity (Registration) Cards and is headed by a Principal Registrar who is assisted by two Senior Registrars.

**Births and Marriages, Deaths and Adoptions Unit (BMDAU)**—The role of the Unit is to ensure the timely and accurate registration of Births, Marriages, Deaths and Adoptions and is headed by a Principal Registrar, and who is assisted by two Senior Registrars.

### Passports and Citizenship Section (PCS)

The Passports and Citizenship Section is responsible for the issuance of passports, travel documents and citizenship and is headed by a Chief Registrar who is assisted by two (2) Principal Registrars for the Passports Unit and Citizenship Unit respectively.

The Passports Unit (PU)—The role of the unit is to ensure the timely and accurate issuance of passports and travel documents and is headed by a Principal Registrar who is assisted by two (2) Senior Registrars.

**Citizenship Unit** (CU)—The role of the Citizenship Unit is to ensure the timely accurate scrutiny and conferment of citizenship and is headed by a Principal Registrar who is assisted by a Senior Registrar.

The ministry's bundling of roles in identity management is good practice. More commonly, in many countries the responsibility for national ID and civil registration resides in different ministries, which makes coordination and interoperability more challenging. MOHA not only houses both, but it is also responsible for citizenship, passports, border control, the Zambia Police Force, the Zambia Prisons Service, immigration, the Commission for Refugees, the Registrar of Societies and the National Archives.

The role of DNRPC in the registration of vital events, the issuance of registration certificates and the establishment of people's identity through birth registration will be discussed below when explaining the role of collaborating ministries of government. For the issuance of NRCs and passports DNRPC is self-reliant—it does not work with or depend on other agencies for the issuance of the national ID.

The **NRC** is issued to persons from 16 years and older who need to be accompanied by their parents. The birth certificate acts as a breeder document to obtain the NRC, but copies of the NRC of the parents are required as well. In the absence of a birth certificate for the applicant an affidavit signed by the registrar who is a Commissioner for Oaths will suffice. This process fails to help populate the birth register; in South Africa, for example, no national ID is issued unless the applicant has been included in the register of births and in that way in civil register and the population register. This also contrasts with the process for voter registration and issuance of the voter's card, which is not possible unless the applicant has an NRC, or obtains one beforehand. DNRPC, through its mobile registration campaigns prior to election years, facilitates this process.

The **passport**, for clients under 16 years of age, requires the so-called Application Form A filled out, the Affidavit of Birth Form (Form N) if the applicant has no birth certificate and no previous passport, a copy of the NRC (according to DNRPC's client service charter, 2009), and for a married person a marriage certificate. Form A is not actually mentioning the NRC as a requirement other than when the applicant has been born abroad (NRC of the father) or is a naturalized Zambian citizen. This bottom part of Form A shows how Form N in the great majority of cases provides for an affidavit to suffice when the applicant has no birth certificate.

For official use only					
	DOCUMEN.	TS TO BE PROD	UCED TO BE NO	OTED HERE	
Applicant's birth certificate or affidavit	Wife's birth certificate or affidavit	Husband's birth certificate or affidavit	Children's birth certificate or affidavit	Marriage certificate	Other documents

The **Registration Certificate of Zambian Citizenship** requires prior residence for more than ten years, and an ID and/or passport issued by the origin country (in those countries birth certificates will usually be the breeder documents used to issue the ID and passport). The issuance procedure takes eight months.

**Key Message:** When birth and death certification processes are decentralised it is recommended that birth registration be made a precondition for the issuance of the NRC and passport.

MOHA has seen advancements in the use of ICTs such as computerization of the passport issuance system, border controls, digitization of NRC records and fingerprints and the use of websites for information sharing. The ministry has expressed a need to invest more and broaden the use of ICT as well as enhance skills in the utilization of ICTs by the ministry. Besides the above opportunities gained from advancements in ICT, they have also posed a challenge for the Ministry as they have led to an increase in crime, i.e. identity fraud, cyber crime. The ministry, in its strategic plan 2013–2016, has identified as a core issue to be addressed the forgery of identity documents. The current National Registration Cards (NRCs) are prone to forgery. This has been caused by susceptibility to photo substitution, insufficient security features and the use of paper. In addition, there are weaknesses in the application procedure, enrollment prerequisites and procedures for obtaining the NRC. This, reportedly, has resulted in fraud, loss of confidence in the system and ultimately, a weakened internal security. There is need, therefore, to review the National Registration Act No. 126 of 2004 to strengthen application procedures and upgrade the NRCs to incorporate enhanced security features.

### 4.3.2 Ministry of Local Government and Housing

A somewhat anachronistic phenomenon in Zambia's regulatory framework is the **1971 Village registration and development act**, a law enacted when a local government and unity party (UNIP) organization had become conflated. The *de jure* one-party state came to an end in December 1990, and political pluralism took its place. Consequently, the transition to a multi-party system demanded a restructuring of local government. Firstly, local government had to be 'de-linked' from the ruling party; and secondly, measures were introduced to strengthen democratic control over the administration, and increase its accountability to democratically elected bodies. The promulgation in August 1991 of the Constitution of Zambia Act (No.1) and the Local Government Act (No. 22), 'delinked' the ruling party from all civil service and state apparatus, repealed the 1980 Local Administration Act (No.15) and re-introduced the distinction between the ruling party, the central government, and local government. Currently, the **Ministry of Local Government and Housing (MLGH)** is responsible for overseeing local government. The mission of the ministry is: "to promote a decentralized and democratic local government system and facilitate the provision of efficient delivery of quality housing, infrastructure and other social services by local authorities and other stakeholders for sustainable development." It appears that the ministry is not supporting village registration, or even agnostic about it, while the mission observed that the system of village registration may

have become all but dormant and a historic relic. The local government act (Cap 281 of 1991, last amended in 2014) does not mention village registration. Local government is important for identity management as it is hosting DNRPC in its district offices, and the infrastructure of local government including developing secure Internet and mobile phone connectivity and reliable power supply are vital for the digitization of identity management work at the local level. Since Internet access is still limited to urban areas or to those who can afford mobile-phone access, councils have not yet used e-government in service delivery to residents. Government is undertaking a number of initiatives and the number of ICT projects in the public sector has increased over the years. Examples include the Integrated Financial Management Information System (IFMIS) project, the Payroll Management and Establishment Control project and the building of local area networks (LAN), which are central to the establishment of e-government. The policy goal is "to improve public sector management as well as delivery of public services through the implementation of e-government systems." As a result, central government has mobilized initial resources to connect the Ministry of Local Government and Housing (MLGH) to all the provincial offices and all councils in Zambia. By October 2012, 33 district councils were connected. In 2013, a private telecommunication service provider was awarded a tender to implement Mobile Communication services to cover 169 chiefdoms and other unserved areas. MLGH is charged with the administration of the local government system and ensuring that the people of Zambia are provided with the necessary municipal services. It oversees the implementation of delegated functions and responsibilities by the local authorities by managing the social, economic and political spheres of governance. According to the Government Gazette no. 547 of 2004, the ministry has been assigned the following functions (note that village registration is not mentioned):

- Coordination of local government administration
- 2. Regulation and provision of social amenities
- 3. Urban planning and regional planning
- 4. Valuation of property
- 5. Chiefs' affairs and house of chiefs
- 6. Water supply and sanitation
- 7. Provision of housing
- Provision of municipal infrastructure services and support services
- 9. Coordination of the implementation of the National Decentralisation Policy; and
- 10. Provision of feeder, community and urban roads

### 4.3.3 Ministry of Health

Of great importance for identity management in Zambia is the **Ministry of Health (MOH)**. This ministry has an important supporting role for identity management, a role which is being expanded further. MOHA and MOH signed a Memorandum of Understanding (MOU) to formalize their cooperation for identity management. Going forward it is important that the role of MOH becomes more "internalized" and the birth and death notification role of the ministry is written into the responsibility of the ministry and the job descriptions of relevant staff. MOH has a footprint in the country which is superior to the DNRPC's current office network: in 2012 it had 1,956 health facilities in total. Note that this number is even larger than the number of gazetted registration offices that once existed (1,722, see Section 4.1).

### Health Facilities by Province, Zambia, 2012

NO.	DISTRICT NAME			
1	Central			
2	Copperbelt			
3	Eastern			
4	Luapula			
5	Lusaka			
6	Muchinga			
7	Northern			
8	North-Western			
9	Southern			
10	Western			
Zambia				

NO. OF HF BY LEVELS OF CARE						
No. of TLH	No. of SLH	No. of FLH	No. of UHCs	No. of RHCs	No. of HPs	Total HFs
0	2	8	29	129	36	204
3	4	11	148	55	29	250
0	2	7	5	143	49	206
0	1	6	3	125	10	145
3	1	15	182	51	42	294
0	1	4	4	69	21	99
0	2	2	8	102	34	148
0	1	10	6	135	11	163
0	4	11	19	178	41	253
0	1	10	5	144	34	194
6	19	84	409	1,131	307	1,956

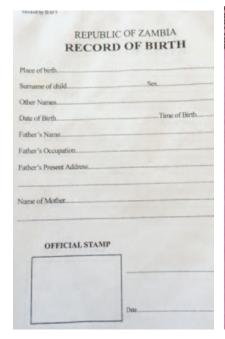
NO.	NO. OF HF BY OWNERSHIP				
No. of GRZ HFs	No. of Mission HFs	No. of Private HFs	Total HFs		
185	9	10	204		
172	10	68	250		
193	13	0	206		
138	6	1	145		
126	13	155	294		
89	7	3	99		
139	6	3	148		
143	18	2	163		
227	18	8	253		
178	16	0	194		
1,590	116	250	1,956		

\*TLH = Third Level Hospital, \*SLH = Second Level Hospital, \*FLH = First Level Hospital, \*UHC = Urban Health Centre, \*RHC = Rural Health Centre, \*HP = Health Post

The health sector's reach also is illustrated by the following statistics:

- 1. BCG vaccination coverage (at birth): 92% (2013/2014)
- 2. DTP1 vaccination coverage (6 weeks after DOB): 95% (2013/2014)
- 3. Hib3 vaccination coverage (14 weeks after DOB): 82% (2013/2014)
- 4. Antenatal care, at least one visit (2009–2013/2014): 99%
- 5. Skilled attendance at birth (2009–2013/2014): 64%
- 6. Institutional delivery (2009–2013/2014): 68%
- 7. Death occurrence in health facility: 48%

Currently for **birth registration** one form is required that is to be provided by a health worker, the **Record of Birth**. In the absence of this, for example for home deliveries, the registrar also accepts the **Children's Clinic Card (CCC)**. The identity information is almost the same on both, and both satisfy an international recommendation that the registrar obtains information from two independent sources. In the absence of both the registrar will accept an affidavit ("Form M") signed by herself/himself as Commissioner for Oaths.





What is surprisingly missing on the CCC is an entry for 1) date of birth registration, and an entry 2) for the issuance of the birth certificate. In an ideal scenario the CCC is brought to a health facility for several subsequent vaccinations (6, 10 and 14 weeks after birth, and for measles 9 and 18 months after birth). An entry on the vaccination card (CCC) would prompt both mother and health worker to be aware of the duty to register the child. Another entry that one would expect in modern time is for the mobile phone numbers of the parents on forms and in records. NRC numbers are commonly asked for. SIM cards are issued only upon showing the NRC; i.e. these data and their linkage will be useful in the future, digital setting. For example, via the NRC and the mobile phone number public messages could be sent to remind parents with regards to vaccinations due, perinatal visits, school enrollment, etc. Baptismal records are relied upon if needed, which in a country where 75% of the population is Protestant and 20% is Roman Catholic, provides another good source of information on basic data on birth.

The informant of birth, normally a parent, also has to fill out and submit the **Notice of Birth (Form No. 14)** which provides more detailed particulars about the parents (and the informant of the vital event if different). The amendments to the Births and Deaths Registration Act that are currently under review include a proposed reduction of forms required. A special birth registration form ("Form 12") is used for delayed registration, i.e. for registration a year or longer from the date of birth.

**Key Message:** It is recommended that future versions of the analog and digital version of the record of birth include an entry of the mobile phone numbers of parents or guardian, and Children's Clinic Cards, as well as digital medical records (SmartCare), include entries to monitor birth registration and certification, and allow entry of the mobile phone numbers of parents or guardian.

For **death registration**, when the event occurs in a health facility, or the deceased is "brought in dead" (BID, police report) a medical practitioner needs to certify the **Medical Certificate of the Cause of Death** and state the cause of death. Headmen and chiefs also have authority to give notice of death when occurring in rural parts of the country. Deaths need to be reported within 24 hours. For death registration the **Notice of Death** is also required, as well as a **Burial Permit** and identity documents for the deceased and the informant. Because of the centralisation of birth and death certificate production this process is somewhat less conducive to death registration as well as control over burial. In Kenya, for example, a burial permit is only issued upon registration of death and surrender of the deceased's national ID. The regulation and licensing of undertakers can be made contingent upon compliance to these rules. In Kenya death registration rates are at the same level as birth registration rates (approximately 60%) because of these best practices.

**Key Message:** In the amendment of the Births and Deaths Registration Act the order in which death certificates and burial permits are issued and NRCs are revoked may be reviewed to establish proven best practice.

In 2013, with help from UNICEF, DNRPC and MOH have started a project for birth registration in health facilities, which by the end of 2014 had been expanded to 200 health facilities. In 2012 in as much as 78% of Zambia's 1,956 health facilities—1,525 in total—deliveries took place. It is important that birth registration desks are staffed with authorized personnel, and that the workload of such registration points makes those desks organizationally and economically viable. An estimated 300,000 deliveries annually take place in health facilities, or about 200 annually on average per facility. A good number of facilities will have too few deliveries to make a registration desk organizationally and economically viable.

An important development since 2005 has been the introduction by MOH of the **SmartCare electronic health record system**, which comes with a **SmartCare Health Smart Card**. The SmartCare system has been developed and deployed by the Zambia Ministry of Health (MOH) in collaboration with the U.S. Centers for Disease Control and Prevention (CDC) and many other implementing partners. SmartCare is:

- A fully integrated electronic health record system to provide continuity of care
- 2. A clinical management information system at the facility and district, provincial and national (management/admin) level
- A key component in 'one National M&E system'

The SmartCare system now includes the generation of the Record of Birth, Notice of Birth and the medical certificate of the cause of death forms, i.e. the progress being made in e-Health also benefits the digitization of identity management.

### Former Secretary of State Hillary Rodham Clinton Showing the Zambia SmartCare Card



SmartCare, according to the MOH statistics (2012) was installed in 33% or 645 of the 1,956 health facilities while in 27% (530 locations) it was used. Reportedly SmartCare is currently installed in 868 health facilities (as of February 2016). The SmartCare card is a key part of this electronic health record system for the provision of the continuity of care. The customized card carries an encrypted copy of a patient's entire health history. It uses a SIM-style chip, familiar to those who use cell phones, to store the data. The card is more durable and private than a paper record, and is easily replaced. It also serves as a low-tech, "just in time" communications alternative when the Internet, phones and faxes don't work. Health records travel directly with the patient. A soft copy of the health record is saved in the SmartCare database of every facility the patient visits, thereby creating a distributed database system. These data are later de-identified, and pooled at the district, provincial and national levels for public health monitoring, evaluation and HMIS use. Where cellular reception exists and costs are sustainable, a 3G cellular option can be used between SmartCare and providers, patients, facilities and managers to provide reminders, requests, warnings, updates and reports using a SmartCare add-on called "SmartMonitor." Mobile phone subscriptions (estimate 2014) stood at 69 per 100 inhabitants. While SmartCare is a very promising development there are basic problems because of power rationing as well as maintenance and ICT support. Reportedly the organization of ICT services in the form of ICT helpdesks within the government sector is problematic.

### 4.3.4 High Court, Local Courts, and Councils

Councils (i.e. Local Government) and churches are agents in the solemnization of civil (statute) marriages that can only be officiated by the Registrar General in Lusaka. Local courts solemnize as well as hear the dissolution of customary marriages, while Lusaka's High Court hears the dissolution of civil marriage. The registration of civil and statutory and customary marriages and the registration of their dissolution are covered by the Marriage Act (Cap 50) and the Matrimonial Causes Act No. 20 of 2007. Adoption is covered by the Adoption (Amendment) Act (Cap 54) of 1997; registration of adoption also falls under the Registrar General, while the High Court is involved in deciding on adoption cases. With the exception of the latter cases dealt with before the High Court and divorce settlements, the present role of the courts in the officiating of marriages differs from common practice outside of Zambia, where civil registrars perform such functions instead.

**Key Message:** GRZ could consider changing current practice and the role of courts in officiating marriage, which seems to be in good hands when conducted by district registrars.

### 4.3.5 Electoral Commission of Zambia

Zambia's independent election management body, the **Electoral Commission of Zambia** is responsible for the issuance of the voter ID—voters need the NRC as well as the voter ID to bring out their vote. Voter IDs do play a role for citizens who do not have any other official identity document in many countries in Africa, since voter registration

usually brings the service of providing a person with an ID to people's doorstep. In Zambia this is not the case, since eligibility to vote requires a person of voting age to have an NRC as well as a voter ID. When during the time of one-party rule in the 1970s and 1980s, only party members were allowed to vote, the UNIP card provided the evidence of voting eligibility. The present system, as governed by the Electoral Act No. 20 of 2006, states in Articles 5, 8 and 17:

- 5) Subject to the provisions of Section 7, every person shall be qualified for registration as a voter in direct elections who—(a) is a citizen of Zambia; (b) has attained the age of eighteen years; and (c) is in possession of a national registration card.
- 8) (1) A person qualified for registration under Section 5 and not disqualified for registration under Section 7, shall be registered as a voter in the register of voters for any constituency of the person's choice, as may be prescribed. (2) A person's name shall not be entered in the voters register for more than once in any constituency. (3) A person who has been registered in the register of voters shall be issued with a voter's card. (4) A voter's card shall contain—(a) the individual's—(i) full names; (ii) residential address; (iii) sex; (iv) date of birth; (v) portrait; and (b) such other information as the Commission may prescribe.
- 17) Every person shall, whenever the person wishes to vote at a direct election, identify oneself to an election officer in such manner as may be prescribed.

In election practice voters are required to identify themselves with their voter's card and NRC. In order to give access to all, or nearly all, persons of voting age the ECZ conducts mobile voter registration campaigns that ideally (though in practice not always sufficiently) are preceded by mobile registration campaigns organized by DNRPC for the issuance of NRCs to those who have reached the age of 16 and those older than that who had not yet availed themselves of the NRC. The NRC thus serves as a breeder document for the voter's ID. Nowhere does the electoral act mention the birth certificate as a document that suffices to obtain a voter's ID.

### 4.4 LEGAL FRAMEWORK GOVERNING NATIONAL IDENTITY MANAGEMENT

Annex 6 provides information on the legal and regulatory framework for civil registration and identification in Zambia. It provides a guide on the constitutional, national and international commitments that the country has made in relation to civil registration and identification. The Republican Constitution was recently amended and some of the amendments have introduced new law on civil registration and identification. Article 34 of the Constitutional Amendment Act No 2 of 2016 provides that citizenship may be acquired by birth, descent, registration or adoption. It was also noted that Article 39 (1) of the Amendment Act has introduced dual citizenship, which is the recognition that a Zambian Citizen may opt to acquire the citizenship of another country while maintaining his/her nationality.

Zambia has international obligations and duties to recognise the rights of children to have their particulars registered under the United Nations Convention on the Rights of a Child and the African Charter on the Rights and Welfare of a Child. The United Nations Convention on the Elimination of all Forms of Discrimination against Women contains provisions especially for women. In the annex the national laws that provide for civil registration and identification are listed and summarised in a table. The various pieces of legislation are discussed there at length in order to give information on some of the salient provisions of the law.

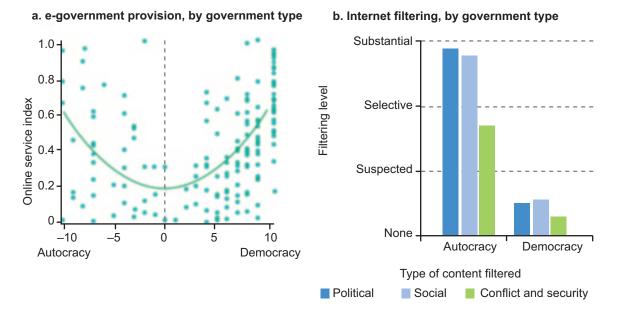
The annex includes a brief discussion on legal review of the Birth and Deaths Act Chapter 51 of the Laws of Zambia and how this law can be synchronised or merged with the National Registration Act Chapter 126 of the Laws of Zambia.

In the annex it is concluded that in order for the country to have a well-developed civil registration and identification system, there is need for an overhaul of the legal framework for civil registration. This could be achieved by pragmatic review of existing laws supporting the application of information technology to synchronise and integrate the various registration and identification systems. There is also need to decentralise the certification aspect of the births and deaths registration process for which regulatory support is required. The changes in the law need to provide for changes in the official birth and death records to allow that the collection of data for the generation of vital statistics is required by law.

### 5 INSTITUTIONAL DEMAND FOR IDENTITY SERVICES

### **5.1** Introduction

Governments provide identity services to their populations for various reasons that, *inter alia*, depend on the nature of governance—whether governments are autocratic or democratic—much in the same way as applies to the use of digital technology by government, as shown in this World Bank diagram:



Generally, taking a neutral position, identity services are delivered by governments to serve government, individual, social and economic interests. Individual legal identity is a right by international law and a means of individuals to avail of government services and benefits, and more broadly for them to be able to fully participate in society. Individual identity functions as a key to unlock a gamut of provisions and services, whether offered by the public or private sector, that expands with economic and technological development. For governments and private sector alike trusted individual identity is a means to efficient and effective service delivery, lawful conduct and contract enforcement. This chapter will look at the demand of some of the major, institutional stakeholders for accurate identity. Their interest is not confined to a sole unique identity, as is the case for an individual's interest in their own credentials. Their interest is in the uniqueness of the identities of thousands to millions of people who make up their target group. Note that institutional demand is not confined to the stakeholders discussed

below—there are more Mobile Phone Network Operators (MNOs), banks, insurance companies than the ones that the mission could meet with. The stakeholders below are thought to be representative. They are:

- Public sector—Bank of Zambia, Central Statistics Office, Electoral Commission of Zambia, Ministry of Health (MOH), Ministry of Community Development, Mother and Child Health, Zambia Police Force, Zambia Revenue Authority
- 2. Semi-government—National Pension Scheme Authority (NAPSA), ZAMTEL, ZICTA, ZSIC Life
- Private sector—AIRTEL, Barclays Bank, Citibank, MTN.

This exposition of the use of identity services by institutional clients will inevitably lead to the question whether the coexistence of identity systems of foundational or functional nature would inevitably be more costly than a multipurpose system and token. This fundamental discussion was held in Britain about the national ID introduced there through the Identity Cards Act of 2006 (and repealed by law in 2010). The House of Commons interviewed experts, among whom Professor Thomas Martyn Thomas of the U.K. Computing Research Committee, a world-renown expert in software engineering and cyber security and visiting professor at the University of Oxford. The 2006 act specified fifty categories of information that the National Identity Register could hold on each citizen, a number that could be increased even further. Professor Thomas states:

"There is a technical systems engineering issue here captured in popular wisdom by "don't put all your eggs in one basket." If you create either a single card that has multiple functions or a single database then you are adding to the nation's critical infrastructure unnecessarily and by doing that you are making a very large range of services, probably a growing range of services, vulnerable to a single attack, either a deliberate attack or a fault that arises as a consequence of mis-implementation or accident. This seems (and undoubtedly is) an extremely foolish thing to do if you do not need to do it. First, you create a target that is worth subverting and therefore you increase the resources that will be applied to subverting it. Secondly, you increase the damage that is done when by whatever means compromise that particular system. If it is an individual's card that is compromised, you have increased the damage to them because they do not have the back-up mechanisms of all the multiple cards that they currently have for getting access to other parts of their life. If it is a central system that is compromised, then you are really in trouble because everybody potentially is having difficulties over all the aspects of their lives that are implemented on that system."

This cautionary advice should be kept in mind. This does not imply that an integrated foundational identity system "puts too many eggs in one basket." A national ID is not principally different from a birth or death certificate—it is just another identity document that can be issued from the same database (the population register). Experience in countries where these systems are not integrated is that, then, systems operated in parallel lead to problems in collaboration and to individual identity records that can differ from one database to the other.

### 5.2 Institutional Clients for Identity Services

### PUBLIC SECTOR CLIENTS

### 5.2.1 Bank of Zambia

According to its website, the principal responsibility of the bank is to create and implement monetary policy that will maintain the economic stability of the country. What sets the bank apart from most central banks is that the Bank is active in promoting financial inclusion and is a leading member of the Alliance for Financial Inclusion. It is one of the original seventeen regulatory institutions to make specific national commitments to financial inclusion under the Maya Declaration, during the Global Policy Forum, held in Riviera Maya, Mexico in 2011. The bank's current concern is the depreciation of the Kwacha and domestic inflation, brought about by the slump in demand for natural resources including copper. The Bank of Zambia oversees the commercial banking system as well as Non-Bank Financial Institutions (NBFIs). In doing so it depends on the integrity of the current means of identification, and bank officials consider the NRC "not credible enough." On the other hand, with the aim of inclusion, pragmatism is encouraged as well and the Children's Clinic Card may suffice as a means of identification

on the low end of credential credibility for vulnerable segments of the population. Zambia's population of 15 years and above is about 7.8 million, of which 35.6%, 2.8 million, has a financial account (2014, Zambia is slightly above Sub-Saharan Africa, including for mobile accounts). Zambia scores worst for the proportion of "adults" (15+) belonging to the poorest 40% holding an account: 20.9% versus 24.6% for Sub-Saharan Africa and 33.2% for the group of lower-middle income countries to which Zambia belongs, which justifies Zambia's active role in the Alliance of financial regulatory institutions for financial inclusion. The bank's supervisory remit extends beyond commercial banks and includes also pension funds and the insurance industry respectively, two sectors with hundreds of thousands of members and clients, and others indirectly dependent as beneficiaries (see below). In 2011 the Bank of Zambia became a member of a working group with the objective to give inputs into the specifications of INRIS and the new e-ID, and participated in study visits to Malaysia (Ministry of Home Affairs, National Registration Department) and Pakistan (NADRA). The Bank's remit includes the monitoring and management of money laundering activity (ML), financial crime risk (FCR) and terrorist financing (FT). A special agency has been established in 2011, the Financial Intelligence Centre (FIC). Financial Intelligence Centre Act (FICA) No. 46 of 2010 is a Zambian government initiative and process of establishing additional regulations to create a stronger environment of compliance in Zambia. FIC became operational on April 1, 2011 via a Statutory Instrument (S.I.) Number 22 of 2011. Through FICA, the Government of the Republic of Zambia hopes to prevent the misuse of public funds, the abuse of the financial system, and emphasize enhanced transparency and protection of the integrity of the financial system. GRZ is attaching critical importance to placing a strong oversight mechanism and developing a comprehensive and integrated approach to combat ML, TF and serious FCR.

### **5.2.2 Central Statistics Office**

Unlike any of the other agencies and organizations that exercise institutional demand for identity information, the Central Statistics Office, by its nature, ignores data on the identity of individuals. This is essential for the sustainability of statistical work: confidentiality of individual information if breached, affects the willingness of the public to cooperate with CSO data collection in the future.

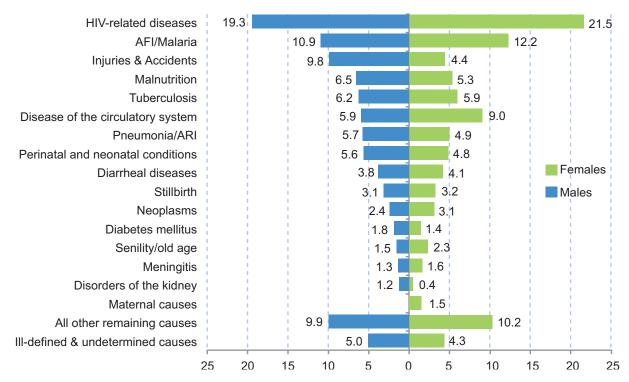
In 1994 registrars of Zambia reported at a regional meeting held in Addis Ababa that "Chapter 425 of the Laws of Zambia allows the Central Statistical Office to collect, process and disseminate any statistical information. Computer printouts from the Data Processing Unit are used to make tables for the vital statistics report. This publication, however, is not disseminated to the public because of the extremely low coverage of the vital statistics system in Zambia. The CSO Library and Publications Section stock the vital statistics reports. Up to the early 1980s registered births, marriages and deaths reports were compiled and published. In spite of low coverage, the tables produced were detailed and adequate which would have provided useful information."

The Census and Statistics Act of 1955 (Cap 127), and its amendments from 1963 through 1994, do not explicitly mention vital statistics. The UN Statistics Division (UNSD) has not once received a filled out vital statistics questionnaire from Zambia. The current situation that no vital statistics sourced from civil registration data are being produced does not mean that CSO does not produce vital statistics; vital statistics are produced on the basis of household surveys and the population census held every ten years. It was mentioned before that World Bank data shows that among 74 developing countries Zambia did worse in terms of statistical capacity development over the 1999–2009 period, i.e. CSO has also been a challenged institution. CSO is well tuned into the African APAI-CRVS process, but given the still very low completeness levels of birth and death registration the outlook for vital statistics derived from civil registration sources remains dim for years to come.

It appears that CSO is about to turn a page in some way. The graph on the following page shows one of the first results of USAID- and CDC-supported efforts to publish cause-of-death data. Sample Vital Registration with Verbal Autopsy (SAVVY) is a system for strengthening vital events monitoring and measurement, including causes of death. SAVVY provides nationally representative information about levels and causes of mortality as well as other indicators not available from other sources.

Given that almost half of deaths occur in hospitals, the Medical Certificate of the Cause of Death is filled out and a medical practitioner fills out the cause of death, it has been possible to at least start producing the basis for statistics at DNRPC though their representativity may still be questioned.

### Leading Causes of Death (%) among Adults 15+ Years in Zambia



Source: SAVVY: Sample Vital Registration with Verbal Autopay 2010–2012. Lusaka, Zambia: Government of Zambia Central Statistical Office, August 2014. This analysis was developed with support from MEASURE Evaluation.

**Key Message:** It is recommended that DNRPC and CSO start reporting annually civil registration coverage based on primary, administrative date-of-occurrence-of-event statistics.

### 5.2.3 Electoral Commission of Zambia

In Sections 3.3 and 4.2 the work of ECZ has been discussed at length. ECZ is one of the largest "clients" of DNRPC. For the elections of August 2016 the provisional voter register covers almost 7 million Zambians of voter age. ECZ now administers the largest electronic database in terms of individuals covered. Biometrics (one thumb print) is used for de-duplication of the database, but not used at the voting booth. The current electoral law is strict in stipulating that voting does require a voter ID as well as the NRC. Smartmatic has been the vendor for voter IDs and voting technology for the elections of 2011, 2015 and 2016. ECZ has found 65,000 NRCs with the NRC number in common, or about one percent of all. To clean the voter roll from "ghosts" (deceased persons) ECZ cannot rely on DNRPC because of the low level of death registration. For that reason ECK does use other means, e.g., collecting information from village registers. An innovation for the elections has been that the public can use an SMS facility to verify inclusion in the voter register and accuracy of personal data. ECZ works closely together with DNRPC and the use of ECZ's database is being considered for the population of INRIS. ECZ will be able to retire its own voter registration campaigns when the voter register can be updated on a continuous basis from INRIS, as is possible in South Africa where the HANIS integrated population register serves for low-cost, monthly updates of the voter register. Presently the mobile registration campaigns that both DNRPC and ECZ conduct before elections are an obvious duplication and an example of a less judicious use of scarce government resources, while it has contributed to pushing the election cost (per elector) in Zambia to levels twice the cost of elections in South Africa.

### 5.2.4 Ministry of Community Development, Mother, and Child Health (MCDMCH)

MCDMCH might be the second most important client of DNRPC for the identification of its target group after ECK, if not the most important. Above has been explained how in South Africa the child support grant fueled the

improvement of civil registration coverage as well as the population of the ID database (now merged in HANIS, the Home Affairs National Identification System). In order to qualify for the means-tested grant the child and parents or caregiver would have to have their birth registered and if an adult issued the national ID. MCDMCH is similarly in a strategic position to be a key partner of DNRPC in boosting the coverage of birth registration and NRC. Poverty in Zambia has proven to be stubborn and persistent. The new Patriotic Front government has stepped up budget for social protection programs. The World Bank has recently (2013) published a study on social safety nets, which includes the table shown below. One of the study's recommendations has been to create a single registry of beneficiaries. Integrating the beneficiary databases of the existing Public Welfare Assistance Scheme (PWAS), Food Security Pack (FSP), and Orphans and Vulnerable Children (OVC) programs with that of an expanded version of the Social Cash Transfer Scheme (SCTS) would, according to the study, be a good start towards that goal. Such a unified registry of beneficiaries would make it possible for other programs to identify their target population guickly while avoiding duplication and gaps in coverage. The table shows that some of the current programs are targeting large groups of beneficiaries, e.g., the Farmers' Input Support Program or the Maize Price Support Scheme (FRA) with 4 million and 2.3 million beneficiaries respectively (rural poverty is much more prevalent than urban poverty), or the school feeding program with 850,000 beneficiaries. Not all of these programs may currently involve individual identification, but they may in the future. Experience in India has shown that leakage and fraud in such programs can benefit from identification of beneficiaries.

### Coverage of Existing Transfer Programs in Zambia, 2011

	APPROXIMATE COVERAGE (BENEFICIARIES)		APPROX. % OF	APPROX. % OF THE
PROGRAM	Households	Individuals	POPULATION	VERY POOR
Katet—Old Age Pension	n.a.	5,758	<0.1%	0.1%
School Feeding	566,000	850,000	6.5%	9.3%
Social Cash Transfer Scheme	22,900	114,500	0.9%	1.7%
Public Welfare Assistance Scheme	n.a.	75,496	0.6%	1.2%
OVC Bursary Scheme—MoE	n.a.	20,000	0.2%	0.1%
Food Security Pack	14,400	76,300	0.6%	0.9%
Farmers' Input Support Program	800,000	4,000,000	30.6%	7.3%
SPLASH	28,500	142,500	1.1%	1.4%
School Milk Program	n.a.	13,000	0.1%	0.1%
OVC Support (STEPS/OVC)	n.a.	146,000	1.1%	<1%
Tertiary Bursary Scheme	n.a.	Est. 50,000	<0.5%	<0.01%
Maize Price Support Scheme (FRA)	460,000	2,300,000	15.3%	<0.4%

Source: Author's calculations based on program administrative data and descriptions; a/Based on population est. of 13.1 million; and 5.5 million extreme poor (Chapter 2).

While the ideas of a combined database of beneficiaries and (biometric) identity tokens issued to beneficiaries may mean a step in the right direction, the example of South Africa shows that a more definitive solution is to provide beneficiaries with official identity documents and include them in foundational registries, e.g., INRIS. "Agenda 2030" has as its overarching goal to "leave no one behind," and includes target 16.9 that by 2030 all will have a legal identity, including birth registration. Legal identity is an essential precondition for the empowerment of the poor, and deserves to be included in any social protection program, just as was pursued in South Africa, with success. It is, finally, important to realize that social protection programs may be channeled through the head

of a household, while in fact all household members may be beneficiaries of these social safety net programs. To break the cycle of intergenerational poverty legal identity for such members of poor households is equally important. E.g., the average rural household has 4.5 household members (2010), i.e. a poor household in the countryside qualifying for farmer's input support may either be just registered as one beneficiary household in the suggested social protection database (table on previous page: 800,000) or all household members (4 million) may be registered in the civil registration system, and the 16 years and over also in the ID database, or, when functional, in INRIS. We have seen before that birth registration coverage is negatively correlated with poverty. The poor who are the target group for social protection are also the citizens that are often undocumented.

### 5.2.5 Ministry of Education

There are about 4.5 million young Zambians age five years and above attending institutions of learning. While in a country such as the US parents are reminded to bring birth certificates (and vaccination records) when they enroll their children, and in a country like the Netherlands parents will receive a letter through the mail when their child reaches the age for kindergarten, in Zambia the scarcity of birth certificates forces school management to resort to vaccination cards or other informal information sources to know a child's date of birth and name. For obvious reasons age is important in education to put children of the same age in a school grade, and identity is important for the certification of school completion. Universities such as the University of Zambia use student IDs. Student IDs can be produced in Zambia by local vendors. The security and convenience (for example meal plans, library) will lead to more demand for student IDs at schools and institutions of higher learning. The Ministry of Education (MOE) and CSO depend on reliable identity information to be able to produce education enrollment rates. The role of the education sector is not to be a "co-producer" of identity services, but rather to play a "gatekeeper" role. The right of education for all cannot be compromised and students cannot be excluded from education with the earmark of boosting registration. The education sector can include time in curricula time to be spent on the education of students regarding the right to birth registration, to a name and a nationality, and the rights of children under the Convention on the Rights of the Child, the African Charter on the Rights of the Child, as well as the Special and Further Rights of the Child in the Constitution.

### 5.2.6 Ministry of Home Affairs

The Zambian Police Force (ZPF) is one of the government services for which MOHA is responsible. Zambia's police depend on reliable identity information while at the same time having to cope with identity fraud, which now also includes mobile identity fraud. The mission unfortunately has not been able to meet with officials of the Zambia Police Force, but has been able to establish that the capabilities and facilities available to fight new forms of crime including cyber crime are being stepped up. ZPF's interest in identity management in Zambia will obviously be especially focused on reliability and integrity, although universal coverage is important for the police as well.

### 5.2.7 Ministry of Health

The growing and improving role of the Ministry of Health in supporting DNRPC in delivering civil registration services and generating the material for vital statistics has been discussed before. At the same time the Ministry of Health uses identity information for clients that use its intramural and extramural health services. Very few Zambians will not once in their life be a client of the health service, and hence then be entered into a health record kept by the ministry.

The SmartCare card will make enrollment easier as personal information will not have to be recorded more than once. In principle the PIN-protected card will be issued to every person, children included. Hence the SmartCare system could hold at some point almost as many records as Zambia's population is large (15 million), while the system will have a potential to capture a substantial share of deaths, which is the Achilles heel of INRIS and civil registration in developing countries in general. The disadvantages of the system are privacy and security especially, as shown in the table on the next page.

AREA OF SECURITY CONCERN	EXAMPLE OF CATEGORY	HOW SMARTCARE MEETS THE SECURITY NEED	HOW SMARTCARE MEETS THE SECURITY NEED— UPDATE MAY 2016
Physical safeguards	Screening rooms and other offices where computer software is kept	All offices and screening rooms are lockable	All offices and screening rooms are lockable
Administrative safeguards	Preventing misuse of patient information by authorized user	Staff training and monthly user auditing	In addition to staff training, role based security is implemented that allows for a need based access. User activity is also logged and can be extracted as a report
Technical safeguards	Unauthorized access (privacy and confidentiality)	Staff access passwords  Automatic account logoff after inactivity	Staff access passwords, automated pledge of confidentiality
	Those who steal patient identity and their smartcards (privacy and confidentiality)	Patient access PIN numbers	Provision of an authentication screen every time a smart card is read. Encryption of smart card data to prevent other system from reading and writing to the smart card
	Backup and device disposal	Standard device disposal protocols available and all data backed up	Standard device disposal protocols available and all data backed up
	Backup and duplication	Access to backup and duplication restricted to senior staff members only	Access to backup and duplication restricted to senior staff members only
	Hackers or large security breach (Firewalls and transmission modes)	No transmission mode Uses standard anti- viruses that are not recommended for this purpose	Transmission mode done via SmartMonitor. Currently no recommendations of setting system up when exposed to the Internet.  Generally uses standard free antiviruses that are
			not recommended for this purpose
Policies and procedures	Access procedures	User protocols in place	User protocols in place
Organizational requirements	Notification for breach	Breach notification proto- cols in place	No breach notification protocols in place

Source: Mweebo, Keith (2014) and CDC Zambia information for status May 2016

### 5.2.8 Zambia Revenue Authority (ZRA)

ZRA is a progressive adopter of ICT for its services, which becomes immediately clear from its website, showing a range of e-services. ZRA is improving its Electronic Records Management System. The usage of online services has gradually increased since inception in October 2013. A total of 28,469 portal sign-ups were recorded bringing the cumulative total to 32,938 at the end of 2014. The percentage of e-registration to total registrations averaged 13 percent in 2014. There has been a significant rise in the usage of e-filing with 54 percent of all the returns received in 2014 being electronically filed. ZRA's 10-digit computer-generated Tax Personal Identification Number (TPIN) with check digit is a prerequisite to all procedures of tax registration at the Domestic Taxes or Customs Division. The TPIN was introduced in 2013 in order to simplify tax administration and to consequently reduce administration costs. For an individual taxpayer the TPIN issuance requires that a valid NRC can be shown. The TPIN is issued in the form of a certificate. According to ZRA 357,364 approved TPINs have been issued. According to a recent (2014) study of tax evasion in Zambia the number of employed and self-employed (or a combination of both) persons was 3.2 million in 2010, of which 22% (710,000) were paying taxes. Zambia's tax base is small in comparison to peer countries at 17% of GDP over the past five years. The study estimates that taxes could be 40% higher; no estimate is given for how many more taxpayers that would represent, but it would likely lift that number above 1 million. As e-filing has already taken off and all paying taxpayers are included in a tax database (Oracle RDMS is used for all databases at ZRA), ZRA is a major institutional client for trusted identity. ZRA reports that is has not been included in consultations for the new e-ID. ZRA does encounter taxpayers with more than one NRC as well as NRC numbers that are the same for different taxpayers. ZRA has as yet no way of knowing whether a taxpayer has deceased.

### 5.2.9 Ministry of Transport, Works, Supply, and Communications (MTWSC)

The ministry is responsible for the issuance of driving licenses. The NRC is required for identification and as a breeder document to the driving license. No information is available on the number of driving licenses in use and issued annually. A new card with security features (vendor: First Technologies Ltd. from South Africa) was introduced in 2011. The ministry runs the so-called **Zambia Transport Information System (ZTIS)**. Last year the ministry experienced problems with the printing of driving licenses for an extended period of time, reportedly in connection with the development of online services. In 2014 more than 20,000 motor vehicles were imported from Japan alone. The number of motor vehicles per 1,000 people was 21 in 2008, and may have doubled in absolute numbers in the meantime when the import of motor vehicles from Japan is an indicator, which would translate to **600,000** vehicles and about as many driving licenses.

MTWSC is not just a client for identity services. It is, more importantly, enabling the development of e-governance. According to Freedom House, Zambia was among the early adopters of the Internet in Sub-Saharan Africa with the installation of dial-up and satellite technology at the University of Zambia in the early 1990s. Liberalization of the information and communication technology (ICT) sector in 1994 enabled new players to enter the market and invest in ICT development, but a long period of economic decline and stagnation through the late 1990s hindered meaningful progress. In recent years, investment in ICTs has regained momentum, bolstered by economic growth and government support through measures such as the 2009 National ICT Policy and the Electronic Communications and Transactions (ECT) Act No. 21 of 2009, which established a new institutional, legal, and regulatory environment for ICT development. Access to ICTs in Zambia has spread steadily over the past decade, with the Internet growing from a penetration rate of 2 percent in 2004 to over 15 percent in 2013, while mobile phone penetration grew from 4 percent in 2004 to nearly 72 percent in 2013, according to the International Telecommunication Union (ITU). Both fixed broadband and mobile broadband subscriptions are still extremely rare, however, with low penetration rates of 0.1 percent and 0.7 percent, respectively, in 2013. Internet infrastructure is poorly developed in rural areas, resulting in a significant urban-rural divide in access. Meager electricity and the high cost of electronic devices further limit access to ICTs in rural areas, where only 3.5 percent of households have access to electricity. Rural communities are particularly vulnerable to the practice of load shedding, which shuts off electricity service in one area to support demand in another region, typically urban areas. Lasting anywhere between 5 minutes and 48 hours, power outages regularly interrupt Internet and mobile phone services and limit Internet connectivity by making local equipment unstable after a power failure. As a landlocked country, three operators—ZAMTEL, the state-owned Zambia Electricity Supply Corporation Ltd. (ZESCO), and the Copperbelt Energy Corporation (CEC)—provide Zambia's national fiber backbone while ZAMTEL operates the fiber-optic connection to two international submarine cables—the West Africa Cable System (WACS) and South Atlantic 3 (Sat-3). MTN and Airtel lease access to the undersea cables from ZAMTEL, though MTN also connects to the Eastern African Submarine Cable System (EASCS). According to the ITU, the gateway to the international Internet in Zambia is fully liberalized and competitive.

### SEMI-GOVERNMENT SECTOR

### **5.2.10 National Pension Scheme Authority**

The National Pension Scheme Authority (NAPSA) was established in February 2000 by the National Pension Scheme Act no. 40 of 1996 of the Laws of Zambia, replacing the Zambia National Provident Fund (ZNPF). NAPSA was established to provide income security against the risk arising from retirement (old age), death and invalidity with a focus on adequacy of benefits and monthly receipt of pension in a better way than the repealed ZNPF. This is achieved through the payment of benefits to its members. A member of NAPSA is one who has duly registered with NAPSA, has been issued with a **social security number (and card)** and contributes to the scheme. Members are eligible upon retirement or invalidity to benefit payments by NAPSA.

### NAPSA Card with Social Security Number



The Pensions and Insurance Authority (PIA) provides the following information. The pension industry in Zambia is largely a two pillar system—the compulsory pillar and the voluntary pillar. All employed individuals in the formal sector are compelled to contribute to one of the three public schemes namely the Public Service Pension Fund (PSPF), the National Pension Scheme (NPS) managed by NAPSA and the Local Authority Superannuation Fund (LASF). This pillar is effectively not yet under the supervision of the Pensions and Insurance Authority but in a proposed bill all statutory pension schemes are expected to be supervised by it. The combined asset size of this pillar was estimated to be K 6 billion (USD 530 million) at the end of 2012. The combined membership in 2012 was estimated at 770,218 at the end of 2012. The voluntary pension pillar is comprised of Trusts that are established by employers and are supervised by the Pensions Insurance Authority. There were 237 registered and active pension schemes in Zambia with a total membership of 110,503 at the end of 2013. The combined asset size at the end of 2013 was K 3.2 billion. The net assets of the industry have continued to significantly grow and at the end of 2013, the amount stood at K 4,295 million (USD 380 million) as compared to K 625 million in 2002. The industry has five pension scheme managers and six pension scheme administrators. NAPSA reported in February 2016 to have 650,000 active accounts, out of a total of 2 million, besides 92,000 LASF clients and 110,000 civil servant accounts.

A pension account will not just require the identity of the pensionholder to be known, for which NAPSA requires the NRC (membership to persons without NRC is discouraged) but **the identity information of beneficiaries other than the insured person is required as well.** For beneficiaries younger than sixteen years of age the birth certificate would be required if not so few would have the birth certificate. For the commencement of pension payments age is important. The date of birth information is derived from the NRC. Members need to take initiative

themselves to update their information and report for the commencement of pension payments. Contact information (address, phone number) for the insured is still spotty. Members need to have a bank account for payments. NAPSA is advanced as far as the digitization of its own operations is concerned. For online services NAPSA would want e-authentication to be possible through the new e-ID. NAPSA management is aware of consultation for the new e-ID but stated that this was a "high-level meeting" rather than one at technical level. NAPSA has contemplated the upgrade of the social security card including biometrics.

### **5.2.11 ZAMTEL**

The company began in 1975 as the Zambian Post and Telecommunication Corporation (PTC) formed from the General Post Office (GPO). In July 1994 the government passed a Telecommunications Act that led to the splitting up of the Post and Telecommunications Corporation into two separate companies: the Zambia Postal Services Corporation (Zampost), and the Zambia Telecommunications Company (ZAMTEL). The company falls under the jurisdiction of the Ministry of Transport, Works, Supply and Communications of Zambia. ZAMTEL is the only provider of landline telephone connections (80,000) and plays an infrastructural role for the two other (Mobile Network Operators) MNOs by providing long-distance services, through a microwave backbone and a single satellite earth station at Mwembeshi. As of December 2014, MNO regulator (see below) said MTN Zambia had more customers than any other mobile phone operator in Zambia. Zambia has three mobile phone operators: MTN, Airtel and ZAMTEL. Out of the 10.1 million total mobile phone subscribers in the country, ZICTA reported MTN had 48%, Airtel 37% and ZAMTEL 15%. In order to reduce the digital divide between urban, suburban and rural areas and to promote the widespread availability and usage of electronic communications services throughout Zambia, MTWSC in June 2012 issued Statutory Instrument No. 38 of 2012, the Information and Communication Technologies (Universal Access) Regulations, 2012. This statutory instrument provides a framework for designating underserved areas and the funding mechanism for the rollout of towers under the Universal Access Fund. Part of the high cost of ICT services can be attributed to duplication of infrastructure amongst the operators, whose cost are passed on to customers in the form of high costs for the services. In order to accelerate the expansion of Information and Communication Technologies and to reduce the cost of deployment, the government on 28th June 2013 issued Statutory Instrument No. 57 of 2013, the Information and Communication Technologies (Access) Regulations on Interconnection, Co-location and Access. This statutory instrument provides a legal and regulatory framework for interconnecting and sharing of Information and Communication Technologies infrastructure amongst the licensed operators to support growth of the sector by avoiding duplication of infrastructure, and providing for nondiscriminatory access to facilitate delivery of efficient and affordable cost effective services to the customers. Its aim is that where towers and other passive infrastructure exist, and when the infrastructure can accommodate additional loads, it shall be shared and no new towers shall be erected. In October the government commissioned Huawei to build 169 towers for the amount of USD 13 million.

### 5.2.12 Zambia Information and Communications Technology Authority

The Zambia Information and Communications Technology Authority (ZICTA) is an ICT regulatory body responsible for regulating the ICT Sector in Zambia. It falls under the Ministry of Transport, Works, Supply and Communications and derives its mandate from three Acts, the Postal Services Act No. 22 of 2009, Electronic Communications and Transactions Act No. 21 and the Information and Communication Technology (ICT) Act No. 15 of 2009 that regulate ICTs, postal and courier services in Zambia. ZICTA has an executive team with expertise in law and enforcement, economics, technical and engineering, information technology and finance. ZICTA's mandate includes:

- Regulate the provision of electronic communication services and products in Zambia;
- Monitor the performance of the sector including levels of investment and availability, quality, costs and standards of electronic communication services;
- Administer the Country Code Top Level Domain (ccTLD) as well as electronic addresses;
- Disseminate information and promote the participation by the public in the provision of electronic communication services;

- 5. Provide for a national frequency and numbering plan;
- 6. Set standards for the ICT sector;
- Promote competition in the sector and also regulate tariffs charged by operators offering electronic communication services; and
- 8. Protect the rights and interests of consumers, service providers, suppliers and manufactures.

The ministry on 28 June 2011 issued Statutory Instrument No. 65 of 2011, the Information and Communication Technologies (Registration of Electronic Communication Apparatus) Regulations, 2011. The Statutory Instrument makes it mandatory for the sellers of SIM cards and the network operators to capture identity details of persons to whom a SIM card is sold and a number assigned. It is a requirement by law to produce a valid national registration card or passport to procure and activate a SIM card, while electronic communications service providers shall not provide, sell, register or activate a SIM card in respect of which a person does not provide the valid identification documents. All SIMs in circulation were to be registered by the end of 2013, but the deadline was extended to 31 January 2014, after which point ZICTA disconnected all unregistered SIM cards. On a monthly basis the MNOs need to report new subscribers and accounts that have gone inactive, which is done through digital means.

Mandatory SIM registration has become common across the world. A general claim, also made in Zambia, is that SIM registration reduces national security risks. Registration requires an original and valid identity—a national registration card or passport—presented in person to a registration agent at a mobile service provider. The government and ZICTA have stated that the registration requirements were for the purposes of combatting crime. An official from ZICTA also publicly stated in November 2012 that registration would "enable law enforcement agencies [to] create a database to help identity the mobile SIM card owners," according to a news report in *Lusaka Times*. However, there are essentially no robust empirical studies that SIM registration makes a difference in terms of crime detection as criminals have a number of ways of circumventing rules. Where the effectiveness of SIM registration has been studied and subject to consultation, it has been found to be wanting. A survey of OECD member countries found little reason to believe criminals would be affected, Canada's privacy commissioner repudiated the idea after investigation, and it was rejected after consultations in the Czech Republic, Greece, Ireland, the Netherlands, and Poland.

When SIM registration is associated with the country's security and becomes an obstacle to widespread mobile phone use, important advantages can be sacrificed. According to World Bank data Zambia belongs to a small group of Sub-Saharan countries where mobile money has made substantial progress. This fosters financial inclusion, and could help Zambia bridging the urban-rural divide not just in connectivity but also in income and wealth disparities. Mobile phones are an exceptional entry point to address under-registration—the lacking of evidence of legal identity—among young and poor people. A visionary approach and policy would be based on the recognition that the mobile phone has made a mockery of Maslow's hierarchy of needs, and is an opportunity for inclusion of a prospective mobile phone user in the country's identity system as part of a "package deal" rather than as a regulatory hurdle. MTN reported that 45% of new mobile phone users are in the age group of 11–16 years old (see below); they made up 15% of Zambia's population in 2015. Zambia could consider bringing down the age for the NRC, as for example was done by Thailand (from 15 to 7 years of age). In Malaysia the identity card ("MyKad") is issued from the age of 12, while younger children have the "MyKid." "Minor cards" are common in Latin America. Presently youth will be issued a SIM card on the basis of the NRC or passport of a parent. When the ID is available from 12 years of age these youngsters can be nudged to obtain the mobile phone SIM card on the basis of their own NRC. A next step would be that mobile phones could be used for identification. However, the change in the age for the NRC would likely require a change in the law (unfortunately the law does not seem to allow NRC issuance to persons younger than sixteen years of age).

**Key Message:** It is recommended that GRZ consider a progressive policy change towards using the demand for mobile phones, also among the poorest and rural segments of the population, and among the youth of Zambia, as an attractive entry point to achieving universal birth registration and national ID coverage. A lower age for the NRC (from 12 years of age) may allow the link of ID and mobile phone use to be established for an age group that accounts for almost half of the new SIM cards issued.

### **5.2.13 Zambia State Insurance Corporation (ZSIC)**

According to the regulator, the Pensions and Insurance Authority (PIA), the insurance industry has been steadily growing from 1971 when the industry became a monopoly under the Zambia State Insurance Corporation following the 1968 Economic Nationalisation Reforms. Therefore, between 1971 and 1991, Zambia only had one insurance company and broker. Following the liberalization of the economy in 1992 the numbers have significantly increased from 1 in 1991 to 11 in 2008 and 33 in 2015. The number of insurance brokers has also increased to 39. In addition there are two local reinsurance companies, two reinsurance brokers, 222 insurance agents and a number of other players. With increased competition has come competition and choice of company and products for policy holders and relatively affordable premiums. Players are also being constantly challenged to be innovative and come up with new products that meet the demands of Zambians. Significant growth has been recorded in business underwritten in terms of the volume of general insurance and long-term insurance.

The mission has not been able to ascertain how many Zambians are directly or indirectly insured. ZSIC alone has insured about **150,000** individuals directly, not including other persons covered as claimant, etc. For every single insurance and identity of the insured, one or more other persons may be associated as claimant, 3rd party, etc. Given that there are now 33 insurance companies the number of persons covered or associated with all insurances outstanding in Zambia will likely exceed **1 million**. Often, according to ZSIC information, surrogate identification documents need to be used, such as vaccination cards (Children's Clinic Card) or the Medical Certificate of the Cause of Death, rather than a birth certificate or a death certificate, while this lands insurers in legally tenuous territory. Affidavits are used often as well. Funeral cover needs to be paid within 24 hours, too short a period currently for the insured to avail of the death certificate when residing outside of Lusaka. Reportedly, ZSIC has not been consulted for the new e-ID, but PIA may have been.

### PRIVATE SECTOR

### 5.2.14 MTN

Among the information provided above on ZAMTEL and ZICTA it was already mentioned that currently Zambia has over 10 million mobile phone subscriptions, or 2 mobile phones for every 3 Zambians on average. Mobile phone penetration in almost one-third of African countries has already passed 100 per 100 inhabitants: Benin (102), Lesotho (102), Côte d'Ivoire (106), Congo (108), Egypt (114), Namibia (114), Ghana (115), The Gambia (120), Cabo Verde (122), Tunisia (128), Mauritius (132), Morocco (132), Mali (149), South Africa (150), Seychelles (162), Botswana (167) and Gabon (210). According to MTN 45% of new subscriptions are for youth from 11 through 16 years of age, whose subscription requires the NRC from a parent. There is no maximum to the number of subscriptions that can be taken per NRC. Given that authentication of the NRC is not possible (online) and NRCs are also easily counterfeited, the SIM registration as yet will hardly contribute to national security. MNOs accept the NRC, passport and driving license as evidence of identity. MNOs find the verification cost for identity, K 15, too expensive. MTN reports a churn rate of 20–30% annually, translating in an annual cost of about USD 2 million. Among a total of 5 million clients MTN has only 5,000 post-paid clients, which is to a good extent the result of a lack of information on the creditworthiness of MTN subscribers. Twenty percent of subscribers only receives calls and do not bring in revenue. MTN reports that doing business in Zambia "is expensive."

### 5.2.15 Barclays Bank, Citibank

One of Zambia's banks, FINCA, has introduced fingerprint scanning for its Know Your Customer (KYC) policy. Clients are registered at a FINCA branch by providing a digital scan of their fingerprint. Then, when they make transactions at a branch or an agent outlet, they sign in to their accounts by scanning their fingerprint. As mentioned under the Bank of Zambia section Zambia has **2.8 million** account holders. The Bankers Association of Zambia (BAZ) represents 19 registered commercial banks. BAZ represents the banking industry and puts the views of the banking industry forward when government determines policy or legislation. Of the 19 member banks 15 are foreign owned, local private investors own two, the Indian and Zambian government jointly own one and Zambia's largest bank, ZANACO, is partly owned by the Zambian government and the Dutch Rabobank. Barclays reports that for new accounts their NRC, passport or driving license are used to identify prospective account holders. Loans are only extended to account holders with a good history as account holder. The banks

will verify the credit reputation of lenders with the Credit Reference Bureau, with which the banks have a webbased interface. Barclays uses software to monitor movements in bank accounts, and has a department for internal controls and money laundering activity. Citibank also reports the vulnerability of the NRC for counterfeiting. As a bank catering to corporate clients Citibank does have less intensive dealings with identification than applies to consumer banking. According to Barclays' information the bankers association has not been consulted with regards to the new e-ID, which the mission has not been able to confirm with BAZ.

### 5.3 Institutional Client Demand for Trusted Identity in Summary

Meetings with institutional clients bring home that the identity information of Zambian citizens is a two-edged sword—for the citizen to access services, but also for institutions—whether public or private—that need to "know their customer." The institutional sector has a major stake in accurate and reliable identities of clients, hence in adequate management and organization of identity services. The interviews the mission has held indicate that there may have been a lack of consultation of institutions, probably caused by a lack of awareness of the importance that trusted identity has for them. E-governance and the digital economy are built on an identity management foundation. The institutional stakeholders discussed above manage their public or private business while depending on the integrity of individual identities, the number of which can be as many as ten million or more. There is not a single developed country that has not a system that covers the identity information of all their citizens and residents. In developing countries the urban population is better covered, being more dependent on their identity credentials to function in an environment that is ahead in moving towards modernity. This review of institutional demand shows that a well functioning identity management system is part of the crucial infrastructure for Zambia's economic and social development. The table below indicates the number of persons of which the identity matters for these institutional stakeholders. The table does not reflect how many times transactions take place that require evidence of identity from the clients or beneficiaries, and neither does it show how many persons matter indirectly, as beneficiary of an insurance, or pension, etc. While on an annual basis only 800,000 new identities are created (births) or "de-established" (deaths), and less are registered, the verification of identity on an annual basis runs in the hundreds of millions. This analysis is not designed to estimate the degree in which the present incompleteness and reliability of identity systems increases the cost of doing business or the cost of living, but it likely is to be considerable, and investment in functional national identity management may have an equally considerable return on investment.

### Number of Clients or Beneficiaries of Institutional Stakeholders in Identity Services

SECTOR	STAKEHOLDER	NUMBER OF CLIENTS OR BENEFICIARIES (1ST ORDER ONLY)
Public	Central Bank of Zambia, banks	2.8 million
	Central Statistics Office	Total population
	Electoral Commission of Zambia	7 million
	Ministry of Community Development, Mother and Child Health, and other ministries	12 transfer programs with number of beneficiaries between 5,758 and 4 million—average number: 650,000
	Ministry of Education	4.5 million students
	Ministry of Home Affairs	Total population
	Zambia Revenue Authority	3.2 million employed and self-employed persons; 357,000 tax pin holders
	Ministry of Transport, Works, Supply and Communications	Unknown number of driving licenses

(continued)

### Continued

SECTOR	STAKEHOLDER	NUMBER OF CLIENTS OR BENEFICIARIES (1ST ORDER ONLY)
Semi-government	National Pension Scheme Authority	2.2 million account holders, of which 850,000 are active
	ZAMTEL 80,000 landline subscribers and 1.5 mi mobile phone clients	
	ZICTA More than 10 million SIM card holde	
	ZSIC	150,000 insurance clients
Private sector	MTN, other private MNOs	9 million mobile phone clients
	Private banks (2 with government share)	2.8 million account holders
	Insurance companies	> 1 million

### **ANNEXES**

- Annex 1. Glossary
- Annex 2. Background Information for Zambia IMSA—IMSA Short Data Sheet
- **Annex 3.** IMSA Zambia—Officials Interviewed and IMSA Team Members
- Annex 4. Inception and Validation Workshops—Officials Attending
- Annex 5. IMSA Zambia Table of Summary Findings
- Annex 6. Legal Report
- Annex 7. Sources and URLs

Autonomous (a) Having the right or power of self-government; (b) Existing or capable of

existing independently (Merriam-Webster). For a registry, an entity legally entitled to administrative and budgetary self-rule within the executive branch

of the government, but outside of the line ministries.

Certificate An original document or certified extract, usually issued by a government

authority, stating when and where a civil event occurred (birth, adoption, mar-

riage, divorce, death).

Civil Identification The verification, registration, management, and conservation of personal

data of citizens, with the goal of establishing a unique civil identity. Civil identification includes all of the data from the civil registration on that particular citizen as well as other attributes such as a unique number and/or biometric data. The civil identification serves as a basis for the verification of identity

(i.e. passport or national identification documents).

Civil Register The repository of a loose-leaf file, ledger book, electronic file, or any other

official file set up for the universal, continuous, and permanent recording, in accordance with established procedures, of each type of vital event and its associated data of the population of a defined area (e.g., county, district,

municipality, or parish).

Data De-duplication A specialized data compression technique for eliminating duplicate copies

of repeating data. Related and somewhat synonymous terms are intelligent

(data) compression and single-instance (data) storage.

Digital Identity A set of features that individualizes a person in a computer based

environment.

Electronic Identification (e-ID) A token that proves an individual's identity and is used to identify, authenti-

cate, and act as an electronic signature. Generally, a smart card contains a

contact or contactless chip.

Electronic identity

A set of data or attributes that enables persons to prove electronically who

they are to access services or reserved information.

Identification The determination of identity and recognition of who a person is; the action or

process of determining what a thing is; or the recognition of a thing as being

what it is.

Identification Credential Information (electronic, token, or paper) that seeks to uniquely identify or

provide qualifications or attributes that define the individual identity.

Identity

A unique set of features and characteristics that individualize a person, including the name and other biographical data of the individual.

**Identity Management** 

A combination of systems, rules, and procedures that are defined between an individual and organizations regarding the entitlement, use, and protection of personal information in order to authenticate individual identities and provide authorization and privileges within or across systems and enterprise boundaries.

**Identity Management System** 

The technical and organizational infrastructure used to define, design, and administer the attributes of an identity.

**Identity Token** 

A portable piece of hardware that a user carries and uses to access a network. The token enables the user to prove his or her identity and authentication for the use of a service.

Interconnection

In computing, communication between two or more points to create a bond between them, even temporarily, to make a punctual or fixed transmission, with the permanent connection of two machines.

Interoperability

The ability of information systems and procedures to share or authenticate data and enable the exchange of information and knowledge among them. This exchange is necessary to ensure cooperation, development, integration, and delivery of joint services by public institutions. It is also necessary to implement various public policies, principles, and rights; transfer technology; and use applications that enable new services and result in better efficiency and cooperation among different applications. All of this facilitates the development of an e-government and information society.

Know Your Customer (KYC)

The process of a business verifying the identity of its clients. The term is also used to refer to the bank regulation which governs these activities.

Population Register

A government data collection system in which the demographic and socioeconomic characteristics of all or part of the population are continuously recorded. Norway, Denmark, Sweden, and Israel are among the countries that maintain universal registers for demographic purposes, recording vital events (birth, marriage, moves, and death) so that up-to-date information on the whole population is readily available.

## ANNEX 2

### BACKGROUND INFORMATION FOR ZAMBIA IMSA

### IMSA SHORT DATA SHEET

Country:	Dates of IMSA field work:
ZAMBIA	From: 08/02/2016 To: 22/04/2016
Name of IMSA responsible officer:	Name of person filling the questionnaire:
Krishna Pidatala	Jaap van der Straaten
e-mail: kpidatala@worldbank.org	e-mail: jvanderstraaten@crc4d.org
Phone: +1 (202) 473 7353	Phone: +31 653 330 028
Online resources for the IMSA	
Population (indicate year): 15,721,343	Estimated number of unregistered population:
Last population census (year): 2010	<ul> <li>Unregistered births (&lt;2 years old):</li> <li>10.5%</li> </ul>
Birth registration rate under-five children: 11.3% (of which having a birth certificate: 4.1%-point)	<ul> <li>Unregistered births (2–4 years old):</li> <li>11.8%</li> </ul>
4. 1 %-point)	<ul> <li>Age group 0–18 years having birth certificates: 17%</li> </ul>
	<ul> <li>Age group 16  n years having National Registration Card: 83.6%</li> </ul>
·	irth registration, birth certificate or identity docs? Yes, cf. 010/National/2010%20Census%20of%20Population%
Has the Country carried out a Demographic Health	Survey (DHS)? Yes

Has the Country carried out a Demographic Health Survey (DHS)? Yes

Last DHS (year): 2013/2014

List key websites of CR, CI, and PR agencies relevant to Identity management, and other websites:

Civil Registration (CD) URL: http://www.homeaffairs.gov.zm/ and

http://www.homeaffairs.gov.zm/?q=national\_registration\_passport\_and\_citizenship\_department

Civil Identification (CI) URL: as above Population Registry (PR) URL: as above

Other (please specify) URL: Zambia Central Statistics Office, http://www.zamstats.gov.zm/

Which organizations, international and/or national, are active in the field of identity management in the country? UNDP, UNICEF, UNHCR, WHO, CDC, Plan Zambia

World Bank ID4D Global Data Set (URL): http://data.worldbank.org/data-catalog/id4d-dataset

Key information providers			
Name	Position	Ministry/Agency	e-mail/Phone
1. Peter Moyo	Acting Principal Registrar	Ministry of Home Affairs	pcmoyo74@yahoo.com
2. See Appendix 2			

## ANNEX 3

# IMSA Zambia—Officials Interviewed and IMSA Team Members

PUBLIC SECTOR	AGENCY	E-MAIL
Chileshe L. Mulenga PhD	Permanent Secretary, Ministry of Home Affairs	mulengacl@gmail.com
Mathews Nyirongo	Registrar General, Ministry of Home Affairs, Department of National Regis- tration, Passport and Citizenship	
Martin Nyahoda	Deputy Registrar General, Ministry of Home Affairs, Department of National Registration, Passport and Citizenship	martinny2@yahoo.co.uk
Peter Moyo	Acting Principal Registrar, Ministry of Home Affairs, Department of National Registration, Passport and Citizenship	pcmoyo74@yahoo.com
Austine Dolopo	Registration Officer, Ministry of Home Affairs, Department of National Regis- tration, Passport and Citizenship	
Chipo H. Muleya	ARO ICT Officer, Ministry of Home Affairs, Department of National Regis- tration, Passport and Citizenship	
Brian Munamonga	ICT Specialist, Ministry of Home Affairs, Department of National Registration, Passport and Citizenship	
Agnes M. Musanda	Registrar, Ministry of Home Affairs, Department of National Registration, Passport and Citizenship	
Matthews Sianga Mwiya	Registrar, Ministry of Home Affairs, Department of National Registration, Passport and Citizenship	siangamm@yahoo.co.uk
Jelita S. Lubinda	District Registrar Livingstone, Ministry of Home Affairs, Department of National Registration, Passport and Citizenship	jsiaminwe@gmail.com
Edward Kahanga Chiteta	Assistant Director ICT, Ministry of Home Affairs, Research, Planning and Information Department (HARID)	edwadchiteta@home-affairs .gov.zm

(continued)

### Continued

PUBLIC SECTOR	AGENCY	E-MAIL
Dorothy Jolezya Zimba	Chief Systems Development Officer, Ministry of Home Affairs, Research, Planning and Information Development (HARID)	dorothy_zimba@yaoo.com
Webby Shula	Director Criminal Investigations Department, Ministry of Home Affairs	webbyshula@yahoo.com
Stanley Siachilubi	Prime Minister Mukuni Village, Southern Province, Livingstone District	
Auxilia B. Ponga, PhD	Permanent Secretary, Monitoring and Evaluation, Ministry of National Development Planning	
Crane Muleya	Director Monitoring and Evaluation Department, Ministry of National Development Planning	crane.muleya@mofnp.gov.zm
Winza Mwauluka	Chief M&E Officer, Monitoring and Evaluation, Ministry of National Development Planning	winza.mwauluka@mofnp.gov.zm
Dr. Felix V. Phiri	National Coordinator, Centre of Excellence for e-Government and ICT, Office of the President	felix.phiri@ceegictgov.zm
Lovenove Shakoti	Centre of Excellence for e-Government and ICT, Office of the President	lovenove.shakota@mofnp.gov.zm
Kaluba Shiliya	Centre of Excellence for e-Government and ICT, Office of the President	kaluba.shiliya@mofnp.gov.zm
Grace Mauka	Centre of Excellence for e-Government and ICT, Office of the President	grace.mauka@mofnp.gov.zm
George Mbasela	Centre of Excellence for e-Government and ICT, Office of the President	george.mbasela@ceegict.gov.zm
Noel M. Masese	Assistant Director ICT, Ministry of Community Development, Mother and Child Health	nmasese@mcdmch.gov.zm
John Kalumbi	Director Central Statistics Office	jkalumbi@zamstats.gov.zm
Nchimunya Nkombo	Head Population and Demography, Central Statistics Office	nnkombo@zamstats.gov.zm
Ivan M. Sikanyiti	Central Statistics Office	isikanyiti@zamstats.gov.zm
Chisna Mwanakatwe	Sr. Director, Bank of Zambia	cmwanaka@boz.zm
Joseph Munyoro	Assistant Director Financial Analysis, NBFI Supervision Analysis, Bank of Zambia	jmunyoro@boz.zm
Kapulwa Kaunda	Project Officer, Financial Sector Development Plan Secretariat, Bank of Zambia	kkaunda@boz.zm

PUBLIC SECTOR	AGENCY	E-MAIL
Halusaka Hamwalla	Assistant Director IT-Business Development, Zambia Revenue Authority	hamwallh@zra.org.zm
Winner Mwanamonga	Elections Manager, Electoral Commission of Zambia	winner.mwanamonga@elections .org.zm
Brown Kasaro	Deputy Director Information Technology Department, Electoral Commission of Zambia	brown.kasaro@elections.org.zm
Fredrick Liemisa	Systems Manager, Electoral Commission of Zambia	fredrick.liemisa@elections.org.zm
Alfred Daka	Acquisition Manager, ZAMTEL	alfred.daka@zamtel.co.zm
Gilbert Sibajene	Application Developer, ZAMTEL	gilbert.sibajene@zamtel.co.zm
Masan Mwonya	Director Contributions and Benefits, National Pension Scheme Authority (NAPSA)	
Kalaba Mwimba	Contributions Manager, National Pension Scheme Authority (NAPSA)	kalabaM@napsa.co.zm
Mwape Mbewe Lambe	Legal Counsel, National Pension Scheme Authority (NAPSA)	lambem@napsa.co.zm
Peter Mutale Sunkutu	Systems Analyst Development, National Pension Scheme Authority (NAPSA)	sunkutup@napsa.co.zm
Peter C. Lukwesa	Managing Director, ZSIC Life Company	plukwesa@zsiclife.co.zm
Makunga Mulando	Head Finance & Administration, ZSIC Life Company	mmulando@zsiclife.co.zm
PRIVATE SECTOR	COMPANY	E-MAIL
Mutale Nkonde Nguwule	Assistant Vice-President Global Development Organization & Financial Institutions Group, Barclays Bank	mutale.nguluwe@barclayscorp .com
Vincent Chuunga	Chief Operating Officer, Barclays Bank	vincent.chuunga@barclays.com
Mwewa Besa	Acting Retail Director, Barclays Bank	mwewa.besa@barclays.com
Ncimunya Mutantika	General Manager, Head Operations and Technology, Citibank Zambia Ltd.	nchimunya.mutantika@citi.com
Conrad Musonda	Operations Manager, MTN Zambia Ltd.	musondac@mtnzambia.co.zm
Simon Bukenya	Billing, Credit and Project Manager, MTN Zambia Ltd.	bukenysp@mtnzambia.co.zm
Godfrey Mulenga	IT Billing/VAS Manager, MTN Zambia Ltd.	mulengg@mtnzambia.co.zm

(continued)

#### Continued

DEVELOPMENT PARTNERS	COMPANY	E-MAIL
Chana Kaunda-Zambezi	Project Officer, United Nations Development Programme (UNDP)	chana.zambezi@undp.org
Innocent Kasongo Mofya	Child Protection Specialist, United Nations Children's Fund (UNICEF)	imofya@unicef.org
Solomon Kagulura	World Health Organisation	kaguluras@who.int
THE WORLD BANK	TITLE	E-MAIL
Ina-Marlene Ruthenburg	Country Manager	imruthenburg@worldbank.org
Helen C. Mbao	Senior Operations Officer	hmbao@worldbank.org
Gurazada Srinivas	Senior Financial Management Specialist	sgurazada@worldbank

#### **IMSA** TEAM

NAME	TITLE	SPECIALIZATION
Krishna Pidatala	Senior Operations Officer	ICT
Jaap van der Straaten	CEO Civil Registration Centre for Development (CRC4D)	Identity Management
Linda C. Kasonde	Partner MMK Zambia	Legal practice

# ANNEX

# INCEPTION AND VALIDATION WORKSHOPS—OFFICIALS ATTENDING

NAME	ORGANIZATION	DESIGNATION	CONTACT	E-MAIL
Martin Nyahoda	MOHA DNRPC	Deputy Registrar General	0977972049	martinny@yahoo.com.uk
Lisuba Kabanda		Executive Officer	0977439318	lisuba@gmail.com
Peter Moyo	MOHA DNRPC	Principal Registrar	0977921450	pmoyo74@yahoo.com
Agnes M. Musonda	MOHA DNRPC	Registrar	0977896846	amwalukanuna@gmail .com
Oliver Chanda	MOHA DNRPC	ICT Officer	0977301191	ochanda@national registration.gov.zm
Brian Munamonga	MOHA DNRPC	ICT Administrator	0966876262	ttech@nationalregistration .cov.zm
Chipo Muleya	MOHA DNRPC	ICT Officer	0976671993	cmuleya@national registration.gov.zm
Jonathan Mutanuka	MOHA DNRPC	Registration Officer	0955547422	jonathan@gmail.com
Austine Dolopo	MOHA DNRPC	Registration Officer	0979278810	austinedolopo@yahoo .com
N. Simambwe	MOHA DNRPC		0978635336	onwa@yahoo.com
Alick Mvula	MOHA DNRPC	Principal Registrar	0977848666	alickmvula@yahoo.co.uk
Sechwayo Nzima	Public Service Management Division	Assistant Director	0977844428	Sechwayo.nzima.@psmd .gov.zm
Edward Chiteta	HARID	Asst. Director	0977854234	kahanguchiteta@yahoo .com
Swithan Sholobela	HARID	Chief Operations Technician	0977714264	kampshuls@gmail.com
Monica Bwalya	HARID	Senior Accountant	0977805558	mobwalya@yahoo.com
Yakomba Yavway	ZRA	Director—IT	0211382700	yavway@zra.org.zm
Kenneth Munkombwe	ZRA	Assist Director Proj.	0977772739	munkombwek@zra.org.zm

(continued)

#### Continued

NAME	ORGANIZATION	DESIGNATION	CONTACT	E-MAIL
Iven Sikanyiti	CSO	Assistant Director	0977784491	isikanyiti@zamstats .gov.zm
Nchimunya Nkombo	CSO	Principal Statistician	0977783527	nnkombo@hotmail.com
Steven Phiri	MoCDMCH	Director	0977194933	steviephiri@yahoo.com
Emmanuel Tembo	Competition and Consumer Protec- tion Commission		0977813599	temboemma@gmail.com
Percy Chinyama	CEEG ICT	Director	0966730367	Percy.chinyama@mofnp .gov.zm
Beaton Sibulwa	CEEGICT	Att. Director—CPT	0955753656	Beaton.sibulwa@ceegict .gov.zm
Chunga Manzi	CEEGICT	Assistant Programmer	0977778228	manziu@yahoo.co.uk
Winza Mwauluka	MoNDP	Chief M & E Officer	0211250886	Winza.mwauluka@nofnp .gov.zm
Carol N. Chibale	BOZ	Security & Compliance	0966220367	Carol.chibale@boz.zm
Gezile Zulu Chooye	MoTWSC	Principal IT Officer	0974360372	zulugezile@gmail.com
Lesa Chisenga	RTSA	Database Administrator	09773166199	Ichisenga@rtsa.org.zm
George M. Mutale	RTSA	Head—ICT	0973396458	gmmutale@rtsa.org.zm
Ezekiel Moyo	RTSA	HR Officer	0978090986	ekmoyo@rtsa.org.zm
Desmond M. Mwanza	Zambia Police	Asst. Director— Legal	0977976755	Mwanzadesmond48@ yahoo.com
Elizabeth Mutale	Zambia Police	ACP	0977420192	Elizabethmutale140@ yahoo.com
Raphael Phiri	ECZ	Public Relations Officer	0966756141	Raphael.phiri@elections .org.zm
Kalaba Mwimba	NAPSA	Contributions Manager	0977623656	kalaba@napsa.co.cm
Clive Mutentwa	ZAMTEL	IT Manager—Infra	0950003903	clivemutentwa@zamtel .co.zm
Humphrey Chula	AIRTEL	Customer Experi- ence Director	0978981414	Humphrey.chola@zm .airtel.com
Gloria Kabonga	MTN	Gvt. Relations & Reg. Manager		kabongg@mtnzambia .co.zm

NAME	ORGANIZATION	DESIGNATION	CONTACT	E-MAIL
Mishcek Provision		PMD ICT		mushecc@wwmcinc.com
Shuller Habeene	ITM Consults	СТО	0976242222	beenzu@itmconsultzm .com
Munkombwe Madube	Digital Africa	Key Account Manager	0966617479	madubekom@yahoo.com
Derrick Muneene	CDC	Health Analyst	0966770607	dmuneene@cdc.gov
Kathy Hageman	CDC			Bluk7@cdc.gov
Chana Kaunda Zambezi	UNDP	Project Officer	0979818277	Chana.zambezi@undp.org
Michael C. Soko	UNDP	Governance Adviser	0211386225	michael.soko@undp.org
Innocent Mofya	UNICEF	Child Proj. Specialist	0977676611	imofya@unicef.org
Sarai B. Malumo	WHO		0977879590	malumos@who.int
Mary K. Bwalya	WHO	NPO CAH—WHO	0955743999	bwalyam@who.int
Helen Mbao	World Bank	Senior Operations Officer	0977853683	hmbao@worldbank.org
Srinivas Gurazada	World Bank	Senior Financial Management Specialist	0973667289	sgurazada@worldbank.org

# IMSA ZAMBIA TABLE OF SUMMARY FINDINGS

EVALUATION CRITERIA	1	2	3	4	SCORE 1-4
Part I: Legal and reg	gulatory framewor	k for civil registrat	ion and civil identi	fication	
Legislation enacted for civil registration	Outdated	Statutory instrument is being drafted	New legisla- tion drafted and in process of approval		
Legislation enacted for civil identification	Outdated				
Legislation on privacy and protection of personal data	Non- existent				
Legislation enacted for SIM registration					
Legislation for digital payments					
Legislation for pensions					
Part II: Barriers and	l obstacles to time	ly and universal re	egistration (Acces	sibility)	
What is the estimated rate of birth registration (0–5 years)	<50% (10%)	50–80%	81–94%	95%	
Has a CRVS assessment been carried out?	Yes	Planned	To be carried out	Has been car- ried out	
If the country is multi-ethnic or multi-lingual, provisions to ensure civil registra- tion and civil identification for traditionally excluded groups	No	Planned	Has been partially implemented	Provisions/ Accommodations are in place	

(continued)

EVALUATION CRITERIA	1	2	3	4	SCORE 1-4
Part	iii: institutional an	d administrative for			
Are there clearly defined lines of administrative responsibility?	No	Organogram in prepara- tion and operational manuals under preparation	Organogram and manuals prepared and implemented centrally (or mostly?)	Organogram and opera- tion manuals implemented and functioning	
Timeliness for issuing identity credential—birth (and death) certificate, after citizen applied/registered (assuming all documents presented were accepted as verification)	4–8 weeks	1–4 weeks	1–7 days	5–60 minutes	
Timeliness for issuing identity credential—ID token, National Registration Card) after citizen applied/registered (assuming all documents presented were accepted as verification)	4–8 weeks	1–4 weeks	1–7 days	5–60 minutes	
Does the agency have ISO certifications for any of the processes?	0	1	2	>3	
Part IV: Use and mar	nagement of inforr	mation and commi	unication technolo	gy (ICT)	
Has ICT been introduced for the management and administration of the register?	No	Planned. Specification defined, will be procured.	In the process of implementing	Implemented and functioning	
Has ICT been intro- duced for the registration processes?	No	Planned. Specification defined, will be procured.	In the process of implementing	Implemented and functioning	
Does the certificate or identity token have security features that can prevent document fraud?	No	Weak	Strong	Very strong	

EVALUATION CRITERIA  Part V: Interconnectivity	1	2	3	4 e registries	SCORE 1–4
Does DNRPC have formal agreements with other agencies or institutions for the purpose of authenticating identities?	No No	In the planning phase	Robust inter- connected online protocol with ≥1 other agency	Robust inter- connected online protocol with ≥ 4 other agencies	
Are there explicit protocols on authentication of identity based on an identity token/ card?	No	In planning phase	Protocol developed and estab- lished with ≥ 1 agency	Protocol developed and estab- lished with ≥ 4 agencies	
Is the passport agency interconnected with the civil registration agency?	No	In planning phase	In testing phase	Fully operational	

## LEGAL REPORT

#### 1 SUMMARY

The system of civil registration in Zambia is fraught with many challenges. This may be attributed to the reliance on old statutes¹ and the lack of a proper and synchronised system of record keeping. The national laws make the registration of births, deaths and marriages obligatory. Another problem is that divorce² records are not covered by the same law as marriage with the result that such records are not integrated or synchronised into the civil registration system. Furthermore, customary marriages though being recognised are not subject to any method of registration in Zambia. The country also has other laws that require registration of individuals' particulars for purposes of identification but in general the country has no jurisprudence pertaining to civil registration and identification save for some decided court cases on citizenship, immigration and deportation which can be said to be relevant.

#### 2 BIRTH AND DEATH REGISTRATION

Zambia is among the countries in the Southern African Development Cooperation (SADC) region with low levels of birth registration. The importance of birth registration cannot be over emphasised.<sup>3</sup> This is because "when children have no legal proof of age and legal identity, they are more vulnerable to early marriage and other harmful practices, including child labour, illegal intercountry adoption, and recruitment into armed forces and groups or commercial sexual exploitation."<sup>4</sup> Similarly, the importance of death registration is vital as it directly relates to matters of succession. According to the World Bank, "death registration provides legal rights to the family, for example, in conferring property or other individual or personal transfer rights to remaining family members. Cause of death registration provides critical information for health and development planning to improve the survival of children and adults."<sup>5</sup>

#### 3 Marriage and Divorce Registration

The registration of marriage and divorce is equally important as they affect the legal rights and obligations of individuals. The importance of the forgoing is that "having good marriage and divorce registration are frequently required to obtain documents that can contribute to women's ability to inherit property and register their children in some countries, among other benefits.<sup>6</sup> It must be stated that most marriages in Zambia are customary or traditional and therefore not registered."<sup>7</sup> On the other hand those divorces that are granted by the courts of law are well registered and accessible for public inspection.

<sup>&</sup>lt;sup>1</sup>For example, the Births and Deaths Registration Act Chapter 51 of the laws of Zambia was enacted in 1973.

<sup>&</sup>lt;sup>2</sup>Divorce is covered by the Matrimonial Causes Act No. 20 of 2007.

³http://www.unicef.org/esaro/5480\_birth\_registration.html accessed on 25th March 2016.

<sup>&</sup>lt;sup>4</sup>Supra note 4.

<sup>&</sup>lt;sup>5</sup>Supra note 1.

<sup>&</sup>lt;sup>6</sup>Supra note 1.

http://www.houseofchiefs.com/2012/03/5-reasons-why-traditional-marriages.html accessed on 25th March 2016.

#### 4 Overview of the Legal Framework

#### 4.1 Zambian Constitution (Constitution Amendment Act No. 2 of 2016)

The Republican Constitution, which is the supreme law of the land, is the starting point for any framework on civil registration and identification. The Constitution of 1991 was recently amended by the Constitution Amendment Act No. 2 of 2016 (the Amendment Act). Part IV of the Zambian Constitution<sup>8</sup> provides for general identification of nationals and citizenship of the Republic of Zambia. Article 34 says that: "Citizenship may be acquired by birth, descent, registration or adoption." Further, Articles 35 (1) and 37 (1) provides a detailed set of criteria for Zambian Citizenship by birth and registration respectively, which affect the intersection between civil registration and various citizenship issues.

The Amendment Act has introduced a notable change to the Constitution. Article 39 (1) of the Amendment Act<sup>9</sup> provides for dual citizenship that is the recognition of a Zambian Citizen acquiring the citizenship of another country without losing their Zambian citizenship. Previously this was not the case under the schedule to the Constitution Act of 1996.

Further, the Bill of Rights under the Constitution of Zambia recognises and provides for the right to privacy of the person and their property. Articles 16 and 17 of Part III of the Schedule to the Constitution of Zambia Act Chapter 1 of the Laws of Zambia provides as follows:

- "16. (1) Except as provided in this Article, property of any description shall not be compulsorily taken possession of, and interest in or right over property of any description shall not be compulsorily acquired, unless by or under the authority of an Act of Parliament which provides for payment of adequate compensation for the property or interest or right to be taken possession of or acquired."
- "17. (1) Except with his own consent, a person shall not be subjected to the search of his person or his property or the entry by others on his premises."

The above provisions of the Constitution and in particular Article 17 are limited in application as they do not expressly provide for the protection of data and personal information through identity theft and other forms of impersonation. The short title to Article 17 is that it provides for protection of privacy of home and other property and not necessarily the individual or his or her identity. It must be noted that it is imperative that privacy and data protection laws must be guaranteed in the constitutional regime of any country to ensure that civil registration can be done effectively. This is because the Constitution is the supreme law of most jurisdictions and ought to be the starting point for any legal framework on privacy and data protection. Further, all other national laws have to be read in line with or conform to the constitutional guarantees of privacy of the person and property.

In addition, the above provisions of the Constitution do not provide for privacy of information obtained through social media and other information technology platforms and are therefore, not sufficient in their current form. There is need for amendments to be made in order for them to be reflective of the ever-evolving global environment.

#### **4.2 International Commitments**

- i. United Nations Convention on the Rights of a Child
  - Zambia is a party and signatory to the International Convention on the Rights of a Child which recognises that children have a right to be registered immediately after birth as well as rights to health, education and protection which are underpinned by adequate systems of civil registration and identification.<sup>10</sup> The country ratified the convention without any reservations but is yet to domesticate and harmonize the same with national laws on national identification and registration.
- ii. United Nations Convention on the Elimination of All Forms of Discrimination Against Women In an effort to eliminate discrimination against women in Zambia, the country has equally become a party and signatory to the Convention on the Elimination of all forms of Discrimination against Women, and

<sup>&</sup>lt;sup>8</sup>Constitution Amendment Act 2 of 2016.

<sup>&</sup>lt;sup>9</sup>Supra note 1.

<sup>&</sup>lt;sup>10</sup>Article 7 of the Convention provides that "The child shall be registered immediately after birth and shall have the right from birth to a name, the right to acquire a nationality and as far as possible, the right to know and be cared for by his or her parents."

therefore is under a duty to ensure that all marriages are registered in an official register. To this end the Marriage Act<sup>11</sup> provides for the Registrar of Marriages to cause to be printed and delivered to all Registrars of marriage and licensed ministers marriage books in the prescribed form with counterfoils.<sup>12</sup> These are meant for the registration of all civil marriages in the country. Further, the Registrar-General has the duty to file all certificates of marriage that shall be transmitted to him and shall forthwith register in a book to be kept in his office for such purpose and to be called the "Register of Marriage" in the prescribed form.<sup>13</sup>

#### iii. African Charter on the Rights and Welfare of the Child

The African Charter on the Rights and Welfare of the Child ("the Charter") provides for the civil registration, identification and protection of children born in a state party or member country. The Charter is "the first regional treaty on the human rights of the child which was adopted by the Organization of African Unity in 1990 and entered into force in 1999, is a real positive step towards securing the protection of children's rights in Africa" and Zambia is a signatory to the Charter. Article 2 of the Charter defines and identifies a child as "every human being below the age of 18 years." Further, in regards to civil registration, the Charter provides under Article 6 that all state parties have the obligations to ensure that "every child shall have the right from his birth to a name."

Further, all state parties have the obligation under Article 6 (2) of the Charter to ensure that "every child shall be registered immediately after birth. Furthermore, Article 6 (3) provides that "every child has the right to acquire a nationality." All state parties to the Charter also "undertake to ensure that their Constitutional legislation recognize the principles according to which a child shall acquire the nationality of the State in the territory of which he has been born if, at the time of the child's birth, he is not granted nationality by any other State in accordance with its laws." Therefore, in line with the requirements under the Charter, the country is bound to provide for laws and infrastructure for the civil registration and identification of all children in Zambia.

#### 4.3 National Legislation

This section gives a brief summary of the current laws in Zambia that provide for civil registration and identification.

TOPIC	LAWS/ACTS	ISSUES COVERED	YEAR ENACTED	YEAR ENFORCED
Civil Registration	The National Registration Act Chapter 126 of the Laws of Zambia	Registration of Persons in Zambia. Issuance of National Registration Cards and other identity documents to foreigners.	1964	1964
	The Births and Deaths Registration Act Chap- ter 51 of the Laws of Zambia	Registration of all births and deaths in Zambia.	1973	1973
	The Marriage Act Chapter 50 of the Laws of Zambia	Solemnisation of marriages and validation of marriages already solemnised. Registration of civil marriages.	1918	1918

(continued)

<sup>&</sup>lt;sup>11</sup>Chapter 50 of the Laws of Zambia.

<sup>&</sup>lt;sup>12</sup>Section 23 (1) of the Marriage Act, Chapter 50 of the Laws of Zambia.

 $<sup>^{\</sup>mbox{\tiny 13}}\mbox{Section 29}$  (1) of the Marriage Act, Chapter 50 of the Laws of Zambia.

<sup>&</sup>lt;sup>14</sup>Priscilla Yachat Ankut, LL.B (Hons) (Zaria), B.L (Abuja) LL.M (Pretoria). The African Charter on the Rights and Welfare of the Child: Linking Principles with Practice. P.1.

#### Continued

TOPIC	LAWS/ACTS	ISSUES COVERED	YEAR ENACTED	YEAR ENFORCED
	The Refugees (Control) Act Chapter 120 of the Laws of Zambia	Provision for the recognition, protection and control of refugees.	1970	1970
	The Registration and Development of Villages Act Chapter 289 of the Laws of Zambia	This law provides for the registration of villages and of their inhabitants. It also provides for the establishment of Village Productivity Committees, Ward Councils and Ward Development Committees.	1971	1971
Civil Identification	The Citizenship Act of Zambia Chapter 124 of the Laws of Zambia	Establishment of Citizenship Board, acquisition of citizenship of Zambia by adoption and registration, confirmation of citizenship of Zambia. Cessation, deprivation and renunciation of citizenship of Zambia.	1975	1977
	The Immigration and Deportation Act No. 18 of 2010	Regulate the entry, exit, and remaining in Zambia of immigrants and other specified individuals and their deportation from Zambia.	2010	2010
	The Inquests Act Chapter 36 of the Laws of Zambia.	Governs inquests into deaths suspected of resulting from unnatural causes that can include findings of presumptions of death where there is no body.	1938	1939
Privacy & Personal Data	The Electronic Communications and Transactions Act No. 21 of 2009	Provides for the protection of electronic data and information.	2009	2009
Other Registration Credentials	The Road Traffic Act No.11 of 2002	Provides for the registration of motor vehicles and licensing of road users.	2002	2002
	The Pensions and Insurance Authority Act No. 28 of 1996	Grant and regulation of pension schemes except the National Pension Scheme, protect the interests of members, etc.	1996	1996

TOPIC	LAWS/ACTS	ISSUES COVERED	YEAR ENACTED	YEAR ENFORCED
	The Zambia Revenue Authority Act Chapter 321 of the Laws of Zambia	Establishes the Zambia Revenue Authority as the central body for the assessment and collection of revenue, for the administration and enforcement of the laws relating to revenue. The ZRA provides Tax Payer Identification Numbers to persons in Zambia.	1993	1993
	The National Pension Scheme Authority Act No. 40 of 1996	Provides for the establishment of the National Pension Scheme Authority, and the processing of contributions to the authority. The authority issues National Social Security Cards to all contributing persons.	1996	1996
	The Public Service Pension Act No. 35 of 1996	Provides for the establishment of the Public Service Pension Fund ("the Fund"), which is a pension scheme for specified public servants in Zambia. The specified public servants to whom the Act applies are from Judicial Service, the Civil Service, the Defense Forces, the Police and Prisons Service, the Teaching Service, the Zambia Security and Intelligence Service and any other Government Service prescribed by the President. The Fund receives contributions from public servants, calculates, processes and pays their pension.	1996	1996
	The Local Authorities Superannuation Fund Chapter 284 of the Laws of Zambia	Establishes the Local Authorities. Provides for the establishment of the Public Service Pension Fund ("the Fund"), which is a pension scheme for workers in local authorities such as city councils, municipal councils, district councils and other local authorities.	1962	1963

(continued)

#### Continued

TOPIC	LAWS/ACTS	ISSUES COVERED	YEAR ENACTED	YEAR ENFORCED
	The Juveniles Act Chapter 53 of the Laws of Zambia	Provides the framework for the custody and protection of juveniles in need of care and provides for the correction of juvenile delinquents.	1956	1956
	The Electoral Act No. 12 of 2006	Provides the framework for a comprehensive process for elections to the office of President and to the National Assembly. It also empowers the Electoral Commission of Zambia ("the Commission") in matters relating to elections and enables the Commission to make regulations providing for the registration of voters and for the manner of conducting elections.	2006	2006

#### 4.4 The National Registration Act Chapter 126 of the Laws of Zambia

The National Registration Act<sup>15</sup> ("the NR Act") sets the framework for the registration of all persons in the Republic of Zambia. Section 5 (1) of the NR Act establishes a register of persons who have attained the age of 16<sup>16</sup> and are either Zambian citizens or foreigner nationals who are present in the country. Section 4 of the NR Act provides that "there shall be a Chief Registrar and such registrars and other public officers as may be necessary for the carrying out of the provisions of this Act." The term Chief Registrar is defined in Section 2 of the Act to be the person appointed under Section 4 of the NR Act. However, the NR Act does not define the term "registrars."

Further, it appears that all business of national registration is now through provincial offices which are not mentioned anywhere in the NR Act or the Birth and Deaths Registration Act.<sup>17</sup> Section 4 is not aligned with the Births and Deaths Registration Act and it does not refer to deputy, assistant registrars and district registrars when in practice they are the ones who are responsible for the management of the issuance of national registration cards. Section 5 of the NR Act provides that:

". . . the Chief Registrar shall cause to be kept and maintained a register of all persons in Zambia to whom this Act applies in which there shall be recorded, in so far as they can be ascertained, the following particulars in respect of each such person:

- Registration number
- Name in full
- Sex
- Race and declared national status
- Date or apparent year of birth and place of birth, and
- Such other particulars as may be prescribed."

<sup>&</sup>lt;sup>15</sup>Chapter 126 of the Laws of Zambia.

<sup>&</sup>lt;sup>16</sup>Section 3 of the National Registration Act.

<sup>&</sup>lt;sup>17</sup>Chapter 51 of the Laws of Zambia.

It must be noted that the particulars in the Register outlined above are not usually the same as those captured on the national registration cards. Further, item (iv) above requiring the entry of ones' race or declared national status in the register is no longer implemented in practice. Further, the term "declared national status" is a legally ambiguous term. Section 5 (2) of the NR Act provides that:

"(2) The Chief Registrar, or any person authorised by him, may provide extracts from the register—

- To any public officer acting in the exercise of his official duties;
- To a person authorised by the Minister in writing on payment of such fee as may be prescribed."

The above section appears to be too weak in terms of keeping information about individuals private and confidential. Section 8 (1) provides for the issuance of national registration cards. It provides that "upon the registration of a person under the Act, the registrar shall issue to such person a national registration card in the prescribed form." The prescribed forms are contained in the First Schedule to the NR Act and each person listed in the register is designated a 9-digit identification number.

Individuals who are Zambian nationals are issued with a green national registration card while specified foreign nationals are issued with a pink card or a blue card. Rule 3 (1) of National Registration Regulations<sup>18</sup> identifies those foreign nationals who may be issued with identification cards under the NR Act to include "commonwealth citizens or citizens of the Republic of Ireland or citizens of such African Countries as are declared by the Minister in accordance with the Constitution to be countries which permit citizens of Zambia to become citizens of those countries by registration."

A significant change to civil registration and identification is the transition from the analog NRC Cards to an e-ID (electronic Identify Card). However, the NR Act does not provide for the use of an e-ID. Therefore, in order to make this change possible, there will be need to amend the NR Act in order to expressly provide for the replacement of the present NRC by an e-ID. The Minister of Home Affairs has the necessary power to make any changes for the better carrying out of the act. Section 14 of the NR Act provides that—

"The Minister may, by statutory instrument, make regulations—

- (a) Prescribing anything to be prescribed or which may be prescribed under this Act;
- (b) Prescribing the form or different forms of national registration card which may be issued and the persons or classes of persons to whom such form or different forms of national registration card shall be issued:"
  - (i) Generally for the better carrying out of the provisions of this Act.

The Minister may also move a motion in parliament for the introduction of the e-ID through the amendment of the Act. Further, any transition from paper to electronic reports will also have to be provided for in the amended law.

Section 10 of the NR Act provides for the production and inspection of registration cards. It provides that "any authority specified by the Minister, by statutory notice, to which a person applies for the grant of any license, permit or other document may, in its discretion, request any person to produce his national registration card for inspection." The foregoing provision appears to be too weak and may need revision. Section 12 of the NR Act allows for the use of any document purporting being a certificate to be used as prima facie evidence in any criminal proceedings. It is recommended that any document (NRC inclusive) should not only be used as prima facie evidence, but the NR Act should also provide for verification in the register. When the register is computerised, there will also be need for online authentication of identity.

Section 13 of the NR Act provides for offences and penalties. However, this section of the Act does not define the penalties under the Act nor does it provide for a separation between offences that may be committed by the general public or the staff of the Department of National Registration, Passport and Citizenship ("the Department").

<sup>&</sup>lt;sup>18</sup>Act No. 13 of 1994.

Therefore, it is desirable for the law to provide for how to deal with wrongful actions of civil servants in the Department. Further, Section 14 (1) (i) gives power to the Minister of Home Affairs to make regulations for the better carrying out of the provisions of the NR Act. However, it appears that the provision gives the Minister too much power as it is open-ended and may be subject to abuse.

The NR Act provides for the issuance of new national registration cards where one is lost, destroyed or materially damaged. Section 9 (1) provides that "in any case where a national registration card is lost, destroyed or materially damaged, the person to whom it was issued shall, without undue delay, report such loss, destruction or damage to the nearest registrar who, on payment of any fee and subject to any conditions which may be prescribed, shall issue to such person a new national registration card."<sup>19</sup>

The National Registration Regulations issued under the NR Act provide in Regulation 7 that "every person to whom a national registration card is issued shall sign his name in the space provided thereon, but if he is unable to write or is able only to print his name, he shall affix his right thumbprint." However, this is likely to change once the Government of the Republic of Zambia implements the digitisation of records. The Regulation also allows one to change their name; however, they need to notify the Chief Registrar of such change. It is recorded that the other civil registers like the Birth and Deaths Register must be amended first before the national register is amended under the NR Act. Regulation 7 (5) provides that the Chief Registrar must keep a separate register of all those persons who change their names. However, it is more likely that this register will be a digital register.

Regulation 15 provides that "within thirty days of the death of a registered person, his national registration card shall be delivered by the person in possession thereof to a registrar who shall forward it to the Chief Registrar." However, it would be much easier if this procedure were synchronised with the procedure under the Births and Deaths Act for obtaining death certificates and also burial permits. Further, Regulation 16 (1) provides for the alteration of the particulars in register in the following terms; "no person may insert, delete, alter or cause to be altered any material particular in the register relating to any registered person unless authorised in writing to do so by the Chief Registrar." It must be noted that in a digital register, this would call for authorisation levels.

#### 4.5 The Births and Deaths Registration Act Chapter 51 of the Laws of Zambia

The Births and Deaths Registration Act ("the BDR Act") sets out the framework for the civil registration of all persons who are born and die in the Republic of Zambia. Section 5 of the BDR Act provides that the "birth of every child born and the death of every person dying in Zambia after the commencement of the Act shall be registered in accordance with the provisions of the Act."<sup>20</sup>

The procedure for registration of all births and deaths in Zambia is that an applicant must give notice of the birth of a child to the Registrar of the District in which the child is born within one (1) month from the birth or death.<sup>21</sup> Further, Section 7 provides for the Registrar<sup>22</sup> to sign and forward forthwith the said Notice and send it by registered post to the Registrar General in Lusaka at the Department of National Registration, Passport and Citizenship. The Registrar General has a duty to keep alphabetical registers in the prescribed form of the birth or death of every child born alive or stillborn.

In order to improve this process of record keeping, there is need for the decentralization of birth and death certification from the Registrar-General in Lusaka to include district registrars. This will serve on time and in my opinion ensure that more births and deaths are captured and well documented. Further, this will call for amendment of this section of the BDR Act that can be spearheaded by the Ministry of Home Affairs. This is because the Act empowers the Minister to make regulations<sup>23</sup> for the better carrying out of the provisions of the Act or he may move a motion to table a bill in parliament to amend the Act.

<sup>&</sup>lt;sup>19</sup>Section 9 of the National Registration Act, Chapter 126 of the Laws of Zambia.

<sup>&</sup>lt;sup>20</sup>Section 5 of the Birth and Deaths Registration Act Chapter 51 of the Laws of Zambia.

<sup>&</sup>lt;sup>21</sup>Section 6 of the Births and Deaths Registration Act Chapter 51 of the Laws of Zambia.

<sup>&</sup>lt;sup>22</sup>Section 7 of the Births and Deaths Registration Act Chapter 51 of the Laws of Zambia.

<sup>&</sup>lt;sup>23</sup>The Birth and Deaths General Registration (General) Rules Act No. 13 of 1994.

Further, it shall be the duty of the father and mother of every child to give notice or in default thereof, the occupier of the building where the child was born, each person present at the birth and in the case of a child born alive the person having charge of the child.<sup>24</sup> In relation to the birth of an illegitimate child, the law provides that no person shall be bound to give notice of the birth of an illegitimate child or registered as father save on joint request of the mother and himself.<sup>25</sup> Similarly, in the case of a death, there is a duty for notice to be given in the prescribed form to the Registrar General. Thereafter, the Registrar General has the duty to enter the particulars in the appropriate register.

An application may be made for a certificate of birth or death under the BDR Act. <sup>26</sup> Birth Certificates are available to any applicant born on or after January 1, 1973, that is, the date that the BDR Act was enacted. Rule 5 of the Births and Deaths Registration (General) Rules provides that "when an application is made by any person to the Registrar General for a certificate containing particulars of information which has been registered in regard to the birth or death of any person, the Registrar General shall issue a certificate in the form prescribed." A person may be issued with a full or a shortened certificate in the prescribed form. The affidavit procedure, as described, is inadequate for this purpose. It is however the common practice that is also used in the overwhelming majority of applications for the replacement of birth certificates and also for the replacement of the national registration card which card is taken to be *prima facie* evidence of nationality.

The individual has to make the application to the Registrar General of Births, Deaths & Marriages<sup>27</sup> in Lusaka. If a Birth Certificate was not issued at birth, but a hospital record of birth or baptismal certificate was obtained, an Affidavit must be prepared by a member of the applicant's family having knowledge of the birth. The Affidavit must be sworn before an officer authorized to administer oaths. The hospital or Baptismal Certificate must be attached to the Affidavit, and submitted to the Registrar General requesting issuance of a late Birth Certificate.

The requirements to be presented by an applicant include copies of the National Registration Card ("NRC") for both Parents and original records of birth of the child to be registered. However, in a case where a record of birth is absent, the under-five clinic card with an affidavit can be presented. Reasons for missing the required documents will be required. If the child is above 16 years of age, a copy of the child's NRC will be required as an attachment. In the event that a child is born out of wedlock, a Form 11 will need to be completed.<sup>28</sup>

The importance of a birth certificate in Zambia includes, inter alia, the following:

- Primary school enrollment;
- It is required when obtaining a National Registration Card or NRC, or passport;
- Tertiary education enrollment at a university and college;
- When seeking employment;
- When applying for a visit for stay or work in a different country; and
- When opening a bank account for a child.

The law also provides that in the case of every child, whether born alive or stillborn, it shall be the duty of the father and the mother, and in default of the father or the mother the duty of the occupier of the house in which, to his knowledge, such child is born or the person in charge of any hospital or other institution in which such child is born;<sup>29</sup> and each person present at the birth;<sup>30</sup> and in the case of a child born alive, the person having charge of the child<sup>31</sup> to give notice in the prescribed form containing the prescribed particulars of the birth within one month thereof to the Registrar of the district in which such child is born.

<sup>&</sup>lt;sup>24</sup>Section 14 of the Births and Deaths Registration Act Chapter 51 of the Laws of Zambia.

<sup>&</sup>lt;sup>25</sup>Section 15 of the Births and Deaths Registration Act Chapter 51 of the Laws of Zambia.

<sup>&</sup>lt;sup>26</sup>Rule 16 of the Births and Deaths Registration (General) Rules.

<sup>&</sup>lt;sup>27</sup>Ministry of Home Affairs.

<sup>&</sup>lt;sup>28</sup>Section 15 of the Births and Deaths Act.

<sup>&</sup>lt;sup>29</sup>Section 14(1)(a) of Chapter 51 of the Laws of Zambia.

<sup>30</sup> Section 14(1)(b) of Chapter 51 of the Laws of Zambia.

<sup>&</sup>lt;sup>31</sup>Section 14(1)(c) of Chapter 51 of the Laws of Zambia.

#### 4.6 The Marriage Act Chapter 50 of the Laws of Zambia

The Marriage Act provides for the law and procedure for the solemnisation and registration all civil marriages by persons designated as marriage registrars<sup>32</sup> and licensed ministers in Zambia.<sup>33</sup> Couples intending to marry are required to give Notice to the Registrar of the district they intend on getting married in. Section 6 (1) of the Act provides that "no marriage shall be solemnised unless notice of the intended marriage shall have been given in the prescribed form by one of the parties thereto to the Registrar of the district in which the marriage is intended to take place not less than twenty-one days before the date of solemnisation."

Upon receipt of such notice the Registrar shall cause the same to be entered in a book to be called the "Marriage Notice Book" which may be inspected during office hours without a fee. He shall also publish such notice by causing a copy of the same to be affixed on the outer door of the office and to be kept exposed there until he grants his certificate as hereinafter mentioned or until three months shall have elapsed.<sup>34</sup>

The above only applies to civil marriages or statutory marriages. The law provides that a marriage should take place within three months of giving such notice. Section 11 provides that "If the marriage shall not take place within three months after the date of the notice, the notice and all proceedings consequent thereupon shall be void; and further notice must be given in accordance with Section 6 before the parties can lawfully marry." The legal age for marriage in Zambia is 21 years<sup>35</sup> without consent for both male and female and 16 years with consent for females. Under traditional law, marriage can take place at puberty, and it is common for girls to be married or have sexual relations under the age of 16; however, early marriages are illegal, and considered a form of child abuse.

Many marriages in Zambia take the form of a traditional union, where couples do not sign any legal document to prove that they are married and therefore it is very difficult to keep proper records of such marriages. The Marriage Act recognises the existence of traditional marriages and provides to the effect that any person who is married under the Act or whose marriage is declared by the Act to be valid, is incapable during the continuance of such marriage of contracting a valid marriage under any African customary law, and nothing in the Act shall affect the validity of any marriage contracted under or in accordance with any African customary law, or in any manner apply to marriages so contracted.

#### 4.7 The Refugees (Control) Act Chapter 120 of the Laws of Zambia

This law provides the legal framework for the recognition, registration and protection of refugees in Zambia. The term refugee is defined as a person belonging to a class of persons to whom a declaration under Section 3 applies. Section 3 being referred to provides that "subject to the provisions of subsection (2), the Minister may declare, by statutory order, any class of persons who are, or prior to their entry into Zambia were, ordinarily resident outside Zambia to be refugees for the purposes of this Act. The Minister being referred to is the Minister of Home Affairs ("the Minister").

The procedure for registration and subsequent identification of refuges is contained in Section 6 (1) of the Refugee (Control) Act. It provides that "every refugee shall, within such period as may be prescribed, present himself for registration under this section in such manner and to such authority as may be prescribed." The Minster has the power to set the time within which one avails him/herself for registration. Further, upon registration, refugees have to be issued with identity cards. Section 6 (2) provides that "every refugee shall, upon registration under this section, be issued with an identity card in such form and containing such particulars as may be prescribed, and shall keep such identity card in his possession at all times while in Zambia."

<sup>32</sup> Section 20 of Chapter 50 of the Laws of Zambia.

<sup>33</sup> Section 29 of Chapter 50 of the Laws of Zambia.

<sup>&</sup>lt;sup>34</sup>Section 9 of the Marriage Act Chapter.

<sup>35</sup> Section 10 (1) Chapter 50 of the Laws of Zambia.

<sup>36</sup>lbid

<sup>&</sup>lt;sup>37</sup>Section 138 (1) of the Penal Code Chapter 88 of the Laws of Zambia proscribes anyone having unlawful carnal knowledge of a child or person below the age of 16.

#### 4.8 The Registration and Development of Villages Act Chapter 289 of the Laws of Zambia

This law provides for the legal framework for the registration of villages in Zambia and their inhabitants. Section 2 (1) of this law defines the term "village" as "a settlement in a rural area of which there is a Headman recognised as such by all or a majority of the villagers and their Chief under their customary law." The term "Chief" is designated the meaning assigned to it in Section 2 of the Chiefs Act, and includes a Senior Chief.

Section 3 (1) of the Act provides for the registration of villages and their inhabitants. It enacts that "a District Secretary in a rural area has the duty to supply to a Chief in his district a prescribed form of register (hereinafter referred to as "the village register") for the purpose of recording therein the particulars mentioned in subsection (2) in respect of each village within his area; and (ii) a prescribed form of master register (hereinafter referred to as "the master village register") for the purpose of recording therein all the particulars recorded in each village register in his area." Further, under Section 3 (2) of this law it is the duty of a Headman to prepare and maintain the village register and the duty of a Chief in his district to compile and maintain the master village register. The particulars that are required for registration by a Headman include the following:

- The name of the Headman;
- The name in full of every inhabitant;
- Sex:
- Date or apparent year of birth;
- Place of birth;
- Race or declared national status;
- Number of national registration card issued under Section 8 of the National Registration Act;
- Date on which an inhabitant ceases to be an inhabitant in his village;
- · Date of death of an inhabitant; and
- Such other particulars as may be prescribed.

It must be mentioned that even though this law is still in force, however, in practice it is very difficult to ascertain whether records are being kept. This may be attributed to factors like rural urban migrations that make it difficult to maintain records as a result of the constant movement of individuals from one area of Zambia to another.

#### 4.9 The Citizenship Act of Zambia Chapter 124 of the Laws of Zambia

This law sets the framework for obtaining citizenship in the Republic of Zambia. Section 2 (1) of the Citizenship Act Chapter 124 of the Laws of Zambia defines the term citizen to mean a citizen of Zambia. The procedure for registration for citizenship and passports is that an applicant has to make an application in the prescribed form to the Department. Further, the Citizenship Board is responsible for scrutinizing all applications for citizenship. Section 12 (1) of the Citizenship Act provides that "the Board may cause any person not of full age who is the child of a citizen to be registered as a citizen upon application in the prescribed form."

Proof of Zambian citizenship is a prerequisite for the application and issuance of the national registration card and therefore, it appears that for one to be given a national registration card, he or she has to prove that they are Zambian citizens by showing that they were born in Zambia and both or either parents are Zambian or they have been conferred with the status of a citizen by the Citizenship Board. Article 34 of the Constitution of Zambia Act³³ provides that "Citizenship may be acquired by birth, descent, registration or adoption. ." Further, the law provides in relation to citizenship by birth that "a person born in Zambia is a citizen by birth if, at the date of that person's birth, at least one parent of that person is or was a citizen. A child found in Zambia who is, or appears to be, of not more than eight years of age and whose nationality and parents are not known, shall be presumed to be a citizen by birth."

<sup>38</sup>Act No 2 of 2016.

<sup>39</sup>Supra note 42.

Further, Section 13 (1) empowers the President of Zambia to confer citizenship upon certain individuals. It provides that "the president of Zambia may as a token of honour cause to be registered as a citizen any person who in his opinion has done signal honour or rendered distinguished service to Zambia. Any person to whom Article 6 of the Constitution applies may make an application to the Board for registration as a citizen."

#### 4.10 The Immigration and Deportation Act No. 18 of 2010

This law provides for the registration and identification of foreign nationals in Zambia who are either visiting the country for holiday or business, working in Zambia under contract with private or government institutions, investing in Zambia, to mention but a few. Section 2 of the Immigration and Deportation Act ("the Immigration Act") defines the word foreigner as any person who is not a citizen. The Immigration law allows for the civil registration and identification of foreign nations. Different types of entry permits and licenses are issued to foreigners to remain in Zambia. These serve for purposes of their identification. The law also empowers immigration officers to arrest, detain and deport all illegal immigrants. The term "illegal immigrant" means a foreigner who is in Zambia in contravention of the Immigration Act and includes a prohibited immigrant.

#### 4.11 The Inquests Act Chapter 36 of the Laws of Zambia

This law sets the framework for identification of all persons who die in circumstances that are unknown or unnatural. This law empowers a coroner to order that a body that is found in his or her district to be identified and the cause of death ascertained. Section 4 (1) provides that "whenever a coroner is credibly informed that the body of a deceased person is lying within his jurisdiction, and that there is reasonable cause to suspect that such person has died either a violent or an unnatural death, or in prison or in police custody, or in any place or circumstances which, in the opinion of the coroner, makes the holding of an inquest necessary or desirable, such coroner shall, except as otherwise provided in this Act, hold an inquest on such body as soon as is practicable." The term coroner is defined in Section 2 of the Inquests Act to mean any person empowered or appointed to hold inquests under the Act.

#### 4.12 The Electronic Communications and Transactions Act No. 21 of 2009

This law sets the framework for the transmission and protection of electronic data and information. The Electronic Communications and Transactions Act ("the ECT Act") also provides for the protection of personal information. Section 2 of the ECT Act defines the term personal information to mean inter alia information about an identifiable individual, including, but not limited to "any identifying number, symbol, or other particular assigned to the individual."

#### 4.13 The Pensions and Insurance Authority Act No. 28 of 1996

This law sets the framework for the registration of all private pension funds in Zambia other than the National Pension Scheme Authority. Section 8 of the Pension Scheme Regulation Act ("PSR Act") provides that "a person shall not establish or manage a pension scheme except in accordance with this Act and under the authority of a certificate of registration of a pension scheme issued under this Act." The term pension scheme is defined in Section 2 of the PSR Act as being "any private, occupational or personal defined benefit or defined contribution pension scheme or savings plan."

The registration of a pension scheme also extends to the capturing of information on all its members. The body responsible for the regulation of this type of pension fund is the Pensions and Insurance Authority. The Registrar of the PIA has a mandate to issue an applicant with a certificate of registration authorizing the applicant to establish or manage a pension scheme if the registrar is satisfied that inter alia the applicant shall protect the interest of the members. This is one of the means through which information on citizens is registered in Zambia.

#### 4.14 The National Pension Scheme Authority Act No. 40 of 1996

The National Pension Scheme Authority Act No. 40 of 1996 ("the NAPSA Act") establishes the National Pension Scheme Authority. Section 3 of the NAPSA Act provides that the authority shall be a body corporate with

perpetual succession and a common seal, capable of suing and being sued in its corporate name, and with power subject to the provisions of the Act. Section 8 of the NAPSA Act establishes the fund where all contributions are to be paid into. Further, under the provisions of the Act, every person who is employed by a company in Zambia required to be registered with NAPSA must register as a member of the scheme. The law requires that both Zambians as well as non-Zambians working in Zambia will be registered as members save for staff members that have diplomatic status or those that work for international organisations.

Under the scheme both the employer and employee are required to make monthly contributions based on the employee gross earnings. According to Section 12 of the NAPSA Act the word "contributing employer" is defined to include a person, association, institution or firm registered as a taxpayer with a contract of service with an employee and the Government of the Republic of Zambia, local authority or parastatal or statutory body. Pensionable age under Section 2 of the National Pension Scheme (Amendment) Act is sixty (60) years. However, one can opt to retire at the age of fifty-five (55) or sixty (65) years of age<sup>40</sup> if they have given twelve (12) months prior notice in each case to the contributing employer and the said employer has given their approval. Further, a member can be paid a pension if they have not yet reached pensionable age but have made not less than one hundred and eighty (180) monthly contributions.<sup>41</sup>

#### 4.15 The Public Service Pensions Act No. 35 of 1996

The Public Service Pensions Act No. 35 of 1996 ("the PSP Act") establishes the Public Service Pensions Fund Board ("the Board"), which is a body corporate with perpetual succession and a common seal, capable of suing and being sued in its corporate name. The PSP Act creates an occupational pension scheme for specified public servants in Zambia. Section 2 of the PSP Act specifies the category of employees to whom it applies and defines the word public service to mean employees from the "Judicial Service, the Civil Service, the Defense Forces, the Police and Prisons Service, the Teaching Service, the Zambia Security and Intelligence Service and any other Government Service prescribed by the President." Only the foregoing categories of employees can qualify for a pension under this act.

According to Section 34 (1) of the PSP Act, an officer serving on pensionable terms in the Public Service and confirmed in his appointment shall retire on the fifty-fifth (55th) anniversary of the date of his/her birth. The proviso to this section provides that "any member of the Defense Forces, or an officer of or below the rank of Chief Inspector in the Police Force, or an officer of or below the rank of Chief Officer III in the Prisons Service, may, on giving due notice, retire on or after attaining the age of forty-five years or after completing twenty years of service whichever is the earlier."

Further, the proviso provides that the "appropriate authority may, in consultation with the Board, prescribe earlier or later dates for the retirement of all or any of its officers." However, the Public Service (Retirement Age) Amendment Regulations, 2015 or Statutory Instrument No. 24 of 2015 increased the retirement age to sixty (60) years for all public servants. However, upon an officer giving twelve months' notice to the Board and subject to approval of the president, one can retire on attaining the age of fifty-five (55) or sixty-five (65) years.

#### 4.16 The Local Authority Superannuation Fund Act Chapter 285 of the Laws of Zambia

The Local Authority Superannuation Fund Act Chapter 285 ("LASF Act") makes provision for the establishment of a Superannuation Fund for employees of local authorities and other public bodies. Section 4 of the Act provides for the establishment of the Local Authorities Superannuation Fund ("the Fund") and provides for the payment of contributions to and pensions and gratuities from such Fund. Section 2 of the LASF Act defines the word "local authority" to mean a city council, a municipal council, a township council, a district council, the Committee, and "any other authority or body of persons of Zambia which the Minister may, at the request of such authority or body

<sup>40</sup>www.napsa.co.zm accessed on 31st March 2016.

<sup>&</sup>lt;sup>41</sup>Supra note 43.

<sup>&</sup>lt;sup>42</sup>Section 34 of Chapter 284 of the Laws of Zambia.

and with the prior approval of the Committee, declare by statutory notice to be a local authority for the purposes of this Act." Therefore, only employees from the forgoing bodies can qualify for a pension under the LASF Act.

In order to receive a pension under the LASF Act, an individual must be at least fifty-five (55) years of age. Section 2 of the Local Authority Superannuation Fund Amendment Act No. 8 of 2015 repeals and replaces Section 2 of the LASF Act and defines the term pension age to mean the age of sixty (60) years. However, one can opt to retire at the age of fifty-five (55) or sixty (60) years if they have given twelve (12) months prior notice in each case to the contributing employer and the said employer has given their approval.<sup>43</sup> The Fund consists of the assets vested in the committee, contributions and interest paid into the Fund in accordance with the provisions of the LASF Act, income and capital appreciation derived from the holding of the assets of the Fund in any form and any other sums or assets accruing to the Fund property of Fund.<sup>44</sup>

#### 4.17 The Juveniles Act Chapter 53 of the Laws of Zambia

The Juveniles Act sets the framework for the custody and protection of juveniles in need of care and it also provides for the correction of juvenile delinquents. Section 2 of the Act defines and identifies a juvenile to mean a person who has not attained the age of nineteen years (19) and includes a child and a young person. Further, the term child is defined as a person who has not attained the age of sixteen (16) years. The term young person is defined as a person who has attained the age of sixteen years (16), but has not attained the age of nineteen years. Section 9 of the Juveniles Act identifies a juvenile in need of care to be a juvenile who inter alia, having no parent or guardian or a parent or guardian unfit to exercise care and guardianship or not exercising proper care and guardianship, is either falling into bad associations or is exposed to moral or physical danger or beyond control.

Further, Section 10 (1) provides that any "police officer or juveniles inspector having reasonable grounds for believing that a juvenile is in need of care may bring him before a juvenile court, and it shall be the duty of a juveniles inspector to bring before a juvenile court any juvenile who appears to be in need of care unless he is satisfied that the taking of proceedings is undesirable in the interests of such juvenile, or that proceedings are about to be taken by some other person."

A Juvenile court has the power to make the following orders against a juvenile, "order his parents or guardian to enter into recognizances to exercise proper care and guardianship; or commit him to the care of any fit person, whether a relative or not, who is willing to undertake the care of him; or without making any other order, or in addition to making an order under either of the last two forgoing paragraphs, make an order placing him for a specified period, not exceeding three years, under the supervision of a probation officer or some other person appointed for the purpose by the court; or order him to be sent to an approved school."

#### 4.18 The Road Traffic Act No. 11 of 2002

The Road Transport Act sets the framework for the registration and identification of all motor vehicles and their users on Zambian roads. The Road Transport and Safety Agency ("RTSA") is the body responsible for this task. The RTSA is also responsible for the issuance of all provisional licenses, licenses and other identification documents to motorists in Zambia. In terms of registration and identification of motor vehicles and motorists, Section 4 (1) of the RTSA Act provides that:

- "... subject to the other provisions of this Act the functions of the Agency shall be—
  - To implement policy on road transport, traffic management and road safety
  - To register motor vehicles under the Act
  - To issue licenses and permits under the Act"

<sup>&</sup>lt;sup>43</sup>Section 5 of the Local Authorities Superannuation Fund (Amendment) Act No. 8 of 2015.

<sup>&</sup>lt;sup>44</sup>Section 7 of the Local Authorities Superannuation Fund Act Chapter 285 of the Laws of Zambia.

<sup>&</sup>lt;sup>45</sup>Section 2 of the Juveniles Act Chapter 53 of the Laws of Zambia.

#### 4.19 The Zambia Revenue Authority Act Chapter 321 of the Laws of Zambia

The Zambia Revenue Authority Act Chapter 321 of the Laws of Zambia provides for creation of the Zambia Revenue Authority ("the ZRA") and the registration and identification of all taxpayers in Zambia. The ZRA is responsible for the capturing of all particulars of taxpayers in Zambia. According to Section 11 of the ZRA Act, the functions of the governing board of the ZRA are to inter alia assess, charge, levy and collect all revenue due to the Government under such laws as the Minister may, by statutory instrument, specify. The authority administers the following taxes which include income tax, Pay As You Earn, Value Added Tax, turn over tax, but to mention a few.

In order for the ZRA to effectively collect revenue taxpayers, companies and individuals are identified by numbers called the Tax Payer Identification Number or TPIN. Under the Income Tax Act<sup>47</sup> the term TPIN is defined as the "National Registration Card number or such number as may be designated by the Commissioner General." One qualifies for a TPIN if they are above the age of 16 and either Zambian or a foreign national who wishes to buy or sell property in Zambia or engage in any other transaction. This is another means of civil identification of nationals and foreign citizens in the country.

#### 4.20 The Electoral Act No. 12 of 2006

The Electoral Act No. 12 of 2006 ("Electoral Act") sets the framework for a comprehensive process for elections to the office of President of the Republic of Zambia and to the National Assembly. The Act also empowers the Electoral Commission of Zambia in matters relating to elections and enables the commission to make regulations providing for the registration of voters and for the manner of conducting elections. The Act also continues the existence of the Electoral Commission of Zambia ("the Commission"). Section 2 of the Electoral Act defines the term Commission to mean the Electoral Commission of Zambia established under the Constitution. Further, Section 3 of the Electoral Act provides that the "Act shall be administered and enforced by the Commission."

The ECZ is responsible for registration of voters and the holding of elections at council, district, provincial and national levels in Zambia. Section 4 of the Electoral Act provides that the Commission shall compile and maintain a voter's roll in the manner and style prescribed by the Commission. Further, Section 5 of the Electoral Act provides for the eligibility requirements for one to be a voter. In order for one to qualify as a voter in direct elections in Zambia, he or she will need to—

- "Be a citizen of Zambia,
- Have attained the age of eighteen years, and
- Is in possession of a national registration card."

From the above provision of the law, a person can prove that they are a citizen of Zambia by showing that they were born in Zambia, have their descent in Zambia or that they acquired citizenship by registration or adoption.<sup>48</sup> However, there is no requirement when voting to prove that one is a Zambian. The only requirement is to possess a green national card and a voters' card.

The process for registration as a voter in Zambia is that any person meeting the above requirements can register as a voter at any ECZ registration center or district council office. The registration involves the digital capturing of the particulars of an individual as contained on their national registration card into a computer database and thereafter, the applicant is issued with a voter's cards. The voter's card is a very important identification document in Zambia because one cannot exercise their right of franchise without it.

Section 16 of the Electoral Act provides that "subject to the provisions of Sections 17, 18, and 19, every person who is registered in a register of voters for a constituency shall be entitled to vote at a direct election held in that

<sup>&</sup>lt;sup>46</sup>Section 11 (1) of the Zambia Revenue Authority Act Chapter 321 of the Laws of Zambia.

<sup>&</sup>lt;sup>47</sup>Section 2 of Chapter 322 of the Laws of Zambia.

<sup>&</sup>lt;sup>48</sup>Constitution of Zambia (Amendment) Act No. 2 of 2016.

constituency." Further, in terms of identification, Section 17 of the Electoral Act provides that "every person shall, whenever the person wishes to vote at a direct election, identify oneself to an election officer in such manner as may be prescribed."

### 5 Legal Review—The Proposed Amendment to the Births and Deaths Registration Act Chapter 51 of the Laws of Zambia

The legal review of the laws pertaining to civil registration and identification in Zambia entails the amendment of the law relating to the Birth and Deaths Registration Act as well as the National Registration Act. One of the amendments would be to synchronise the order in which death certificates and burial permits are issued. This should also extend to the revocation of national registration cards upon death in order to establish proven good practice.

Another proposed and welcome amendment is that future versions of the analogue and digital version of the record of birth should include an entry of the mobile phone numbers of the parents or guardian. Further, the Children's Clinic Cards and digital medical record are to include entries to monitor birth registration and certification, as well as the mobile phone numbers of the parents or guardian. This is a very welcome proposal that would make communication easier between the service sector workers in the various departments involved in civil registration and the parents or guardians of children seeking to have their children registered.

#### **6** Conclusions and Recommendations

In conclusion, it is noted that Zambia has a number of laws that provide for civil registration and identification. However, the country has very low rates of civil registration especially partly due to reliance on old statutes and the lack of a proper and synchronised system of record keeping. There is also a failure to have a systematic, integrated identity management system. For example, customary marriages though being recognised are not subject to any method of registration in Zambia. Further, divorce records are only accessible through the court system and are not part of the general civil registration system. Therefore, it is recommended that in order for the country to have a well-developed civil registration-cum-identification and vital statistics system, there is need for an overhaul of the legal framework for civil registration. This change in the law must commence with the amendment of the Bill of Rights of the Constitution in order to provide for protection of private and personal data or information of citizens and foreign nationals, and can be further achieved by pragmatic review of existing laws and provisions for the use of current information technology to synchronise and integrate the various registration and identification systems. There is also a need to provide in the law for decentralisation of the birth and death registration process that includes the issuance of birth certificates. The government could consider replacing the two main laws for civil registration and identification by one new law, while in the interim enabling improved operations by use of statutory instrument.

## ANNEX

### Sources and URLs

- Bulwani, Gideon, Owen Mtawali and Alick Mvula. Report on the assessment of the current birth registration system in Zambia. Lusaka, 2008.
- Central Intelligence Agency, World Factbook. https://www.cia.gov/library/publications/the-world-factbook/ [Accessed 5 Apr 16]
- Central Statistics Office. 2010 Census of Population and Housing. National analytical report. Lusaka, 2012. http://www.zamstats.gov.zm/nada/index.php/catalog/63 [Accessed 5 Apr 16]
- Central Statistics Office. 2010 Census of Population and Housing. National descriptive population tables. Volume 11. Lusaka, 2012. http://www.zamstats.gov.zm/report/Census/2010/National/Zambia%20National% 20Descriptive%20Population%20Tables.pdf [Accessed 5 Apr 16]
- Central Statistics Office, Central Board of Health, ORC Macro. Zambia demographic and health survey. 2001/02 FR136. Lusaka, 2003. http://www.dhsprogram.com/pubs/pdf/FR136/FR136.pdf [Accessed 5 Apr 16]
- Central Statistics Office, Ministry of Health, Tropical Diseases Research Centre et al. Zambia demographic and health survey 2007. FR211. Lusaka, 2009. http://dhsprogram.com/pubs/pdf/FR211/FR211%5Brevised-05-12-2009%5D.pdf [Accessed 5 Apr 16]
- Central Statistics Office, Ministry of Health, University of Zambia Teaching Hospital et al. Zambia 2013–14 demographic and health survey. FR304. Lusaka/Rockville, 2015. https://www.dhsprogram.com/pubs/pdf/FR304/FR304.pdf [Accessed 5 Apr 16]
- Chikulo, Bornwell. Local governance reforms in Zambia. A Review. *Commonwealth Journal of Local Governance*, Issue 2, January 2009. https://www.google.co.id/webhp?sourceid=chromeinstant&ion=1&espv=2&ie=UTF8#q=Bornwell.+Local+governance+reforms+in+Zambia.+A+Review.+Commonwealth+Journal+of+Local+Governance%2C+Issue+2%2C+January+2009 [Accessed 5 Apr 16]
- Committee on the Rights of the Child. Combined second, third and fourth periodic reports of States parties due in 2009. Zambia. CRC/C/ZMB/2-4. Geneva, 2013. http://tbinternet.ohchr.org/\_layouts/treatybodyexternal/Download.aspx?symbolno=CRC/C/ZMB/2-4&Lang=en [Accessed 5 Apr 16]
- Committee on the Rights of the Child. Concluding observations. CRC/C/15/Add. 206. Geneva, 2003. http://tbinternet.ohchr.org/\_layouts/treatybodyexternal/Download.aspx?symbolno=CRC/C/15/Add.206&Lang=en [Accessed 5 Apr 16]
- CRVS Secretariat. Ministry of Home Affairs. DNRPC. Draft report for key assessment findings from the supplementary assessment of the national civil registration and vital statistics system. Lusaka, 2014.
- Fake NRCs scam unearthed—UKZAMBIANS, 2013. http://ukzambians.co.uk/home/2013/07/28/fake-nrcs-scam-unearthed/ [Accessed 5 Apr 16]

- Ferguson, James. Expectations of modernity. Myths and meanings of urban life on the Zambian Copperbelt. 1999.
- FINCA. New technology making a difference in FINCA Zambia, Lusaka, 2014. http://www.finca.org/news/new-technology-making-difference-zambia/ [Accessed 5 Apr 16]
- Freedom House. Zambia country report. Freedom on the Net 2014. https://freedomhouse.org/report/freedom-net/freedom-net-2014#.VwMzphJ96uU [Accessed 5 Apr 16]
- Gordon, David M. Invisible agents. Spirits in a central African history. Oxford, 2012.
- Gordon, David. M. Rebellion or massacre? The UNIP-Lumpa conflict revisited, in Jan-Bart Gewald, Marja Hinfelaar and Giamoca Macola (Eds.). *One Zambia, Many Histories*. Pp. 45–76. Leiden, undated. https://openaccess.leidenuniv.nl/bitstream/handle/1887/20391/ASC-075287668-703-01.pdf?sequence=2
- Government of the Republic of Zambia. Vision 2030. Lusaka, 2006. http://unpan1.un.org/intradoc/groups/public/documents/cpsi/unpan040333.pdf [Accessed 5 Apr 16]
- GSMA. Mobile services for the unbanked. State of the Industry 2014, 2015. http://www.gsma.com/mobilefor development/wp-content/uploads/2015/03/SOTIR\_2014.pdf [Accessed 5 Apr 16]
- IDEA International, Voter turnout 1990s, 2000s. http://www.idea.int/vt/ [Accessed 5 Apr 16]
- International Records Management Trust. Case study Zambia. London, 2007. http://www.irmt.org/documents/building\_integrity/case\_studies/IRMT\_Case\_Study\_Zambia.pdf [Accessed 2 May 14]
- Kalaba, Kunda Emmanuel. Fighting money laundering and fraud—A Zambian perspective. Zambian Eye. Lusaka, 2013. http://zambianeye.com/archives/7904 [Accessed 5 Apr 16]
- Kambole, Kambole and Emmanuel M. Silanda. The current status of civil registration and vital statistics systems in Zambia. Paper prepared for African workshop on strategies for accelerating the improvement of civil registration and vital statistics. Addis Ababa, 1994. http://unstats.un.org/unsd/demographic/meetings/wshops/1994\_Ethiopia\_CRVS/docs/Doc.42\_Report\_of\_AfricanWorkshop.pdf [Accessed 5 Apr 16]
- Kuczynski. R.R. Demographic survey of the British colonial empire. London, 1949.
- Ministry of Finance. Revised Sixth National Development Plan 2013–2016. Lusaka, 2014. http://www.gwp.org/Global/Activities/Impact%20Stories/Supporting%20documents/Revised%20Sixth%20National%20Development%20Plan.pdf [Accessed 5 Apr 16]
- Ministry of Finance and National Planning. 6th National Development Plan 2011–2015. Lusaka, 2011. https://www.google.co.id/search?q=Ministry+of+Finance+and+National+Planning.+6th+National+Development+Plan+2011%E2%80%942015.+Lusaka%2C+2011&oq=Ministry+of+Finance+and+National+Planning.+6th+National+Development+Plan+2011%E2%80%942015.+Lusaka%2C+2011&aqs=chrome..69i57.745j0j8&sourceid=chrome&ie=UTF-8 [Accessed 5 Apr 16]
- Ministry of Health. e-Health strategy 2013–2016. Lusaka, 2013. http://www.who.int/goe/policies/countries/zmb\_ehealth.pdf [Accessed 5 Apr 16]
- Ministry of Home Affairs, DNRPC, A presentation to the Workshop on the improvement of civil registration and vitals statistics in SADC region. Blantyre, 2008.
- Ministry of Home Affairs and Management Development Division Cabinet Office. Strategic Plan for the Ministry of Home Affairs 2013–2016. Lusaka, 2014. https://www.google.co.id/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=Ministry+of+Home+Affairs+and+Management+Development+Division+

- Cabinet+Office.+Strategic+Plan+for+the+Ministry+of+Home+Affairs+2013-2016.+Lusaka%2C+2014 [Accessed 5 Apr 16]
- Ministry of Transport, Works, Supply and Communications. Ministerial statement on Mobile Communication Towers and Mobile Phone Subscriber Identification Module (SIM) card registration. Lusaka, 2013. http://www.parliament.gov.zm/sites/default/files/images/publication\_docs/Ministerial%20statement%20MTWSC.pdf [Accessed 5 Apr 16]
- Muyunda, George. Zambia leads the way in SmartCare Electronic Health Records System, A benefit to both providers and patients. John Hopkins, Jhpiego, 2011.
- Mweebo, Keith. Security of electronic health records in a resource limited setting. Perth, 2014. http://ro.ecu.edu .au/cgi/viewcontent.cgi?article=1020&context=aeis [Accessed 5 Apr 16]
- Naumann, Ingo and Giles Hogben. Privacy features of European eID card specifications. Elsevier Network Security Newsletter, August 2008. https://www.enisa.europa.eu/activities/identity-and-trust/trust-services/eid-cards-en [Accessed 5 Apr 16]
- Nyahoda, Martin. Role of the health sector in improving birth and death registration. Presentation at 3rd Conference of African Ministers responsible for civil registration. Yamoussoukro, 2015.
- Nyahoda, Martin. Supplementary assessment of the national civil registration and vital statistics. Highlights. Presentation at 9th ASSD 2014. Gabarone, 2014.
- Oxford Policy Management. RuralNet Associates Ltd. Assessment of the Zambia Social Protection Expansion Programme Targeting Mechanisms. Final Report. Oxford/Lusaka, 2013. http://www.opml.co.uk/sites/default/files/Assessment%20of%20the%20Zambia%20Social%20Protection%20Programme%20Targeting\_Final%20Report.pdf [Accessed 5 Apr 16]
- Oxford University. Biometric identification and privacy. Comparative research prepared for Centre for Law and Policy Research India. Oxford pro Bono Publico. Oxford, 2013. http://www3.law.ox.ac.uk/denning-archive/news/events files/2013.2 Indian Biometrics and Privacy.pdf [Accessed 5 Apr 16]
- President Lungu Launches E-Government Division. Lusaka, 2015. https://www.lusakatimes.com/2015/10/22/president-lungu-launches-e-government division/ [Accessed 5 Apr 16]
- Public Records Office Victoria, Commonwealth Scientific and Industrial Research Organisation and Ernst & Young. Victorian Electronic Records Strategy. Melbourne (1998).
- Samui, Grace. Straddling sectors. The micro-level regulation of electronic payment systems in Zambia. Lusaka, 2013. http://dspace.unza.zm:8080/xmlui/bitstream/handle/123456789/3223/Samui%20G..pdf?sequence=1 [Accessed 5 Apr 16]
- Simengwa, Charles. Zambia. Transforming for Prosperity. All Africa, Lusaka, 2015 ICTforLDC, ICT Profile for Zambia. Lusaka, 2015. http://allafrica.com/stories/201509240525.html [Accessed 5 Apr 16]
- Smart Zambia Now, speech Lungu, The Post, Lusaka, 2015. http://www.postzambia.com/news.php?id=11461 [Accessed 5 Apr 16]
- The World Bank. Digital dividends. Washington, 2016.
- The World Bank. Resilience, Equity and Opportunity. The World Bank's Social Protection and Labor Strategy 2012–2022. Washington, 2012.

- The World Bank. Using Social Safety Nets to Accelerate Poverty Reduction and Share Prosperity in Zambia. Washington, 2013. http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/04/16/000333037\_20130416100030/Rendered/PDF/682450WP0P12690Prosperity0in0Zambia.pdf [Accessed 5 Apr 16]
- UNICEF. Every child's birth right. Inequities and trends in birth registration. New York, 2013.
- UNICEF. Zambia 1999 Multiple Indicator Cluster Survey Report. Report on the monitoring of the End of the Decade Goals. Lusaka (undated) Tables. http://www.childinfo.org/files/zambia.pdf [Accessed 5 Apr 16]
- UNICEF. Zambia 1999 Multiple Indicator Cluster Survey Report. Report on the monitoring of the End of the Decade Goals. Lusaka (undated). http://www.childinfo.org/files/zambia.pdf [Accessed 5 Apr 16]
- UNICEF. The State of the World's Children 2015. New York (2015). http://www.unicef.org/publications/files/SOWC\_2015\_Summary\_and\_Tables.pdf [Accessed 5 Apr 16]
- United Nations Development Programme. Bolstering Use of Smartcare Electronic Health Records System. Lusaka, 2014. http://www.zm.undp.org/content/zambia/en/home/presscenter/articles/2014/02/03/bolstering-use-of-smartcare-electronic-health-records-system.html [Accessed 5 Apr 16]
- United Nations Development Programme. Country programme performance summary. Reporting period 2011–2015. DPDCPZMB3. Lusaka (undated).
- United Nations Development Programme. Final project document. Strengthening electoral process in Zambia. Support to the Electoral Cycle 2009–2012 ZMB10/00071651. Lusaka, 20 Oct 09.
- United Nations Development Programme. Independent external evaluation of the Electoral Cycle Management Project Zambia (2009–2012). Lusaka, 2015. https://www.google.co.id/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=United+Nations+Development+Programme.+Independent+external+evaluation+of+the++Electoral+Cycle+Management+Project+Zambia+(2009–2012).+Lusaka%2C+2015 [Accessed 5 Apr 16]
- United Nations Statistics Division, Southern African Development Community. Report on the United Nations workshop on the improvement of civil registration and vital statistics in SADC region. New York, 2008. http://unstats.un.org/unsd/demographic/meetings/wshops/malawi\_1dec08/docs/Report%20workshop%20 SADC%20final.pdf [Accessed 5 Apr 16]
- USAID Zambia Institutional Reform Programme. Consolidated quarterly progress report Jul 1–Nov 22, 2013. PA00JK9W. Lusaka, 2013. http://pdf.usaid.gov/pdf\_docs/PA00JK9W.pdf [Accessed 5 Apr 16]
- Van der Straaten, Jaap. The high cost of legal identity in Africa. The Hague, 2015.
- Weerakkody, Vishant, Yogesh Dwivedi, Mike Williams et al., E-government implementation in Zambia, Contributing factors. Uxbridge/Swamsea, 2006. http://elibrary.aisnet.org/Default.aspx?url=http://aisel.aisnet.org/cgi/viewcontent.cgi?article=1833&context=amcis2007 [Accessed 5 Apr 16]
- World Bank Group, Central Statistics Office. Mapping subnational poverty in Zambia Washington/Lusaka, 2015.
- World Bank Group. Doing business 2016. Washington, 2016. http://www.doingbusiness.org/~/media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf [Accessed 5 Apr 16]
- World Bank Group. Identification for Development. Strategic Framework. Washington, 2016. http://pubdocs.worldbank.org/pubdocs/publicdoc/2016/4/21571460567481655/April-2016-ID4D-Strategic-RoadmapID4D.pdf [Accessed 2 May 16]

- Zambia announces introduction of multipurpose IDs ID News Canada, 2010. http://news.idg.no/cw/art .cfm?id=071AF482-1A64-67EA-E4B297FCADCF3934 [Accessed 5 Apr 16]
- Zambia Information and Communication Technology Authority. Press statement on activation, selling and buying of pre-registered subscriber identification module (SIM) cards. Lusaka, 2015. http://www.zicta.zm/Views/NewsArticles/Selling%20and%20buying%20of%20pre-registered%20SIM%20cards%202015.htm [Accessed 5 Apr 16]

Zambia National Broadcasting Corporation. K 25m for NRC registration. Lusaka, 2015. http://www.znbc.co.zm/?p=10544 [Accessed 5 Apr 16]



