Toward a Somali Identification System: ID4D Diagnostic

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About ID4D

The World Bank Group's Identification for Development (ID4D) initiative uses global knowledge and expertise across sectors to help countries realize the transformational potential of digital identification systems to achieve the Sustainable Development Goals. It operates across the World Bank Group with global practices and units working on digital development, social protection, health, financial inclusion, governance, gender, and legal, among others.

The mission of ID4D is to enable all people to access services and exercise their rights, by increasing the number of people who have an official form of identification. ID4D makes this happen through its three pillars of work: thought leadership and analytics to generate evidence and fill knowledge gaps; global platforms and convening to amplify good practices, collaborate, and raise awareness; and country and regional engagement to provide financial and technical assistance for the implementation of robust, inclusive, and responsible digital identification systems that are integrated with civil registration.

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To find out more about ID4D, visit worldbank.org/id4d.

Acknowledgments

This assessment and feasibility study was conducted in 2016 at the request of the Federal Government of Somalia (FGS) in order to explore options for national identification system(s) to underpin 'One Person, One Identity' for transparent voter lists for electoral voter cycles and for sustainable development applications.

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The views expressed in this document are part of a deliberative process between the authorities in Somalia and the multiparty team regarding best practices in establishing national digital identification programs, and are not legal advice. Accordingly, no inference should be drawn as to the completeness, adequacy, accuracy or suitability of the underlying assessment of, or recommendations or any actions that might be undertaken resulting therefrom, regarding the enabling policy, legal or regulatory framework (including institutional aspects thereof) for establishing a national digital identification program in Somalia. It is therefore recommended that, prior to undertaking any action to address any issue raised in the deliberative process, a formal legal due diligence be performed by competent, locally qualified legal counsel with relevant experience and knowledge of the subject matter.

Abbreviations

3G	Third Generation wireless mobile telecommunications technology
ABIS	Automated Biometric Identification System
AML	Anti-Money Laundering
API	Application Programming Interface
BSD	Berkeley Software Distribution
CBS	Central Bank of Somalia
CFT	Combatting the Financing of Terrorism
EASSy	Eastern Africa Submarine Cable System
EU	European Union
FAO	Food and Agricultural Organization of the United Nations
FATF	Financial Action Task Force
FRC	Financial Reporting Center
FSB	First Somali Bank
FGS	Federal Government of Somalia
FSVC	Financial Services Volunteer Corps
GB	Gigabyte
GDP	Gross Domestic Product
GSMA	Groupe Spéciale Mobile Association
ICAO	International Civil Aviation Organization
ICT	Information and Communication Technology
ID	Identity Document
ID4D	Identification for Development Initiative
IDP	Internally Displaced Person
IEC	International Electrotechnical Commission
IFT	Informal Funds Transfer
IMF	International Monetary Fund
INEC	Independent National Electoral Commission (of Nigeria)
IOM	International Organization for Migration

ISO	International Organization for Standardization
KB	Kilobyte
KYC	Know-Your-Customer
MIDAS	Migration Information and Data Analysis System
MRTD	Machine-Readable Travel Document
MRZ	Machine Readable Zone
MTO	Money Transfer Operator
MySQL	Structured Query Language (database system)
NAMLC	National Anti-Money-Laundering Coalition
NCRI	National Commission for Refugees and Internally Displaced Persons
NIAS	National Identity Authority of Somalia
NIEC	National Independent Election Commission
OECD	Organisation for Economic Co-operation and Development
PHP	Personal Home Page (scripting language)
POS	Point of Sale
PSG	Peace-building and State-building Goals for Somalia
QR	Quick Response (code)
SDG	Sustainable Development Goal
SIM	Subscriber Identity Module
SNA	Somali National Army
TFC	Transitional Federal Charter
TFG	Transitional Federal Government
TI	Terra Incognita
TNG	Transitional National Government
UK	United Kingdom
UN	United Nations
UNDP	United Nations Development Programme
UNHCR	United Nations High Commission for Refugees
UNICEF	United Nations Children's Fund
UNOPS	United Nations Office for Project Services
UNSC	United Nations Security Council

UNSOM	United Nations Assistance Mission in Somalia
U.S.	United States (of America)
WB	World Bank
WFP	World Food Program

Executive summary

Identification is necessary for sustainable development. It is an enabler for (among others) the right to vote, financial inclusion, gender equality and health services, and a key element in empowerment. Recognizing the opportunities presented by advances in digital and biometric technology, the Federal Government of Somalia (FGS) requested an assessment and feasibility study regarding the potential for a national identification system(s) to underpin transparent voter lists for future elections and for sustainable development applications.

A study team comprised of the International Organization for Migration (IOM), Terra Incognita (TI), the United Nations Development Programme (UNDP) and the World Bank (WB) carried out the assessment during the period from July to November 2016 in response to the FGS request and to support the FGS in considering options for identification systems and making strategic decisions regarding the development of a robust identity ecosystem in the country. The study team consulted multiple stakeholders and drew on local knowledge, as well as lessons from other countries, including India, Pakistan, Peru, and others. This joint approach to carrying out an assessment of identity management is a first within the global context.

Establishing a legal identification system—particularly one that is digital—could be a game changer for the FGS's capacity to administer a variety of public programs and services (including election administration), for the growth of the Somali economy and banking sector, and for the delivery of humanitarian assistance and other support by the international community. However, the challenges in rolling out an inclusive, robust, and safe system are immense.

Key findings

Somalia currently has no foundational identification system capable of facilitating service delivery, underpinning voter lists, or enabling basic administrative functions such as compiling vital statistics. There is no national ID system in place, and at 3 percent, Somalia has the lowest under-5 birth registration rate in Sub-Saharan Africa. Instead, Somalis rely on a patchwork of documents to prove their identity, most of which are non-robust with coverage limited to specific municipalities, states, or program beneficiaries.

These functional IDs include, for example, registers for UN-supported social transfer initiatives, such as the World Food Program (WFP), identification for the payment of Somali National Army salaries through the United Nations Office for Project Services (UNOPS) system, local government initiatives like the Benadir ID card in Mogadishu and Puntland ID card, the Passport and associated ID system, and the UNICEF-supported civil registration system in Somaliland. In addition to low coverage, most of these systems have a range of issues, including a lack of trust in the system by citizens, a concerning lack of data protection and privacy rights, the exceedingly high costs of identity credentials that makes them unaffordable for the majority of the population, opaque financial governance arrangements, a lack of interoperability, and ambiguity regarding data ownership.

As a result of these problems and the country's fragmented approach to identity, there is a high level of demand for a robust identification system in Somalia from a variety of actors. The report discusses some of the most prominent sources of demand, including the FGS requirement of creating a list of all eligible voters to support future elections (which will adhere to the principle of 'one person, one vote'); the need to expand financial inclusion and meet due diligence requirements in the finance and telecommunication sectors, including 'Know Your Customer' (KYC) and anti-money laundering measures; the need to effectively and efficiently provide social protection, basic services, and humanitarian assistance to vulnerable groups, including digital cash transfer programs or tracking immunization records of children; and the desire of FGS agencies to improve key planning and administrative capacity, including developing accurate statistics,

boosting tax revenue, controlling immigration at border control points, and responding to security threats. The team also reviewed the existing law related to identification systems—and in particular, identification for voter registration—and identified key gaps in the legal framework.

Challenges

Key challenges to establishing future identification systems in Somalia include:

- Insecurity concerns, particularly given Al-Shabaab's closure of, and threats to, identity initiatives;
- The short timeframe to roll out a comprehensive identity and/or civil registration system linked to the upcoming 2020 election;
- The challenge of addressing issues of trust in identity systems;
- The complications in adequately verifying a person's identity due to missing or poor quality breeder documents;
- The difficulty of reaching populations in all geographic areas of Somalia;
- The contested space of identity, whether from ambiguous legislation for eligibility for citizenship (i.e., who should have entitlement to identity and for what purposes) or over which entities are responsible for the provision of identity; and
- The possible potential for negative political interference in identity systems if linked to a voter registration process.

Options

Based on the needs identified, the context of Somalia, local and global lessons learned, and the challenges identified, the study team developed a number of options for the FGS and other stakeholders to consider, including the following issues:

- Whether a foundational (i.e., a general-purpose system such as a national ID) or functional (i.e., an application-specific system such as a voter registry) identity management system(s) should be adopted

- Whether data should be collected over time or through a surge mechanism such as a voter registration drive
- Whether new facilities or existing facilities should be used to roll out an identity initiative
- Whether and how improvements to the civil registration system should be incorporated into a national ID system
- How to include Somali diaspora in an identification system
- Whether a digital ID card or just an ID number (for security reasons) should be provided or both
- The range and scope of data to be collected
- Whether enrollment in an identity system should be mandatory and how to create incentives for registration
- The choice of roles in terms of who manages and implements the country's identification system(s)

The use of biometrics for registration is one of the areas that received an overall consensus among all stakeholders. Although strong biometric controls do not guarantee that a national identity system will be robust, they introduce tremendous discipline and guard against common abuses.

Recommendations

After considering the above options, the study team makes the following key recommendations to the FGS for its consideration:

- Crucially, the team has reached the conclusion that no existing identity system within Somalia could be scaled up to adequately meet the country's demands. Instead, a new system should be established. If Somalia's already existing functional identification systems continue to be used, the study further suggests that they—and any functional systems that may emerge in the future—should, at a minimum, be interoperable, use common standards, and use open source software.
- In terms of the objective and function of an identification system in Somalia, the study team recommends that the primary goal would be to provide every Somali citizen with a unique and verified identity in order to harness both development and democratic benefits. Such a system would be optimized if it were a foundational system, used for multiple purposes (voter registration, KYC compliance, etc.), and used by multiple stakeholders (government, federal states, private sector, humanitarian actors, etc.).
- Given the Somali context, and although the study recommends that citizen ID be compulsory, the team also suggests that the FGS and donors consider an incentive-based approach to encourage citizens to demand identity services. In the case of Pakistan, for example, a similar initiative was carried out where disaster relief activities served as a catalyst to register citizens in order to access relief support, but expanding the coverage and utility of the ID system.
- In terms of the legal framework, the team posits that, given the time constraints, a decree could be considered to establish an initial project phase of an identity management system whilst a more comprehensive, enabling legal framework is developed. Developing such a comprehensive framework should include resolving and clarifying who is eligible to vote, the revision and passing of the draft Somali citizenship law, the finalization of the electoral law, legislation pertaining to the establishment of privacy and data protection rights and digital identity, and law(s) to legally establish the scope, mandate, responsibilities, access rights, and accountability of an identity management system.
- Given issues of trust and time constraints, the study team suggests further study regarding the feasibility of a public-private partnership model for creating and managing an identification system in Somalia. Under such an arrangement, the overall responsibility of bestowing identification would remain with the government, and be overseen and directed by a credible and competent independent body (with a multi-stakeholder board) appointed by the government. This body could

then utilize private sector facilities (such as Money Transfer Operators (MTDs) and telecom operators' offices or banks) as points to register people, including a system of multiple verification of identity to meet international standards. Biometric data collection also opens up the possibility of performance-based incentive contracts for registration, with local or private entities receiving payment based on new identities registered with acceptable data quality and verifiable validity. India has used a similar approach.

- Given Somalia's current and foreseeable budget deficit and the low level of income of its citizens, the study recommends that enrolling in an identification system and receiving proof of identity be a cost-free service for the individual to help ensure inclusion. Although investment costs for an identity management system are supported primarily through donor financing, ongoing operations and maintenance costs can be covered in parts, by commercial revenues derived from services to third-party users such as KYC verification.

Next steps

A coherent approach, with high levels of FGS, donor, and private sector support, will be critical foundations to launching an identity management system. The study lastly provides some key next steps to move from study to implementation, and then from implementation to democratic and development impact.

1. Introduction

This report provides an overview of identification systems in Somalia and assesses various options for the government to strengthen these systems in the short and medium term. Many of Somalia's citizens are among the estimated 1.5 billion people worldwide who lack access to government-issued or recognized proof of identity.[1] At 3 percent, the country has one of the world's lowest birth registration rates.[2] This under-identification is problematic, as the possession of identity credentials is a key enabler for access to rights, entitlements, and services, including the right to vote, financial inclusion, gender equality, and access to health care. In addition, robust and inclusive identification systems are a basic requirement for governments to effectively perform a variety of functions, including the preparation of high quality voter lists, delivery of basic education and health benefits, and the administration of social transfers and financial services. A robust identification system is also necessary to comply with basic international banking guidelines, such as Know-Your-Customer (KYC)[3] requirements for remittance verification, and address money laundering concerns.

Motivation

In light of these potential benefits, the Federal Government of Somalia (FGS) recognizes the importance of improving its identification systems to meet urgent administrative and developmental needs and provide a foundation for future applications. To this end, members of the FGS requested that the international community conduct an assessment of its identity systems and make recommendations for future development. In particular, the government wants to ensure its capacity to produce an accurate and transparent voter list ahead of future elections, which will be conducted under a new 'one person, one vote' electoral system. Specifically, it wants to understand whether an identification system used to establish a voter list could also be utilized for other development purposes, or whether it would be advantageous to first develop a more general-purpose identification system which could also be used to underpin election administration. At this point in Somalia's history, there is an opportunity to develop a strategic and comprehensive identity ecosystem from scratch.

Organizations involved

This report was jointly prepared by the International Organization for Migration (IOM), Terra Incognita (TI), the United Nations Development Programme (UNDP) and the World Bank (WB), in response to the FGS's request to carry out a feasibility study on potential options for developing a national identification system. This joint effort is a novel undertaking and responds to recent global recommendations regarding the need for a multi-stakeholder and multi-sectoral approach to the support of developmental identification systems.

To this report, these organizations bring a diversity of perspectives and expertise on identification systems. The World Bank's 'Identification for development' (ID4D) initiative seeks to support the development of robust, inclusive identification systems that facilitate individuals' access to rights and services and governments' capacity for administration and service delivery. A key pillar of the ID4D Action Framework is country and regional engagement, which begins with an analysis of a country's identity ecosystem,

1 www.worldbank.org/en/programs/id4d
2 Source: Birth Registration Rate in Sub-Saharan Africa—UNICEF 2013.
3 Know your customer (KYC) is 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.

including laws, policies, practices, governance institutions, capacity, and technology (also known as an Identity Management Systems Analysis, or IMSA). To date, IMSAs have been carried out in over 20 countries and serve as the basis for further cooperation and support.

The role of the United Nations (UN) in identification has been recognized by the UN Sustainable Development Goal (SDG) number 16.9, which requires states to "provide legal identity to all, including birth registration, by 2030."[4] Furthermore, the main goal of UN electoral assistance is to support Member States to hold periodic, inclusive, and transparent elections that are credible and popularly perceived as such, and to establish nationally sustainable electoral processes.[5] Implementing effective voter identification and registration is a key component in achieving these goals. Toward this end, UNDP is leading an effort to prepare the highest quality voter lists for Somalia.

The International Organisation for Migration (IOM) is committed to the principle that humane and orderly migration benefits migrants and society. As the leading international organization for migration, IOM acts with its partners in the international community to provide secure, reliable, flexible, and cost-effective services for persons who require international migration assistance, and identification plays the central role in its mission. Terra Incognita is a not-for-profit entity established in Somalia. Its mission is to foster state building, enhance transparency and accountability, and contribute toward sustainable and equitable economic growth. Currently, Terra Incognita provides advisory support to the FGS and has a coordinating role for this study.

Study process

This report is based on information gathered from discussions with representatives of FGS, federal states, municipalities, international partners, and private sector stakeholders and identity service providers within Somalia, in addition to rapid desk research. Consultations and interviews were conducted between July and October 2016. The report presents the current identity landscape of Somalia, along with lessons learned from identity programs in other countries and options for the FGS to consider for the development of its identification system. However, the rapid nature of the assessment and the security situation in Somalia has limited the scope, coverage, and comprehensiveness of data collection. The report should be read in light of these constraints.

4 In addition to providing identity as a right in itself, good identity management is fundamental to the achievement of at least 10 other SDGs. Dahan, Mariana and Gelb, Alan. 2015. 'The Role of Identification in the Post-2015 Development Agenda. World Bank Working Paper'. http://documents.worldbank.org/curated/en/870421467993220562/The-identity-target-in-the-post-2015-development-agenda-enabling-access-to-services-for-all

5 UN Global Issues: http://www.un.org/undpa/en/elections

2. Background

Benefits of identification systems

Legal identification systems are those that provide a means for identifying and authenticating citizens and residents through enrollment, verification of identities, and the issuance of identity credentials that are recognized by the government. The provision of these credentials ("proof of legal identity") and their associated systems is a public good necessary for modern development. In order for a government to deliver services to people, it needs to know who is who. For individuals, a reliable way of proving one's identity is necessary to exercise basic rights, claim entitlements, participate in democratic processes, access a range of government services, and conduct myriad other daily activities.

Governments play an important role in this process by establishing legal identification systems (either digital or paper-based) and/or inculcating trust through legal and regulatory frameworks. When identification systems are digital, they can be combined with mobile phone and Internet applications, allowing services to be delivered electronically. This can increase government efficiency and facilitate new online products and services. With over 7 billion mobile phone users[6] worldwide, mobile phones and the Internet are the largest delivery channels for services. A detailed primer on digital identity is available in the World Bank's Digital Identity Toolkit: A Guide for Stakeholders in Africa.

6 WDR16 Digital Dividends. www.worldbank.org/en/publication/wdr2016

Types of Identification systems

Legal identification systems can be categorized as 'foundational' or 'functional'. Foundational refers to systems such as general-purpose identity databases, national ID cards or identity numbers, and civil registration systems that issue birth certificates and other 'breeder documents'. Functional systems are those registries maintained for specific programs or applications such as voting or membership in a social insurance scheme. Foundational ID systems are typically supply driven systems whereas functional ID systems are application or demand driven. In this report, the terms 'foundational system', 'national ID system' and 'identification system' are used interchangeably, while functional systems (e.g., voter registration) are referred to by name.

In developed countries, foundational 'breeder documents' (e.g., birth certificates) are normally used to establish legal identity for other forms of identification, such as national IDs. In developing countries such as Somalia, reliable birth certificates are often lacking. As an alternative, many developing countries have begun to use biometric technologies to uniquely identify individuals and establish a legal identity on this basis. In such cases, countries may build national identity registries in parallel with efforts to improve civil registration systems.[7]

A robust foundational identity database, such as a national population register or national identity system, is one that provides a unique identity to each person and provides an interoperable platform on which new products and services can be built by private firms and government agencies. For example, a government offering safety net transfers to the country's poor can use the registry to uniquely identify target populations and issue cash transfers electronically. A financial institution can use it to validate a person's identity, thereby addressing a key aspect of KYC rules. Immigration authorities can track who enters and exits the country, linking national passports with the unique identity of each person. A robust, unique identifier based on biometrics can be the key in a relational database. Electoral commissions can use a national identity system to support electoral processes and expand the democratic space. In Pakistan, for example, the unique ID (National ID number) is used as a voter ID to prevent multiple entries or inclusion errors in voter lists. Figure 1 describes the benefits of strong national identification systems in graphical form.

Country overview

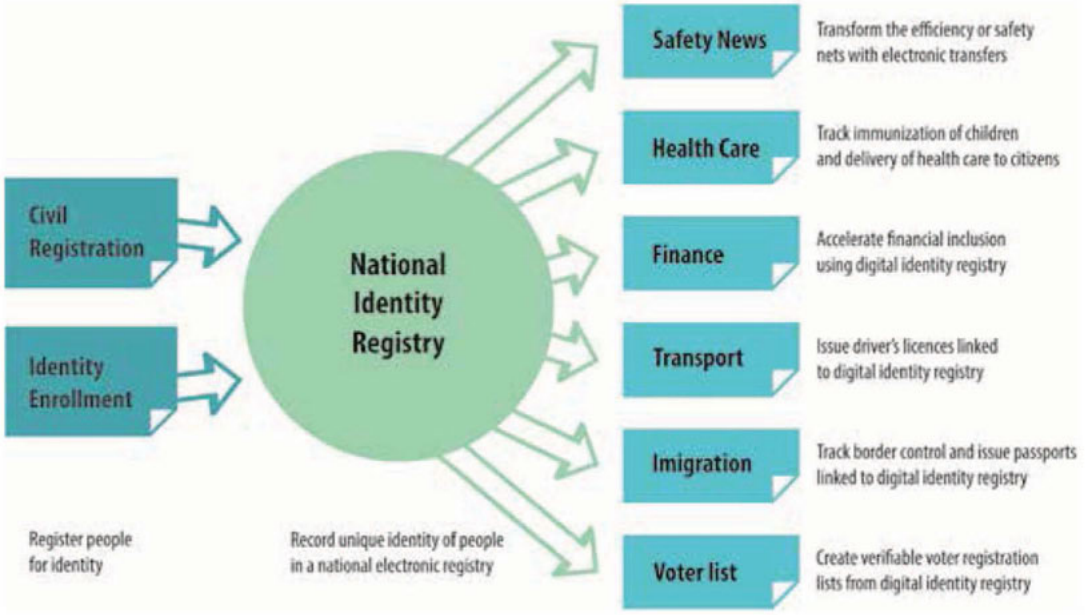
Two and a half decades of conflict, concentrated mainly in southern Somalia, have destroyed much of the country's governance capacity and economic infrastructure, including the institutions mandated to provide civil registration or identification.

Economy and development indicators

In 2012, a new federal government emerged in Mogadishu within the framework established by the Provisional Constitution, and Somalia's economy has shown remarkable resilience over the past years. Throughout the years of fragility and conflict, Somalia's vibrant private sector helped maintain economic activity through provision of trade, money transfers, transport, and telecommunications services. The dearth of statistics continues to make it hard to precisely estimate the size of the economy or macroeconomic and social indicators. The World Bank and International Monetary Fund (IMF) estimate Somalia's GDP at about US$6 billion in 2015, which is six times that of the pre-war (1985–1990) average of US$1 billion. Consumption remains the key driver of GDP with gross fixed capital formation accounting for only 8 percent of GDP in 2015. The economy is highly dependent on imports, which account for more than two-thirds of GDP, while exports account for only 15 percent of GDP. The result is a large trade deficit, mainly financed by

7 The use of biometrics to establish uniqueness can help countries leapfrog their identification systems and root out many types of fraud. However, biometrics are not a substitute for a good civil registry, which is necessary to provide data on the identity lifecycle and support vital statistics systems.

Figure 1: Service Delivery Using National ID Registry



Source: World Bank Analysis.

Table 1. Socioeconomic Data, 2014

	Somalia (per UNFPA)	Sub-Saharan Africa (per World Bank)
Population	12,316,895	974,315,323
Rural population (% of total population)	61%	63%
GDP per capita (current US$)	$435	$1,792

Source: UNFPA Population Estimation Survey, October 2014 and World Bank 2014.

remittances and international aid. Indeed, Somalis are heavily dependent on overseas remittances as their primary source of income, and in 2015 remittances were estimated at US$1.4 billion, or 23 percent of the GDP (see section below for more on remittances).[8]

Income per capita in Somalia is estimated at US$435, making it the fifth poorest country in the world. Three-quarters of Somalis are less than 30 years old, and around 46 percent of the population is below the age of 15. Somalia has a within-country population of 12,316,895, which is 51 percent male and 49 percent female. Approximately 42 percent of the population live in urban areas, while around 25 percent are nomadic. The United Nations High Commission for Refugees (UNHCR) estimates that there are 1,106,751 internally displaced persons within Somalia. In addition, some 2 million Somalis live outside of Somalia.[9]

Many Somalis face acute food shortages: five million—more than 40 percent of the country's population—are food insecure, up by 300,000 from February 2016, according to the latest assessment by the Food

8 World Bank makes progress to support remittance flows to Somalia June 10, 2016. www.worldbank.org/en/news/press-release/2016/06/10/world-bank-makes-progress-to-support-remittance-flows-to-somalia

9 Population Estimation Survey, UNFPA, October 2014.

and Agriculture Organisation (FAO)-managed Food Security and Nutrition Analysis Unit (FSNAU) and the Famine Early Warning Systems Network (FEWSNET). Among them are 300,000 children under age 5 who are acutely malnourished and over 50,000 severely malnourished children.

Elections

Somalia has not held 'one person, one vote' national elections since before the 1969 military coup d'état. Since then, presidents have been elected indirectly by parliament, which has been chosen by a small group of elders rather than directly elected by popular vote. In recent years, there have been moves toward linking parliamentary representation with the will of the people. Progress has been made in granting a greater number of people—through an Electoral College system consisting of clan elders—the opportunity to elect their representatives. The 2016 electoral exercise involved a total of over 14,000 respected clan representatives in selecting the members of the two houses of parliament, whose new members then elected a president. The process in Somalia has yet to reach the standard of counting all Somali voices and votes; however, the FGS is moving toward a democratic system underpinned by the idea of 'One person, One vote', which is scheduled to be implemented for the 2020 elections. This significant democratic milestone—moving to full enfranchisement of the population—would be facilitated by the development of high quality voter lists with minimal exclusion and inclusion errors. Achieving this goal will require the rapid rollout of a countrywide robust identity system.

Somali identity culture

As most colonies in Africa became independent and formed new states, Somalia was considered to be unique. It was perceived as ethnically homogeneous, with a common language, religion, and culture, and a strong national consciousness. Since 1990, Somalia has suffered civil war with horrific consequences, causing hundreds of thousands of deaths. Despite the perception of homogeneity, however, Somalia is a diverse community, and the sensitive question of 'Somali identity' was one cause of the violence. The former UN Envoy to Somalia, Mohamed Sahoun, compared Somali society to a vase that has been smashed into small fragments (Luling 1997: 292). The question now is how this vase can be rebuilt.

The Somali people are said to have a consciousness of their corporate unity. This sense of a common heritage is rooted in the widespread belief that all Somalis descend from a common founding father, Hiil, father of Sub and Samale. Although a simplification, it is nevertheless useful as clannism is one of the main characteristics of Somali society and its subsequent breakup. Ancestry, lineage, or clan identity—i.e., 'who am I and where have I come from'—is a cornerstone of Somali identity. Hence, biographic information (inheritance, lineage, and family structure) and demographic profile (where they come from, permanent and temporary addresses) are two important traditions that cannot be ignored when considering identity in Somalia.

History of pre-1991 identification systems in Somalia

Somalia is a pastoralist society with an urban population along the coastline that is heavily involved in agriculture and livestock. Prior to Somalia's colonization, there was an absence of identification systems since the country did not have a ruling administration or clearly defined boundaries, and its population was sparsely spread and inhabited several territories in the Horn of Africa. However, people could identify others by their dialect, accent, and genealogy if needed.

This changed in the first half of the twentieth century, following the arrival of British and Italian colonial administrations. Quick to establish clearly demarcated borders that necessitated the introduction of identity registration systems, both administrations sought to better secure their territory, control migrants,

and, of course, set up a taxation system. On the whole, these colonial administrations did not entirely succeed in implementing effective identity systems due to myriad challenges, including local resistance by nationalist activists, poor collaboration with local elites (especially religious leaders), and power struggles among the colonizers eager to assert their authority across the entire country.

Initially, the two colonial administrations were concerned with establishing their own identity systems. The registration processes were designed to register citizens in their respective constituencies and were subject to strict rules. This drive was also connected to law enforcement due to skirmishes between nomads over territorial encroachment. Clan elders already recognized and registered by the colonial authorities were tasked with providing verbal references on behalf of their clansmen and this enabled Somalis to register and receive identity cards. Needless to say, elders were selective about acting as witnesses—fearful of reprisals by the administrations that held the elders responsible if their clansmen were found guilty of committing a crime.

These colonial identity cards were manually registered by local colonial registration offices and issued by the colonial district mayor and included a photo, fingerprint, full name, mother's maiden name, and maternal grandfather and paternal grandfather's names. This process, however, was time consuming, and failed to convince locals to endorse the idea (because of their limited and problematic encounters with the authorities) and helped fuel suspicions about the whole exercise (which also required a small fee, known as 'kodi'). Furthermore, many Somalis did not see the benefits of registering unless you were a civil servant in the colonial administration.

The pace of rolling out uniform identity and personal registration systems continued even after the Italian Somaliland administration was overthrown by the British colonial administration following World War II. In 1950, two different identity card systems emerged in the North and South. However, both identity cards shared some similarities in that they identified people according to their clans and subclans, as verified by clan elders. During this period, a limited number of people registered and received identity cards in preparation for the first post-independence democratic elections in 1963.

Remittance crisis

Somalia's fragile economic progress is sustained in large part by money sent from friends and family overseas. This money keeps Somalis from going hungry, sends their children to school, and provides seed capital for entrepreneurs to start businesses. Remittances are the backbone of Somalia's economy, providing a lifeline to 40 percent of the population. Remittances are estimated at between US$1.2–2 billion today, equivalent to 23–38 percent of GDP.[10] This source of income has been extremely important in cushioning the economy, creating a buffer against shocks (drought, trade bans, inter-clan warfare). Remittances fund direct consumption, including education and health, and investment; provide significant employment; and support trade. Remittance inflows finance the large trade deficit. As in many other developing countries, remittance flows in Somalia outweigh both international aid flows and foreign direct investment (FAO 2013). It is widely accepted that while most remittances are spent on consumption, some of it is invested, with significant subsequent effects on poverty and inequality. In the Somaliland Household Survey (SHS) conducted in 2013, remittances were received by 31 percent of urban households and 16 percent of rural households (World Bank 2015).

Despite the critical importance of remittances in the Somali economy, international banks have concerns to provide remittance services and work with Somali Money Transfer Operators (MTOs) due to a number of issues such as de-risking, lack of regulation, inadequate supervision, and including the lack of 'Know-Your-Customer' (KYC) verification (i.e., the identity of the receiver is not properly determined). KYC can be facilitated once the identity is registered and enrolled in a system to be verified or authenticated. However, KYC can be done in different ways, especially for financial inclusion products or with regard to certain types of transactions using a risk-based approach to supervision and regulation. Thus, KYC does not necessarily require an ID and having an ID does not automatically resolve all issues related to KYC, but it is a good step forward. The common currency for remittances is the US Dollar, and the USA Patriot Act gives U.S. regulators oversight of all dollar transfers by making it compulsory that they go through U.S. correspondent banks. Pressure from regulators such as the U.S. Department of Treasury and fears of being charged with financially aiding a known terror group under Title III of the Patriot Act is one of the critical issues among others (such as, ability to guarantee compliance with international standards, lack of regulation, inadequate supervision, low enforcement capacity, etc.) that has caused some international banks to withdraw bank accounts from MTOs because of the reputational and regulatory risk of being associated with illicit finance and fear of fines triggered by investigations. In February 2015, for example, the U.S. bank that handled up to 80 percent of remittances to Somalia closed the accounts of remittance businesses that provided money transfer services from the United States, amid fears of money landing in terrorists' hands.[11] The impact has been wider than just in the United States. From 2013, the bank accounts of the majority of Somali commercial remittance providers in the UK, United States, and Australia (and to a lesser extent in Scandinavia) have been closed.

In response to the remittances crisis, the FGS, with the technical assistance of the World Bank and other international partners such as the Financial Services Volunteer Corps, are undertaking a program of policy change and institutional reforms. One of these programs is the 'Supporting Remittance Flows to Somalia', which includes measures to improve the formalization, transparency, and compliance of the remittance service providers in Somalia. The project supports the efforts of the Central Bank of Somalia (CBS) to begin formal supervision of Somali money transfer operators (MTOs) with the assistance of a 'Trusted Agent' (an external firm procured by the World Bank) to work alongside the CBS for up to four years to establish and strengthen supervision of MTOs.

10 Don't Block Remittances to Somalia, *New York Times,* April 10, 2015. www.nytimes.com/2015/04/11/opinion/dont-block-remittances-to-somalia.html?_r=0

11 www.justice.gov/archive/ll/highlights.htm

ICT sector

This section provides a brief summary of identity-related information and communication technology (ICT) systems in Somalia, including Internet connectivity and mobile coverage. It draws on various private and intergovernmental sources to overcome the current lack of official national data on the ICT sector in the country. Comparisons are also made between Somalia and neighboring nations. The detailed analysis is available in Annex A of the report.

Access to—and use of—ICT is key to a robust, modern identification and civil registration system, particularly one that uses biometric technology for identification and authentication. Communications networks, connectivity, and teledensity are important factors in deploying this technology. For example, data collected in remote areas have to be transmitted to a central location in order to be aggregated and deduplicated. Although physical transportation of data has been used historically, this no longer meets standards for data security, privacy, and efficiency—connectivity is therefore required. Likewise, mobile-based identity applications, if rolled out, need to ensure mobile penetration rates are at a sufficient level.

The Internet sector in Somalia remains underdeveloped with less than 3 percent of the total population able to access the Internet.[12] Identity applications, such as online verification or real-time authentication "en-masse," may not be feasible until robust connectivity is available. New fiber connectivity arrived in Somalia in 2014 in three locations: in Mogadishu (undersea EASSy cable), in Hargeisa (terrestrial cable from Djibouti), and on the Kenyan border to the south (terrestrial cable from Garissa). However, it still needs to expand to the length and breadth of Somalia to gain an optimal level of connectivity.

The telecom industry is of growing importance and one of the brightest spots in the Somali economy. Private, unlicensed mobile network operators, using satellite for international communications, have emerged to meet the high demand for communications, especially with the large Somali diaspora. Critical areas—including remittances, and mobile-money services—are influenced and, in some cases, controlled by large companies. However, the fact that the ICT sector and the financial sector are both largely unregulated and have the same holding companies active in both fields is a potential source of risk for the Somali economy. Aside from supporting voice and text communications for citizens and businesses, mobile networks also provide Internet access and has emerged as a financial platform.

The position of these firms in Somalia creates the potential public-private partnership to develop an interconnected identification system (with a civil registration system). However, the possible conflicts of interest between telecom operators and financial institutions must be avoided through proper checks and balances (such as regulations and legislation regarding the roles and clear responsibilities, with the government setting up an independent telecom regulator).[13] This enabling framework would be essential for the private sector participation and collaboration in the rolling out of an ID System in Somalia, considering their capacity and infrastructure across the country.

12 TeleGeography, 2015.

13 Incidentally, this conflict of interest may also extend to mobile money accounts, where the so-called trust fund account may likely be sitting at a financial institution that also owns or is owned by the telecom operator or the mobile money issuing company.

3. Key findings

Existing identification systems

Somalia has not consolidated identity management around a single national system. It lacks any type of population register or national ID system, and has a limited and poorly functioning civil registry. In the absence of a viable foundational system, a patchwork of functional systems provides Somalis with their only viable proof of identity. However, these foundational systems are lacking in coverage and many suffer from a variety of issues, including high costs, complex processes, difficulties in verifying a person's true identity, and a lack of common standards. In addition, the absence of a unique legal identity instrument to underpin foundational systems (e.g., a birth certificate) means that fake or forged documents are rampant in the country.

This fragmentation, poor coverage, and non-robustness is a problem for public administration and the delivery of key benefits. For example, financial inclusion programs geared toward the poorest can only function effectively if they use a targeted approach to identify deserving beneficiaries. High quality voter lists can only be prepared without any inclusion or exclusion errors if the unique identity of each voter can be ensured. KYC, remittance, and anti-money laundering efforts can be more fruitful if customers' accounts are tied to real identities. Taxation becomes easier if information on the different sources of income can be brought together for each taxpayer. The highly fragmented system imposes costs and creates difficulties for the government and for Somalis resulting in one-off functional identification systems by private sectors (mobile companies, banks) and international donors (UNWFP, UNOPS, NCRI).

This section provides a brief overview of the civil registry and other functional identity systems; a more detailed description of these can be found in Annex B.

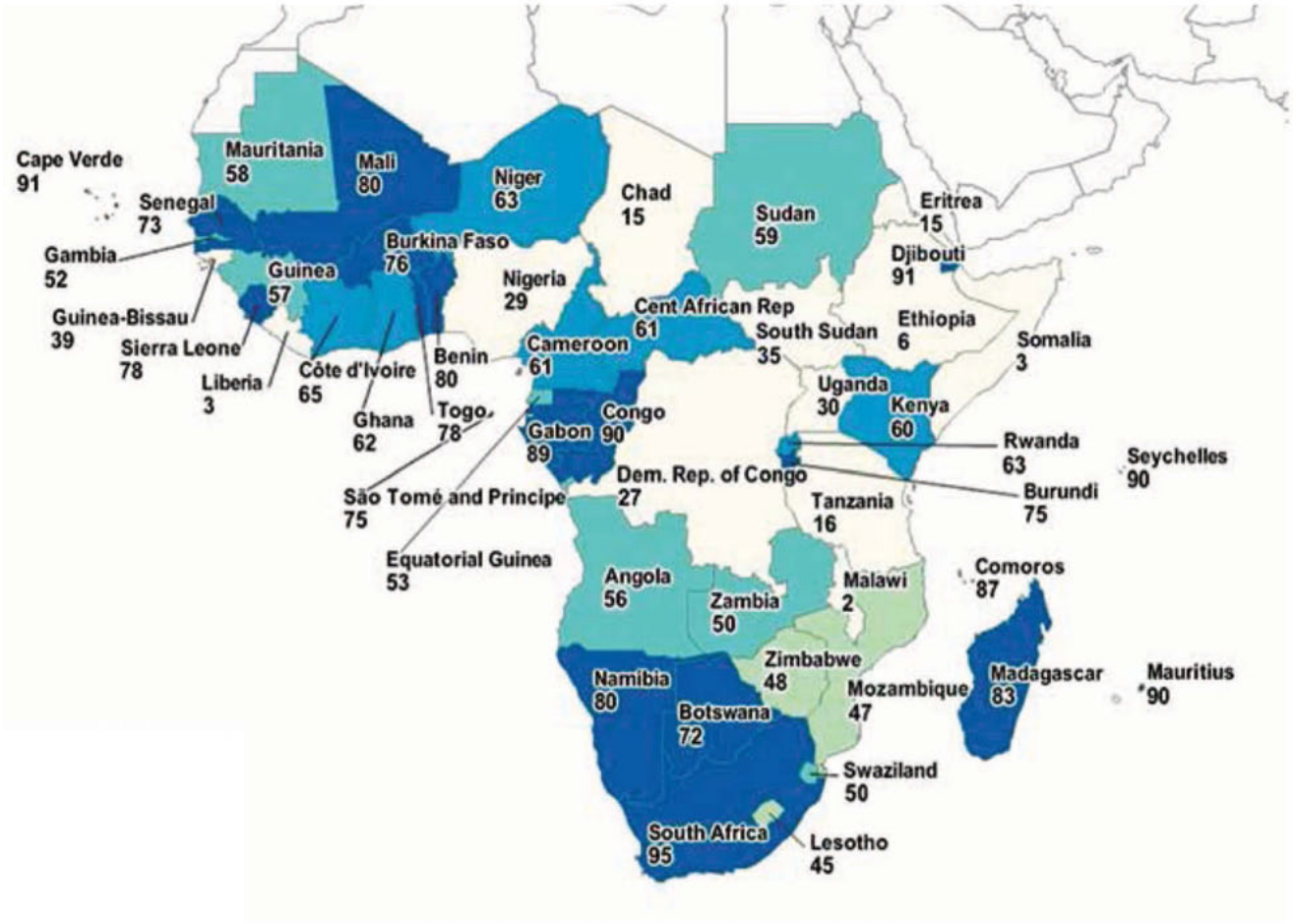
Civil registration system

Despite the current dysfunction of its civil registry, Somalia was among the first African countries to establish a system for registration of live births and deaths in 1904.[14] However, the records from this paper-based, manual system were destroyed in subsequent wars and violent incidents. The current weakness of Somalia's fractured identity ecosystem starts with civil registration. Birth registration should logically form the foundation of identity management; however, Somalia has yet to establish a coherent and interconnected system of civil registration with such a capability. As a result, Somalia has the lowest birth registration rate in Sub-Saharan Africa (approximately 3 percent for children under age 5). At just 7 percent, Somaliland has registered more children than any region. Civil records are not digitized, and verification is manual based on paper records, where these exist. Whilst this is a priority area for action, it is likely to take a long time to develop. Figure 2 compares Somalia with other African nations in birth registration.

One primary issue with the civil registration system is that it is completely decentralized and implementation is uneven. Currently, some of the country's 22 municipalities (local governments) are charged with civil registration—including maintaining registers and issuing certificates for births, deaths, and marriages—and producing municipal ID cards. However, the implementation of these responsibilities by municipalities has been poor. For example, it appears that Mogadishu municipality has only just started producing birth, death, and marriage certificates and a new ID card. A number of municipal mayors have introduced registration systems in the past, but the systems were scrapped by the next mayor for various reasons.

14 www.cdc.gov/nchs/data/isp/031_Organization_and_Status_of_Civil_Regist_in_Africa_and_Recommendation_for_Improvement.pdf

Figure 2: Birth Registration Rates in Sub-Saharan Africa



Source: Birth Registration Rate in Sub-Saharan Africa—World Bank ID4D & UNICEF 2013.

Some recent efforts to improve birth registration show promise. The United Nations Population Fund (UNFPA) and UNICEF are engaged in supporting civil registrar services (such as births and death) in Puntland and Somaliland. UNICEF, for instance, is supporting Somaliland in a pilot program to help hospitals and health centers in the Burao district register all newborn babies and children under five,[15] and has a similar initiative in Puntland. The Health Ministry coordinates the issuing of birth notifications by hospitals and health centers, while local Civil Registration offices provide the birth certificates. Until now births have been recorded by hospitals or other nongovernment institutions on an informal basis. Under the pilot scheme, every health facility inputs their birth registration data into a computer-based application linked to a database. Eventually it is planned to directly link the hospitals and health centers with the civil registration offices, so that mothers can go home with a birth certificate for their baby after delivery. In addition to these pilots, other recent efforts to improve the civil registry include the draft citizenship law (7.1), which would require all children born in Somalia to be registered immediately after birth, regardless of citizenship status. However, more comprehensive reforms and a sustained effort are needed to build a coherent civil registry capable of playing a foundational role in identity management.

15 www.unicef.org/somalia/reallives_16521.html

Other identification systems

As mentioned in the previous section, in the absence of a viable identification system produced by the FGS, some states and municipalities have taken it upon themselves to issue ID cards. Likewise, some international agencies issue an ID in paper or digital form when material or cash aid is to be disbursed to beneficiaries. For example, the UN World Food Program (WFP) provides relief interventions through a mix of material and cash-based transfers. Following biometric registration, households receiving WFP assistance are issued electronic transfer cards (e-cards) to purchase food in vetted local shops or to receive food assistance. In order to receive assistance, the recipient's fingerprints are authenticated against the WFP database, and assistance can only be redeemed by the individuals registered on the card.[16]

Table 2 provides a list of key identification systems in Somalia, and a detailed discussion of many of these is provided in Annex B. As a whole, the country's identification ecosystem faces a number of challenges, including the following:

- There is no rigorous verification mechanism at enrollment. It is unclear how breeder documents required for an ID are vetted or how identity to obtain breeder documents is adequately verified.
- While international agencies ID systems perform deduplication to authenticate the credentials after enrollment, no evidence has been provided that the same process is observed by local, state, or regional systems and systems rolled out by private sectors.
- The ID cards issued by some regional governments do not follow basic international standards (e.g., ISO/IEC 7816 for contact cards or ISO/IEC 14443 for contactless cards).

16 www.wfp.org/countries/somalia

- Some regional governments (e.g., Banadir) issue ID cards without a unique number (i.e., a number issued to an individual based on their biometric uniqueness) and instead use the serial number of the card as the ID number.
- Disparate ID systems without a common, standards-based approach collect different forms of biometrics (just thumbprint, ten fingerprints, iris scans) and issue different identity credentials, making them non-interoperable.
- Birth certificates are stored manually in paper repositories. As a result, these records are highly vulnerable to destruction or tampering.
- The country's approach to privacy and security of the databases of existing systems is unclear. Some existing systems host data outside the country, which poses a risk of data theft. The backup or disaster recovery procedures of some systems were unclear.
- Data ownership remains a murky concept and is sometimes undefined. For example, for the UNOPS Somali National Army database, information is stored on behalf of donor countries rather than the national government, which would not be the case in most other countries.
- It is unclear how the current ID systems are recording the address field of the Somali citizens and how (or if) it is verified. The migration factor and registration of the nomadic population is a consistent challenge for all existing systems.
- The costs of many of the identity systems is extremely high and passed onto the individual card holder, resulting in a significant portion of the population being excluded.
- The financial management system used in the majority of systems reviewed was not disclosed clearly.

Table 2. Snapshot of Key Identification Systems

Program Title	Function	Biometrics	Deduplication Performed	Unique ID	Identity Instrument	Data Ownership	Issuing Authority	Enrollment
Banadir ID Card	Municipal ID	Thumbprint	Yes	No	Plastic ID card	Mogadishu Municipality	Mogadishu Municipality	5,300
Puntland ID	State ID	10 Fingerprints & Iris Scans	Yes	Not defined	ID card (barcode & MRZ)	Ministry of Interior	Ministry of Interior, State of Puntland	800,000
Passport Somalia	Travel Document	10 Fingerprints & Iris Scans	Yes	Yes	Passport Book and ID card	Ministry of Interior	Depart. of Immigration & Naturalisation	300,000
NCRI-IDP Registration	Refugees or Returnees-IDP registration, Cash Transfers	2 Fingerprints, Digital Photo	Yes	Yes	Card	UNHCR	UNHCR	600
Somali National Army (SNA) Registration	Registration for Payroll of (SNA) and Police	10 Fingerprints, Digital Photo	Yes	Yes	Card	UNOPS	UNOPS	14,500
2016 Electoral College Lists	Voter List	None	No	No	Voter Card	FIEIT/SIEIT	FIEIT/SIEIT	14,025
Somaliland Voter Registration	Voter Register	2 Iris Scans	Yes	Yes	Voter Card	Somaliland	Election Commission of Somaliland	3 Million (disputed)
WFP e-Card	Relief Intervention, in-kind and cash transfers	Fingerprints	Yes	Yes	e-Card	WFP	WFP	1.3 Million

Source: Study team analysis.

Feedback from stakeholders

The team met with multiple stakeholders during the study period, drawn from representatives of the Federal Government of Somalia, the federal states (except Hirshabelle and Somaliland), the National Independent Electoral Commission, telecommunications, banking, remittance sector, identity providers, diaspora, the National Intelligence and Security Agency, the Central Bank, Interpol, Interpeace, Creative Associates International, the Financial Service Volunteer Corps, members of the peace-building and state-building goals for Somalia (PSG) 1 group, and key donors. A full list of people and agencies met can be found in Annex D. Common themes, concerns, and challenges identified by these stakeholders are reflected in the following summary.

Lack of trust

All stakeholders raised significant concerns regarding trust in existing identification systems in Somalia, suggesting they were, for the most part, open to fraud; that they all did not adequately verify identity (particularly with existing breeder document systems and processes); that there were concerns pertaining to ownership of data and privacy rights of individuals; that many past systems, for various reasons, did not work; and that most systems lacked strong financial governance and were subject to extortionate charges.

The Federal states currently do not have trust in the potential of a national identity management system managed by the central government. Likewise, the central government was concerned that if the process were managed at the state level, there could be potential inflation of the numbers of identities in order to influence the 2020 voting process. Major companies within the remittance sector did not trust the central government or federal states to roll out a comprehensive identification system, suggesting that such a system would be financially exploited and be subject to political influence and infighting.

A survey of fifteen EU countries[17] found that nine did not recognize or accept the biometric passports that are being issued by the Somali Department of Immigration. Only two, Latvia and Slovenia, widely accept Somali passports as valid travel documents. In the survey, the widely established reason for rejection of the Somali passport as a valid form of identity was a perceived lack of verification against breeder documents of the holder.

Governance and roles

As a result of the lack of trust between stakeholders, there was no consensus as to whether existing entities could successfully manage and roll out a national identity and/or voter registration process. Most stakeholders, however, saw potential in a model similar to that of the Pakistani identity program where the government appointed an independent body, chaired by a qualified and trusted chairperson, to administer an identity management system under the supervision of a board that had stakeholder representation.

Many of those consulted who were present in Somalia prior to 1991 discussed the former system of verifying identity and providing civil registration services at the municipality level ("Foglio di famiglia"), suggesting that this system was effective because only those at the local level have the knowledge to accurately verify a person's identity.

Legal issues

Many stakeholders expressed concerns relating to whether the 2020 voter registration process would need to include all ethnic Somalis, including the estimated 13 percent of the total Somali population in Diaspora. This is not only a legal concern for stakeholders but also a political consideration, given that the Diaspora could wield a significant influence in the 2020 election. Previous attempts to clarify the legal ambiguity regarding Somali citizenship and voter eligibility have been heavily contested, and many stakeholders questioned whether parliament had the political will to resolve this issue in time to enable the registration of identities for the 2020 'one person, one vote.'

Somali legal experts, after reviewing relevant legislation, posit that national identification is within the mandate of the central government, yet the recently developed constitution for the Federal State of Puntland, for instance, holds that identity systems are the purview of the state.

17 Ad-Hoc Query on biometric passports issued by Somalia, European Commission, European Migration Network, 23 March, 2015. Countries surveyed include: Austria, Belgium, Czech Republic, Estonia, Finland, France, Germany, Latvia, Lithuania, Luxembourg, Netherlands, Slovak Republic, Slovenia, Sweden, and Norway.

Lack of citizen demand

Historically, identification has had negative connotations for the Somali population—either through association of identifying a person based on his or her clan, or because of past administrations' attempts to tax the population, tamper with electoral processes or, more recently, use identity documents as opportunities to extract rents from the population. Consulted stakeholders suggest that identification systems in Somalia have rarely served the public good and are neither a priority for Somalis nor are in demand, except where there is an incentive such as access to social transfers, the security sector, civil servant salary payments, receipt of remittances, or access to international travel.

Cohesion

The majority of stakeholders consulted, acknowledging the likely complications of rolling out identity systems, suggested two options to approach identity management systems for Somalia. The first is to develop more than one identity system and make these interoperable. The second option, preferred by the majority of those consulted, is to create a single identity system that serves multiple applications and multiple users.

Security and access

Security and access will pose some of the largest challenges to implementing a National ID system in Somalia. At the moment, large areas of the country are still under Al-Shabaab control, of which the government have little access and no presence.

Al-Shabaab has continually expressed opposition to any government-led identity program, and has stated that they will actively work to disrupt any initiatives taken to provide identification to citizens in Somalia. Populations under Al-Shabaab control need to have access to identity services if remittance verification and voter registration is to be nationally accessed and inclusive. However, it is clear that Al-Shabaab will prove to be a huge challenge to any identity system and registration of individuals in Somalia. As such, the registration suggestions within this report are made predicting that government presence will be unlikely within Al-Shabaab controlled areas for the coming few years. Access to identity services for those residing in Al-Shabaab areas needs to be considered creatively. Some of the remittance companies or MTOs suggested, for instance, using the offices of the remittance companies in order to facilitate identity registration.

Demand from potential users of an ID system

The ability to prove one's identity is vital for participation in social, political, and economic life. Yet the majority of the Somali population lacks any form of officially recognized ID. Digital identity, combined with the extensive use of mobile devices in Somalia, offers a transformative solution to the challenge of preparation of high quality voter lists, compliance with KYC and anti-money laundering standards, and strengthening immigration and border control systems. It also provides public-private sector entities (telecom operators and MTOs) within Somalia with efficient ways to reach the poorest and most disadvantaged.

After engaging with various organizations and sectors within Somalia, a picture has emerged of increased demand for the potential uses of a robust Identification system. Many of these sources of demand are summarized below.

The voter list based on ‘one person, one vote’

If ‘one person, one vote’ is to become a reality in Somalia, there needs to be an effective mechanism for uniquely registering voters. There are several ways to achieve this, each with a different likelihood of success against the main objectives of information being accurate, sufficient-for-purpose (i.e., containing necessary data fields), and up to date. Technically, the most effective approach is to compile and maintain a database of unique voters and their voting locations, and the most effective way to achieve that is to use biometric registration and a national deduplication process.

However, creating a biometric registration and deduplication system for electoral purposes alone would be expensive. In addition, and possibly more important than the cost, is the fact that it would be very difficult to keep accurate and current. Experience in many other countries has shown that, unless there is huge interest in the outcome of a particular election, voters often are not inclined to actively maintain registration details. This can easily lead to voters being registered at previous addresses and under pre-marital names, as well as failing to register many newly-of-age voters and failing to remove voters who are deceased.

What is needed is a solution that further incentivizes voters to maintain their voter record. Linking the voter data to a wider database, with other incentives to keep it up to date, could be an ideal solution. The biggest electoral concerns and absolute requirements in this regard are (1) that the database from which the voter list is drawn is (and is seen to be) maintained with a high level of currency and accuracy and without prejudice or bias due to any political or commercial reasons; and (2) that enough information is available to the National Independent Election Commission (NIEC) for it to be able to correctly allocate each eligible citizen to a polling station without the need for further complex and costly registration exercises.

If an effective citizen identification system were in place and used to uniquely register almost all Somali citizens, each citizen’s assigned ID number could then be used by the NIEC to make sure that no citizen appeared in the voter list at more than one location. Other data would also need to be made available to the NIEC, such as names date of birth and address/location, for the purposes of determining electoral eligibility in any one constituency. In addition, the NIEC would need to maintain some of its own data fields,

the most important of which would be the polling location at which each citizen deemed eligible would be registered to vote.

Typically, when an electoral commission relies heavily on a civil registry for voter registration, the voter data used for any electoral event is a snapshot of the citizen database as of a particular, previously agreed date, as would usually be prescribed in electoral law.

In addition to national elections, a voter list would also be used in the event of any agreed referendum, although it is not expected that a biometric-based registration scheme could be implemented in time for the constitutional referendum currently planned for 2018.

Regulating banking, financial, and remittance sectors

KYC compliance through ID in banking sector

The Somali jurisdiction does not, as currently constituted, lend itself to conventional financial services. A variety of systems are used in different regions for transferring funds, both domestically and internationally. The primary movement of funds at the domestic level is through innovative mobile telephone schemes, for instance almost 70 percent[18] are using mobile money for domestic transfers. The formal banking system is not yet enough developed and the usage is only 4 percent, therefore Somalia relies on different transfer systems like mobile money mostly for domestic transfers and 'hawala or remittance system' for cross-border transactions, counting around 76 percent of the international transfers. The traditional hawala service is defined as a remittance service provided by an individual rather than an incorporated entity and it means transfer in Arabic.[19] However, it is important to note here that a number of remittance services are done by Money Transfer Operators (MTOs) which are regularly registered businesses on the sending side (including in the United States, EU, Australia and others) and also regulated as money transfer businesses on the receiving end by the Central Bank of Somalia. Nevertheless, some portions of the flows can still be transferred through actual traditional unregulated 'hawalas'. This report discusses the risks where these flows are not properly tracked, affecting both regulated and unregulated remittance services, and allegedly used for terror financing.

The traditional unregulated hawalas' alleged role in financing illegal and terrorist activities is in the eye of the storm globally. Since the September 11, 2001 terrorist attacks on the U.S., public interest in this type of informal system and its traditional transferring of money between individuals and families—often in different countries—have increased. Hawalas, previously considered Informal Funds Transfer (IFT)[20] systems, are in use in many regions for transferring funds, both domestically and internationally, but Somalia is disproportionately dependent on this method.

Part of Somalia's banking sector is willing to kick-start a robust operational banking system and wants to identify clients for KYC purposes. KYC guidelines are mandatory under various jurisdictions (countries) where these transactions are originating as remittances by expat Somalis and are landing in Somalia. In a nutshell, these guidelines are centered around customer identification in various laws such as those in the European Union (under Joint Money Laundering Steering Group), the U.S. (under Patriot Act), South Africa (under the Financial Intelligence Centre Act 38 of 2001), and others. Linking a unique ID with accounts will be a step forward in KYC compliance.[21] For example, the International Standards on Combating Money Laundering and the Financing of Terrorism (FATF 10—customer due diligence and recordkeeping) demands

18 World Bank Mobile Money Survey 2017 under Somalia ICT Sector Support Project.
19 WB-CPSS (now CPMI) General Principles for International Remittance Services (the de-facto internationally recognized standards in this space) note 12 page 10.
20 WB-CPSS (now CPMI) rejects the distinction between formal and informal channels and the mention to Informal Funds Transfer (IFT).
21 However, while a robust identification system is necessary to fulfill KYC requirements, it alone will not solve the de-risking issue.

identification and verification of the customer's identity using reliable independent source documents, data, or information.

In the absence of a widely accepted unique ID, banks are known to accept any type of identification, consisting of, but not limited to: national ID issued by local or regional governments, driver's license, passport, birth certificate, and in some cases employment ID. If the potential customer does not have any of these types of identification, s/he is required to get references from other account holders and/or any known person in the business community.

The Central Bank of Somalia is therefore a strong supporter of a national ID with a unique ID number. The interaction with various officials within Somalia observed that it is anxious for the rollout of a robust identity system, as it is vital to document the fiscal economy and to regulate the movement of funds to and from Somalia. The identity of the sender and receiver can be documented, and movement of money can be tracked. A national ID card would then become a key to curb terror financing. It is the customer identification part that takes the center stage in identity management ecosystems.

Customer ID requirement for Remittance Transfers

The mobile industry would also benefit from a strong national ID system to identify its customers, particularly with regards to mobile money. The IOM, in a report titled 'Supporting the Central Bank of Somalia's regulation of mobile money to strengthen and safeguard remittances', published on 7 July 2016 and presented to the Central Bank of Somalia, suggests that "The customer identification requirements of the regulation should be clarified, specifically stated and adjusted to the reality of Somalia, a country in which a large share of the population lacks an official form of identification." It is also important to clarify the identification requirements that will be applied retroactively to those who already hold mobile money accounts.

One possibility for encouraging Somalis to obtain identity documents is to have different monetary transaction limits for those mobile money and remittance accounts in which the customer has provided an official identity document. Interviews of big players (see Annex D) in mobile money and remittance

market[22] in Somalia revealed that while there's a huge demand of an ID system in the Somali market, the private sector is skeptical about the government's' capacity to roll out such system due to its lack of presence in most geographic areas of the country and high levels of perceived corruption in the current identity management systems that are being rolled out by central and local governments. They believe that the private sector could implement an ID system because it is in the private sector's interest to implement a KYC requirement. Even if the private sector were to roll out an ID system, it would be exceedingly challenging to do so in Al-Shabaab-held territories, and the companies may not be willing to expose their staff or offices to such high risk areas. Amal, a large MTO, has invested in and is deploying its own biometric identity system for their customers working with an Indian-based company. However, the World Bank team was not able to assess the functioning of the system.

ID as key to combat money laundering and financing of terrorism

The Missions' interaction with international partners revealed that there is a considerate effort by the international community to support the FGS so that Somali authorities can effectively regulate the Somali financial sector and document remittance flows. An identity system can advance this initiative. The Financial Services Volunteer Corps (FSVC) is helping to strengthen the financial sector in Somalia and its ability to intermediate effectively financial flows. The program aims at strengthening the financial sector in Somalia through conducting a preliminary assessment of customer identification systems with recommendations on appropriate systems to be adopted nationally.

The Financial Action Task Force (FATF) requires that all countries have proper customer due diligence (CDD), through the verification of the identity of individuals utilizing a financial sector. The FATF outlines a number of requirements in its 'Recommendation 10' on CDD, including "identifying the customer and verifying that customer's identity using reliable, independent source documents, data or information." Although Recommendation 10 provides guidance to financial sectors on CDD requirements, the FATF is not specific to the exact standard of customer identification. In its June 2011 FATF Guidance entitled "Anti-Money Laundering and Terrorist Financing Measures and Financial Inclusion," FATF does specify further that its requirement can "extend to accepting a broad range of IDs, and innovative IT solutions can provide reliable identifiers." In most countries, passports and national IDs are the norm, but in some countries where they have had difficulty, a broad range of documentation, including expired foreign IDs, consular documents, or other documents that undocumented people can acquire (e.g., bills, tax certificates, health care documents), usually in predefined types of business relationships and below account balance limits are used, employing a risk-based approach. FSVC experts have helped develop the requisite regulations to implement Somalia's newly passed 2016 Anti-Money Laundering/Combatting the Financing of Terrorism (AML/CFT) law, as well as support the establishment of two key institutions within that law: the Financial Reporting Center (FRC) (Somalia's financial intelligence unit), and the National Anti-Money Laundering Coalition (NAMLC). Again, the biggest concern is terrorist financing and/or money falling into the wrong hands. Customer identity and the end-user of remittances have been a perennial problem, and recent months have seen an increase in de-risking practices through closures of correspondent bank accounts. This has precipitated various responses by donors aimed at understanding how best to resolve the identity issue in Somalia. A comprehensive identity management system would go a long way to addressing these risks and concerns by tying identity, verification, and authentication to e-bank accounts and complying with international standards and best practices.

Migration and border security

Improving the identification system in Somalia will help improve immigration and border movement data management systems. Verification or authentication of persons coming in and out of the country's porous borders are a persistent problem, partly due to the lack of a robust identity system(s). While the

22 In Somalia, there are a total of 17 established companies participating in remittance services. The largest of these—and the main players in Somalia—are Dahabshiil, Amal Express, North American Money Transfers (Mustaqbal), and Kaah Express.

documentation of people arriving and departing Somalia by air, sea, and land is performed at 15 of the 57 recognized border control points using the IOM designed Migration Information and Data Analysis System (MIDAS), there are still gaps in capacity that prevent control of all cross-border movements.

While the Somali passport (and the corresponding identity card) is available and is employed to facilitate travel, the price of the passport/card (US$103.00) is untenable for a vast majority of Somali citizens. This cost limits regional and international mobility for all but a minority of the population. A National ID card, if linked to MIDAS, would be able to facilitate cross-border travel while allowing a larger proportion of the population access to the service.

Social security administration

Currently, Somalia has no social security system in operation. But a new ID system would become a backbone for any proposed social security system, financial inclusion program geared toward the poorest of poor, and other social safety nets.

Health care

The role of a functioning ID system within the health sector touches upon several important issues. Health care providers and authorities can better register their clients and track their progress toward vaccinations or injury rehabilitation after an initial doctor's visit. Being able to prove one's identity through an ID card system would also facilitate the transfer of patient's records between medical facilities and doctors' offices, allowing for mobile populations to continue treatment toward illness or vaccinations across different locations without the risk of duplicate doses or missing treatments. The National IDs could be used to register babies and link the child registration to the parents, track vaccinations, and access the food programs to prevent malnutrition and drug adherence (register and give attendance).

Similarly, a functioning ID system would allow health authorities to have anonymized access to health statistics from throughout the country, allowing for better health policy planning and delivery. This

includes important areas such as disease prevention and control, as well as nutrition and malnourishment prevention. ID systems link patients and cases to an overall analytical system that can ultimately allow vast improvements in a country's health infrastructure. This could result in automation of public health data which can be used for epidemiologic assessments, the prevalence of communicable and noncommunicable disease, and to document population health.

Finally, Somalis could use a smart identity card to access either private or public health insurance schemes. Globally, mobile health and e-Health initiatives have linked electronic health records and smart ID cards to mobile insurance options, whose payment transactions can be executed exclusively through mobile money providers. Pakistan and Peru have been experimenting with such initiatives. There is currently no such program within the Somali context, but a widespread and functioning ID system could greatly facilitate the setup, planning, delivery, and monitoring of such a scheme, given the appropriate technological circumstances.

Access to education

The education sector is another field that would greatly benefit from a functioning identification system. Linking student records to an official identity makes it easier to track progress, organize large-scale exams and certification exercises, and store degree and examination records for future reference. As with other fields, such an approach is particularly useful for mobile populations, who might experience obstacles in accessing continuous education in the absence of a long-term place of living.

Furthermore, linking teachers' identification records to a national system allows the state to employ teachers as public servants and run a state-owned school system. This is common practice in the majority of countries both in- and outside of Sub-Saharan Africa. A functioning ID system based on rigid technological and administrative standards would greatly facilitate the setup of education reform programs.

There is a pilot looking for solutions to deliver payroll using mobile money to geographically disbursed cadres of teachers, for many of whom opening and using a bank account is unreasonable because of the following reasons recently cited by UNICEF colleagues:

- Teachers need to take a day off to collect salaries from banks
- Bank accounts come with costs which reduce net salary
- Possible to manipulate
- Relatively cumbersome administrative procedures

Mobile money transfers are seen as cheaper and more flexible, and the legal and regulatory vacuum may not be insurmountable for financing if the supporting architecture is established. This could be using the formal mobile money system with a requisite for identification from the sender to the receiver.

For instance, an electronic identity card based on a unique ID number could be provided to all government employees. In addition, their SIM card numbers would be recorded, or they would be provided with a secure SIM for future use with mobile money payments.

This is one of the possible quick wins as there is an incentive for government employees to acquire an ID and register their SIM card numbers to continue receiving their payroll.

Legal framework

Any discussion of, or proposals for, national identification, or civil or voter registration in Somalia needs to consider the constitutional and legal environment within which it would be introduced. This entails any existing or proposed legislation that may direct or constrain development; it also involves consideration of any additional legislation that may be thought necessary or advantageous. Some salient points of the legal framework analysis are summarized below. On the whole, Somalia lacks relevant legislation to govern a foundational identification system. As a result, this analysis focuses mostly on those legal provisions related to citizenship, immigration, and voter registration that would have implications for any identification system intended to underpin election administration.

Citizenship law has existed in Somalia since 1960, based on the constitution in place at that time. The method of determining citizenship was poorly defined and ambiguous, but it nevertheless served as the basis of two national elections, in 1964 and 1968. There were no good registration data on which to base voter lists, and so voters were permitted to cast their ballot at any polling station. In the absence of sufficient controls, this led to accusations of widespread electoral fraud. The 1969, military coup d'état heralded a period of legal stagnation, wherein no new citizenship or electoral laws were passed prior to the collapse of the Somali state in 1991.

The constitution and legislature now in place have been created afresh. However, the body of legislation regarding identification remains limited and will require extensive additions before it achieves a level of maturity, as seen in many more developed democracies. A federal constitution is now in place, as are a number of other laws, and a detailed citizenship law has been drafted but not yet passed. In relation to citizen identification and/or voter registration, the following is a summary of the most pertinent points in the constitution and in existing legislation.

1. The constitution declares the federal government as the authority responsible for all matters concerning citizenship and immigration (54c). The people of Somalia are its citizens and dual citizenship is explicitly permitted (8.3).

2. Except where excluded in specific laws, the constitution grants all citizens (who are ethnic Somalis) the right to vote in elections (22.2) and considers it a citizen's duty to strive to vote (42.2g). It prohibits discrimination on many grounds (11.3), notably including wealth, suggesting that personal outlay required for voter registration may be unconstitutional.
3. The National Independent Electoral Commission (NIEC) is constitutionally mandated to undertake (inter alia) continuous registration of voters and revision of voter lists (111g.2).
4. Member State constitutions exist and may contradict the federal constitution in some detail regarding the provision of identity.
5. Freedom of access (by the individual) to any personal information held by the state or by others is enshrined in the constitution (32).
6. The Political Party law requires, for the establishment of political parties, that a list of 10,000 members' signatures is collected and that these members reflect regions, clans, gender balance, minorities, and discriminated/marginalized groups. Verifying this information would be a challenge without access to required data, but collecting such sensitive data for all citizens may be unacceptable.
7. Electoral Commission law requires the NIEC to register voters and constantly review the voter list, for which it will need constant access to relevant citizen and voter data.

In addition, a Draft Citizenship Law has been produced but has yet to be passed by parliament. It does not yet constitute Somali law and there is no indication at present that it will be passed without significant revision and/or contestation. This draft law contains the following relevant clauses.

1. A Somali is defined (3) as any person who by origin, language, or tradition belongs to the Somali Nation. A Somali citizen, by birth or descent, is then defined (4.1) as any person born with at least one Somali parent; or born in Somalia with at least one parent also born in Somalia; or born in Somalia and with no citizenship entitlement in any other country.
2. Somali citizenship may also be granted (5.1) under various conditions, largely based on an 8-year period of residence; it may be gained by marriage (9.1); and honorary citizenship may also be granted (10.1), although such honorary citizens will not be entitled to vote in elections.
3. Somali citizenship may be voluntarily renounced (11.1) or may be revoked (12.1) under prescribed circumstances.
4. All children born in Somalia will be required by this law (7.1) to be registered immediately after birth. There is no indication as to which municipal, state, or federal body will be responsible for such registration.

The historical context of Somali constitution, citizenship, and other legislation, and implications for citizen and/or voter registration are discussed and referenced in detail in Annex C, Detailed assessment of legal framework.

Laws in need of enactment

A Citizenship Bill along the lines of, but not necessarily identical to, the draft bill described in detail in Annex C will be vital if widespread decisions on Somali citizenship are to be taken in pursuance of a national citizenship identification scheme. National 'one person, one vote' elections have not taken place in Somalia in the modern era. As a result, the detailed mechanism by which they should be carried out has yet to be decided and presented for parliamentary approval. For the 2016 elections, a one-time regulation (160915 Comprehensive electoral model as presented to Parliament) was developed and approved but this has no authority beyond 2016, and prior to elections in 2020 even the most basic aspects of the electoral model could be subject to change.

The details of voter registration processes will inevitably be dependent on electoral law, particularly where it determines representation specific to geographic areas or specific to any minority group, or where eligibility for people to take part in elections is determined by specific criteria. If voter registration is anticipated before the electoral law is agreed upon, it therefore must be flexible enough to cope with likely future requirements. Specific to voter registration is the need for legal guidance on the location at which each voter may/should cast their ballot. In most cases, this is determined directly by the citizen's place of residence but sometimes there is a choice, particularly for those with multiple addresses or for those temporarily away from home. If citizens are to be registered in an identification scheme with a view to this data forming the basis of a voter list, this question must be resolved in advance so as to make sure correct and sufficient data are collected for each citizen.

More fundamentally, there appears to be no agreement between member states to share citizens' personal data for any federal purpose, including elections. Additionally, there is no clear delineation around the roles and responsibilities (governance) of identity-related actors.

The other area in which the absence of legislation is particularly notable is that of data protection and privacy rights. There appear to be no data protection laws governing use or misuse of voters' personal data, neither is there anything to help ensure that information collected or maintained is handled securely and responsibly by any state authority, private concern, or other organization to which it may be entrusted.

4. Challenges

Fraud and corruption

Corruption and fraud poses a significant risk to any identity scheme in Somalia. Weak institutions, low pay for civil servants, and a prevailing culture of corruption indicate that corrupt practices should be an utmost concern for any organization or institution engaging in national ID-related work in Somalia. The potential pitfalls of corruption are twofold; first, there is risk of falsified information and documentation entering into any backend data system, which compromises its integrity. Second, there is the risk of a higher level of corruption through opaque bidding processes and awarding of contracts under dubious circumstances. Therefore, any identification or registration system that is implemented will have to have various safeguards in place to protect against corruption, both at the field level and at higher levels of government.

There have been multiple allegations of corruption within the Department of Immigration and Naturalization. Furthermore, there have been issues with the existing Somali passports in regards to corruption that have been highlighted by the UN Monitoring Group on Somalia and Eritrea. According to the United Nations Security Council (UNSC) Monitoring Group for Eritrea and Somalia's 2012 Report, there were various questions and issues raised in regards to the practices regarding corruption and fraud around passport issuance.[23] The report states, "Fraud and corruption became rampant in the passport business, with multiple passports being issued to the same individuals under false identities and foreigners obtaining Somali passports thanks to the intervention of senior Transitional Federal Government (TFG) officials. Members of Al-Shabaab, including at least one senior leader, have allegedly received new passports."

The current system of issuing 'Passport Cards/National IDs' lends itself to corruption and widespread fraud. Specifically, because of the financial governance model for passports and the corresponding cards, it incentivizes small bribes to issuing officers. Secondly, the passport and National ID system is based on breeder documents which are not widely available, do not exist, or are unverified in Somalia, as an applicant is required to submit a birth certificate as well as verified identity through a clan elder or recognized community leader. As such, there are significant incentives to forge breeder documents, and it is widely recognized that a vast majority of the birth certificates in Somalia, even in Mogadishu, are either forgeries or do not adequately verify a person's identity. Therefore, there are significant issues related to the reliability of the verified identity.

If the proposed identity system issues cards, they should have enough security features to combat forgery. The identity system should be able to log each transaction on each stage of identity lifecycle so that if an employee of the identity authority gets involved in the process of issuing fraudulent identity or identity theft, s/he can be identified.

Dearth of breeder documents

Birth certificates are commonly denoted as "breeder documents," i.e., the basis for the issuance of other identity documents, such as a driving license, an extract from the population register, a passport, and a national ID. As discussed earlier, Somalia lacks breeder documents, as those were destroyed due to the continued violence in the last many decades. As a result, and in combination with a rapidly growing population, the country's identification ecosystem is particularly weak. The biggest challenge to roll out an

23 UN Security Council Report # S/2015/801 dated 19 October 2015.

identification system would be resurrecting a civil registration system, and meanwhile enrolling Somalis for in a national ID system in the absence of breeder documents.

No country has, as yet, opted for a digital, biometric ID system to replace a civil registration system. Typically, the civil register feeds the national ID database. However, the shortcut in many African countries is to start a national ID system without making a systematic connection to the civil registration system, and without having a functional population register. The ID shortcut implies the enrollment of the (adult) population irrespective whether the enrollees have birth (and marriage) certificates, while civil registration systems are often build in parallel. In 2014, for example, Uganda registered the adult population in a national ID scheme, despite the fact that under-five birth registration was 4 percent in 2000 and 30 percent in 2011, i.e., three in four adults may not have had a record in the civil registration system.[24]

African countries are now building biometrically indexed single registries to track all social payments and service transactions, in an effort to move from the documentary disorder of the last few decades. Tanzania, Nigeria, and South Africa, among others, have taken key initiatives to move in this direction. The pressures behind those shifts are enormous as discussed in previous sections, and these efforts can be very beneficial, for example in preparation of high quality voter lists or rolling out financial inclusion programs geared toward poor or combating fraud and corruption (identification of ghost workers).

Short timeline

Establishing a credible, effective, and comprehensive identity registration and management process takes time. Given the operational, political, and security environment of Somalia, it will be extremely challenging to achieve full registration of the population by 2020—whether it be for just a voter registration process, or an identity registration process for multiple applications. The nonconventional recommendation of this

24 National Identification & Registration Authority of Uganda Statistics.

report to fast track the registration process is in many ways influenced not only by the 2020 timeline, but also by the FGS goal to have a referendum in 2018 and state elections scheduled between 2018 and 2020.

Such timeline challenges will require swift consensus by the relevant stakeholders to move from study to implementation and strong and immediate financial and political support. It may be the case that less than the majority of the population is registered by 2018, or that a 'one person, one vote' process proves unviable for 2020. In either case, however, should an identity registration and management process be rolled out, there will be progress in significantly increasing the number of citizens within the democratic space, and there will be progress in utilizing identity for development applications, resulting in positive political and economic multiplier effects.

The contested identity space

The study came across many examples of contestation within the realms of identity services: from disputes arising from ambiguous or nonfinalized legislation on eligibility for citizenship, to mixed political perceptions on which entity within the federal architecture is responsible for identity or verification of identity; from the probable inflation of numbers of identities in certain areas (in order to possibly swell numbers leading up to voter processes), to mixed perceived purposes of identity (e.g., public good vs. opportunity for extraction). The implementation recommendations within this study are informed by the existing contested space for identity and are intended to minimize the potential of conflict and contestation.

Voter list dependency on registration system

One of the primary motivations for this report is the FGS's need to establish a functioning voter list of all eligible citizens for elections. If the government decides to implement a national ID system to underpin voter registration, it is therefore important that this ID system interoperates efficiently and effectively with the electoral commission and its requirements. Fundamentally, an effective voter registration system separates eligibility decisions from the voting process and:

1. Ensures eligible voters' right to vote
2. Provides an opportunity for voters to seek a review of ineligibility decisions (appeal)
3. Provides an opportunity to challenge the presence of other names on the list
4. Provides information for use in election day logistics planning
5. Helps to balance constituency sizes based on population size, where appropriate
6. Helps ensure voters know where to vote on election day
7. Helps ensure each voter can only vote once on election day

Notwithstanding the above advantages, it is possible to hold elections without requiring all voters to register in advance. If an effective voter registration system is not in place in advance, then:

1. Eligibility would need to be assessed at the polling station. This could be considerably more time consuming and would likely be less reliable than assessing eligibility in advance, but it is expected that a large majority of citizens could be assessed positively on the spot and granted the right to cast a ballot.
2. The advantage of seeking a review of decisions to refuse the right to vote, which in individual cases is critically important but which is likely to affect relatively few people, would be lost if registration were to take place on election day.
3. Another drawback of Election Day registration is not being able to challenge the voting right of others.

4. Election Day logistics would be far harder to plan, notably in terms of ensuring enough polling station capacity and materials are available. A large surplus to expectations would need to be provided, which would increase costs and introduce higher risks of electoral fraud such as ballot stuffing.
5. Without preregistration, the size of the electorate, and therefore the number of voters in each constituency, would need to be estimated using existing, much less accurate estimates.
6. If voters are able to vote at any polling station, it may even be easier to inform the electorate of polling station locations.
7. While indelible and/or UV finger ink can be deployed as a stopgap measure, it is not as reliable in preventing multiple voting as when a biometrically controlled single registration system is implemented, thereby ensuring no person can hold two ID cards and no person can be included in the voter list at more than one polling station.

   In addition, no advanced registration means that no voter would need to carry any ID card or voter card to the polling station, which may be welcomed by some in areas of high security risk.

A third option—that of simple, non-biometric registration in advance—would help greatly with logistics planning, although it would do relatively little to prevent determined voter fraud due to the fact that the same voter could register in two or more locations, possibly with slightly different (but unverifiable) personal details, and there would be no way to detect such a duplicate registration.

As a one-time exercise, holding an election without advance biometric registration would be very possible and would be preferable to rushing a national identification scheme to the extent that it did not effectively achieve its long-term objectives. Drawbacks would include expecting some (but relatively few) cases of multiple voting, and some inaccuracy or inconsistency in assessing voter eligibility. On the whole, it is quite possible that the representatives so elected would be for the most part, if not completely, the same as if an effective voter registration system had been in place. The biggest drawbacks would be: (1) that after the election Somalia still would have no usable voter list for use in subsequent elections, and (2) that voter confidence in the credibility of the electoral process would be lower. If subsequent elections were then also to be run without advance registration, this latter point would most likely become a much greater and ultimately a critical drawback.

In the absence of a credible national identification scheme and low birth registration rates, the registration of voters may become an exercise with low quality data, marred with inclusion errors and multiple entries, as there is no reference within which the voter list may be constrained. In a volatile country, where the trust deficit between the state and its citizens is wide, preparation of a voter list without a credible identification system may result in complaints of electoral fraud. The high cost of preparing a one-off biometric voter list has contributed to a significant increase in the overall cost of African elections. In Nigeria, for example, the adoption of new technology to vet voters during the 2015 general elections pushed the budget of the Independent National Electoral Commission (INEC) to around US$603 million, roughly US$7.90 per voter.[25] In Kenya, the 2013 budget of the electoral commission was US$293 million, which translates to US$20 per voter. In Uganda, where minimal technology was used to register voters, the costs were considerably lower, but still US$4 per voter was spent.[26] For a similar budget, a robust identity system can be established that can be converted into minimal-error voter lists and used for other development initiatives like financial inclusion programs, strengthening state capacity to improve service delivery and to improve health and education provision.

Some foreign partners and international donors are growing tired of the increasing costs of polls at a time when aid budgets are under pressure. One consequence of rising costs and donor belt-tightening is that an increasing proportion of the cost of elections is falling on African taxpayers. This should be a cause of concern. Consider Zambia, where the 2016 elections represented 1.4 percent of the national budget,

25 AC Vol 56 no 8, INEC and High Tech.
26 Technology Against Tricksters, Africa Confidential Vol 57 No 18, published 9 September 2016.

more than was allocated to the government 'Empowerment Fund', Fisheries Development Fund, and Food Security program combined. Hence, an investment in a robust ID system instead of in a one-off voters list could result in more dividends, including high quality voter lists.

Threshold for voter identification requirement

The ideal and ultimate goal would be that all adult citizens would be registered in a national or nationally coordinated scheme and that this registration database would be used in preparing voter lists. Any persons not so registered would not appear on the voter list and therefore would not be eligible to vote. Clearly such registration could only be considered an electoral requirement once an overwhelming majority of potential voters are registered in the scheme. When Pakistan was considering migrating to such a state registration requirement, it was determined that 95 percent of adult citizens being registered should be the threshold beyond which the advantages of the more accurate state registration records would outweigh the disadvantages of having unregistered citizens unable to be included in the voter list (and therefore disenfranchised.) Of course, once this figure is thought to have been reached and the election planned to use state registration as a requirement, an additional registration drive would be necessary in the run-up to the election to make sure every citizen has a reasonable opportunity to guarantee their inclusion.

If, in the later planning stages of elections, it is considered that insufficient citizens have been registered in the national identification scheme to justify inclusion in the scheme as a prerequisite to electoral participation, elections could still be held, either with a hybrid voter registration program or with Election Day registration. People already with national ID cards by then would not need to actively register in any hybrid voter registration scheme nor would they need to provide documentation other than the national ID card if Election Day registration were to be supported. Inking of fingers would need to be prioritized as a means of preventing widespread multiple voting.

The above presupposes that the citizen registration system will be sufficient to permit the NIEC to allocate voters to polling stations without need for any further registration of, or communication with, individual voters; this should be an absolute requirement of the citizen registration scheme to be developed.

5. Requirements

Identity management systems are understood to include policies, laws, institutions, governance arrangements, practices and procedures, hardware and software, and government capacity to support the implementation and operation of civil registration and legal identity systems. The fractured and stand-alone existing civil registration, disparate functional identification systems, and absence of any viable voter registration system are fueling demand in Somalia for a reliable, integrated identification system. The discussion in the preceding section endorses the requirements of such an integrated system in the light of demands from the potential users. This section discusses key requirements of such a system based on the findings and challenges identified above.

Establishing a trustworthy dedicated authority

National Identity is the purview of the federal government, according to the constitution. In some countries, (such as Pakistan, Peru, and others) the key to identity is establishing a dedicated institution (an authority or program office under the Ministry of Interior and Federal Affairs) that manages the identity life cycle (enrolling, validating, issuing, authenticating, and managing the data in a secure environment while protecting the privacy of citizens).

If the electoral commission is to be successful in achieving a high quality voter list, the scope and quality of the data it relies upon will be critical. If it relies on a national ID system, this pushes much of the responsibility onto whichever body is performing the citizen identification and registration services. This body must be not only effective in its registration and data management responsibilities, it also must be trusted by the electorate. In Macedonia, for example, the scheduled 2016 elections were postponed twice because the Ministry of Interior data, upon which the voter list is legally based, were felt by many opposition groups to be of insufficient quality to prevent electoral fraud, such as multiple voting and ghost voting.

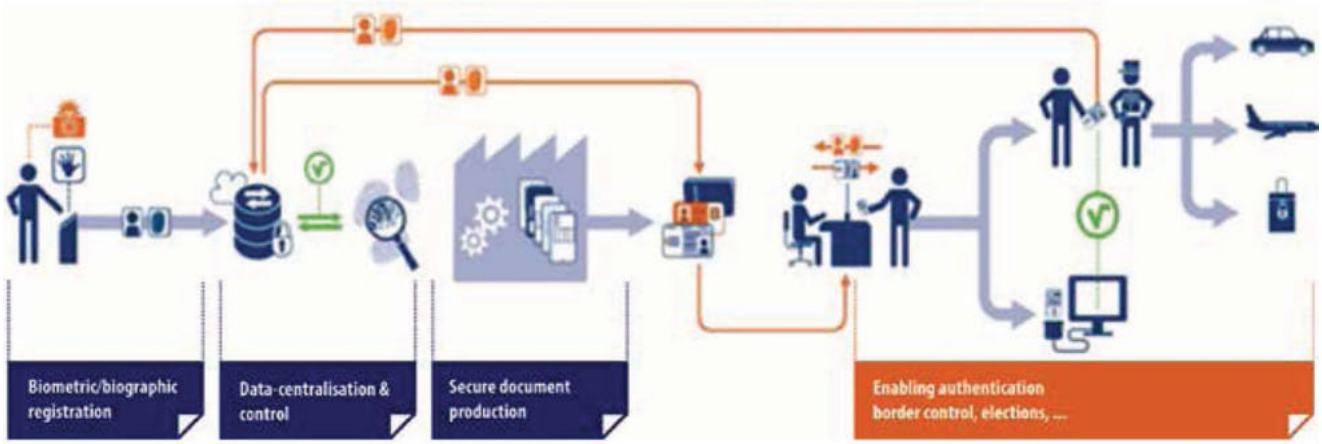
How this trust among the electorate is gained will be a vital factor in the electoral success of any voter registration system implemented. If voter registration relies on all voters having registered through a new Somali citizenship identification scheme, the scheme itself must be created and managed in as impartial a manner as possible. This could be achieved either by the creation of an independent body mandated by government or by a body formed with representatives from existing government ministries and state representatives, such that ownership and decision making is less likely to become politicized.

Such trust in the non-politicized nature of citizen registration will be doubly important if the data collected are to be used for many other purposes, such as the eventual provision of state services like education or medical support, or access to privatized facilities such as mobile telephony. Accusations of preferential treatment for particular locations or of particular groups of people in society are common in many countries fearing deliberate electoral bias; it will be equally important not to risk eroding electoral confidence by creating registration doubts through non-electoral politics or private involvement.

Nationally coordinated data

There has to be a coordinated effort to collect, store, maintain, and share citizens' data in a way that ensures citizens' privacy through proper checks and balances. With open architecture, the data warehouse has to be connected with key institutions through a secure virtual private network (VPN). An integrated multifunctional identity system should have clear roles and responsibilities of institutions in terms of data sharing and ownership.

Figure 3: Coordinated Data in a System



Source: Authors' elaboration.

As discussed below under the Institutional roles section, a public-private partnership could enable outreach to underserved areas of Somalia. Universal coverage would likely only be possible with using private sector infrastructure in tandem with government to reach out to the citizens for registration.

Proper legislation of data collection, storing, granting ID cards, revoking identities, and sharing data via nondisclosure agreements (NDAS) needs to be introduced. Strong Standard Operating Procedures (SoPs) must be developed to share the relevant data for specific uses, e.g., with an agency or organization such as NIEC, and Immigration and Passport Office, etc. Applications can be developed to authenticate the credentials of a citizen for a specific service, benefit, or entitlement. For example, an application for banks, financial institutions, and financial inclusion programs can be developed to ensure KYC. The institutions or agencies that receive the data or subset of data may choose to verify the subset of data again for their usage only. For example, NIEC may get some fields from a national database (unique ID number, name, father's name, mother's name, photograph, age/date-of-birth, and address) and conduct random checks to verify the accuracy of data while preparing voter lists by visiting the corresponding addresses. If the voters choose to use a different address, NIEC can change their address to a constituency where they would like to vote as per electoral laws. Assuming that age of voting and eligibility to apply for an ID card is the same, all new registrations have to be populated in the NIEC database on periodic basis.

In addition to voter trust and data correctness, the citizen data received must be sufficient for the NIEC to be able to make its necessary decisions regarding voter eligibility and constituency inclusion. Depending on details of electoral laws not yet drafted, this could potentially require that NIEC has access to individuals' status regarding such things as citizenship category (notably where honorary citizenship is not associated with the right to vote), criminal status, or profession (where such may be essential in determining eligibility). Some of this information could reasonably be sourced prior to each electoral event, by NIEC receiving information directly from ministries or other official sources.

One important piece of information the NIEC will certainly need is the location of each eligible citizen, such that they may be allocated to a polling station. It is vital that enough detail is recorded during citizen registration for this to be possible, since there is no other source from which such information could be supplied, and collecting this independently by the NIEC would be an unreasonable and near impossible task. There are several possibilities for achieving this during citizen registration; the most promising options involve presenting each registrant with a choice, supported with detailed maps and reference information. Each citizen would then choose either which of the predefined and marked zones they live in, or which of the predefined and marked locations would be easiest for them to get to for polling on Election Day.

Role of National Independent Election Commission (NIEC)

It should be the responsibility of the National Independent Election Commission (NIEC) to collect, manage, and—where appropriate—publish information on citizens and electoral eligibility. Such responsibility should be clearly and explicitly defined and respected. NIEC should also be the body which makes the decisions as to which citizens appear in the voter list at which locations and for which constituencies they may cast ballots, of course with the requirement that it meets all existing constitutional and legal requirements. The sources of data used by the electoral commission in performing its roles may be many and varied; notably, many such commissions rely heavily on state registration systems for initial data. Typically in such cases, the commission will interpret and assess the data received by other agencies, then use additional sources of information (e.g., from other state agencies such as immigration, death register, prison records, etc., plus information directly obtained from the electorate) to make final decisions as to eligibility of voters and the correctness of voter data.

Technical options and standards

The identity system for Somalia should be context appropriate and adaptable for long-term needs (instead of a one-off objective of developing a voter list). It should have an effective architecture blueprint with measures to ensure robustness, integrity and resilience, interoperability, proportionality, vendor and technology neutrality, and fiscal and operational sustainability. There will be a need to establish a set of guidelines, including data privacy and access protocols, for common standards applicable to any identity system in Somalia.

The ICT system and network ecosystems must be robust, and must have protection of records and database(s) as a key priority. There should be standard operating procedures for capture, encryption, storage, access, backup, disaster recovery, and business continuity for the ICT system and network. This is particularly important for a system that operates in an environment of a highly volatile security threat.

In addition, it is vital to follow at least minimum common technical standards and outcome-based approaches. Standards can help ensure that the building blocks of identity systems are interoperable, testable, and can meet the desired performance targets by establishing universally understood and consistent interchange protocols, testing regimes, quality measures, and best practices. The effectiveness of an interconnected and interoperable national identification system cannot be ensured without standards. Thus, the identity life cycle (enrollment, identity proofing, identification/deduplication, non-repudiation, verification/authentication, and updating) can be strengthened by the use of standards. In Somalia, some financial standards such as Financial Action Task Force (FATF) clause 10 should play an import role. The FATF recommendations are the internationally endorsed global standards against money laundering and terrorist financing: they increase transparency and enable countries to successfully take action against illicit use of their financial system.

Looking at the current Somali identity landscape, the mission observed that, with the exception of the passport, identity documents do not follow any standards. The Somali passport is the only identity document complying with very basic parts of the ICAO (International Civil Aviation Organization) standards for travel documents. It would be advisable that any new ID card design complies with ICAO 9303 standards for a Machine-Readable Travel Document (MRTD). This would immediately enhance the FGS image within the international community. Table 3 lists key minimum technical standards, with a brief description and purpose (why it is proposed). Compliance with these minimum relevant technical standards, based on the unique ID agreed upon by FGS (e.g., contact card or contactless card), would increase the robustness of any identity system in Somalia.

Table 3. Selected Technical Standards

Standard	Description	Purpose
ISO/IEC 19785 (CBEFF)	Common Biometric Exchange Format Framework	Interoperability
ISO/IEC 19794 Series	Biometric Data Interchange Formats—Parts 1 to 8	Interoperability
ISO/IEC 15444	Image Compression Standard	JPEG Coding System—Interoperability
ISO/IEC 29794 Series	Biometric Sample Quality	Matching Performance
ISO/IEC 7810	Identification Cards—Physical Characteristics	Defines standard sizes of the card
ISO/IEC 7811	Standards for Magnetic Strip-Based Cards	Interoperability
ISO/IEC 7812	Identification of Issuers—Numbering System of Card	Interoperability
ISO/IEC 7813	Standard for Financial Transaction Card	Payment Cards Interoperability
ISO/IEC 18013 Series	Standard for Drivers License Cards	Interoperability
ISO/IEC 7816	e-IDs/Smart Cards—Contact Card Standards	Interoperability and Interconnectivity
ISO/IEC 14443	e-IDs/Smart Cards—Contactless Card Standards	Interoperability and Interconnectivity
ICAO 9303	Standard for Machine-Readable Travel Documents	Interoperability of MRTDs
ISO/IEC 8583	Standard for Payment Cards with Magnetic Strip	Interoperability
EMV	Standards for Payment Cards	Interoperability of Payment Cards
ISO/IEC 24761	Authentication Context for Biometrics	Remote site biometrics authentication
ISO/IEC 24760 Series	Framework for Management of Identity Information	Protecting Privacy and Security
ISO/IEC 29109 Series	Testing Methodology for Biometric Data Interchange	Interoperability
ISO/IEC 24745	Security Techniques	Biometric information protection
ISO/IEC 29115	Entity Authentication Assurance Framework	Interoperability and Interconnectivity

Source: ISO www.iso.org/iso/home.htm, ICAO, GSMA, FIDO.

In the above table, some standards rely on which form of ID card is selected for the Somali population. For example, if a chip-based contact card is to be developed, then ISO/IEC 7810 with ISO/IEC 7816 would be applicable. However, if a contactless card is chosen, where a chip is embedded within the card and is not visible, then ISO/IEC 7810 with ISO/IEC 14443 are applicable.

The standards address the challenge of interoperability, interconnectivity between various systems and devices, and play a key role in ensuring security and privacy of citizens' information. Additionally, it is advisable to use open source software to avoid vendor-lock in situations.

Legal reform

The introduction of an identification scheme should be accompanied by a detailed review of existing legislation and drafting of additional laws where significant gaps are found to exist. There is insufficient legislation in place to clarify the roles and responsibilities of different identity actors, protect user rights and privacy, and adequately protect and secure data. The creation or endowment of a dedicated identity

authority will require new legislation to delineate clear lines of authority and accountability regarding identity management. The principal areas of concern identified thus far are:

- The draft citizenship bill, or similar, has yet to be passed.
- There is no agreement with States on the legality or modality of sharing citizens' personal data at a federal level.
- There is no legislation in place to protect citizens'/voters' personal data from being used for purposes other than those required for the provision of government services and the facilitation of electoral events.
- There is no legislation in place to specify or restrict the personal data to be collected and maintained for any citizens/voters. This would include limiting data access to those records and fields as required by any state body or other organization to perform its duties.
- There is no electoral law, from which it would be expected to be able to determine which data fields would be necessary for the NIEC to access for each citizen. For example, it is not clear at present whether each citizen's clan membership/origin would be required for any electoral purpose other than the verification of political party supporters.
- There is no legislation to govern responsible use of electronic data, such as requiring adherence to any international standards when storing, transmitting, or accessing citizens' personal data.

Budget and costs

Budgeting for an integrated multifunctional identity system for Somalia should be looked at as a public investment and hence subjected to a rate of return analysis like any other investment. The fiscal costs will depend on different factors and choices (infrastructure, technology, multi-modal, or single biometrics, whether cards are used and the types of cards, points of registration, training of staff, etc.), as well as whether the ID system can provide commercial services such as KYC compliance authentication at a fee, which may reduce overall costs. Additionally, the ability of a national ID system to act as the source of voter data and lists would represent a huge cost savings, eliminating the need to conduct expensive voter registration exercises ahead of each election.

Successful ID systems must provide benefits at minimal, or at least acceptable, costs. For electoral participation, the cost of documentation specified as a prerequisite for voter registration must not provide a barrier or disincentive. Based on standard cost ranges and estimates of potential savings—for the budget and also for users—a strong ID system can be a very good investment. The savings from reforming just one of India's numerous programs were sufficient to recoup the entire costs of the Aadhaar program over about one year. Yet there are many examples of costly programs that have failed to provide benefits.[27] Cost standards do not widely exist for ID programs, however, Table 4 provides some indications of approximate costs.

Successful programs require a combination of an effective supply of ID services and also a demand for them. They should be developed through an inclusive consultation process (a "user group" or a "social cabinet") and also with some financial incentive to the ID agency based on ID uptake and use (Pakistan, Peru, and others). This will also help to ensure that the program includes a common understanding of the necessary Point of Sale (POS) infrastructure. Use is critical to motivate the demand for registration and ID, for example through linking them to social grants (South Africa, others). It is also essential to help ensure that data such as current address are reasonably updated or that countries can keep the links between their population, family, and household registers reasonably current (Pakistan).

27 www.cgdev.org/sites/default/files/Using-ID-for-Development_%20Some-Guiding-Principles%20_CGDNote.pdf

Table 4. Approximate Costs of ID Program Components

Component	Description	Cost per Person
Enrollment (investment)	Capturing biometric and biographic identifiers	$3–$6 (Aadhaar low-cost $1.16)
Register Maintenance	Database management: cleaning, updating, checking	+15%–25% per year
Authentication (investment)	Issuing smart cards (if used) or other credentials	$1–$5 per card + $0.50 for digital certificates
Authentication (maintenance)	Maintenance	+$0.05–$0.10 per year

Source: Alan Gelb, Center for Global Development. Presentation at ID4D Africa Conference, 2016.

Costing examples from some countries include India at US$1.16 per head (note, however, that India does not issue an ID card, but rather issues a unique ID card number), Peru at US$4 per head, of which 85 percent of the budget is financed through charges to businesses (primarily for KYC authentication at 30 cents per verification), and Pakistan at US$1.2 per head for which the entire ID management system is self-financing and financially sustainable. The examples provided are fairly cost-effective examples in countries that are relatively more stable than Somalia. Globally, country costing examples have varied from as low as US$1.16 per head up to approximately US$10 per head. In general, the costing for an identity system would need to take into account the following:

1. Investment costs: central facilities for data entry and management, backup, disaster recovery site, decentralized centers
2. Core hardware and software: ID registry and database, biometrics engine (ABIS)
3. Enrollment costs: including data entry, checking, due diligence, management
4. Credentialing: card provision, personalization, printing, checking, and distribution
5. Costs of alternatives: smart cards, simple cards, mobiles, no cards
6. Communications network, mobility support
7. Hiring and training of staff
8. Advocacy and public awareness campaign
9. Security-related costs

Election costs vary from country to country. On average the cost to hold an election for an in-country process globally is cheaper and the out of country voting is considerably higher, depending on how voter registration and ballot casting takes place, at US$5–20 per registered voter. Therefore, if procedures are put in place, and there is active and engaged participation among the diaspora communities, additional resources ranging from US$5 million to US$20 million may need to be invested in the electoral process for out of country voting. This cost may be prohibitively expensive to the electoral process, depending on donor support.

Research conducted by Alan Gelb and Anna Diofasi in the paper titled 'Biometric Elections in Poor Countries: Wasteful or a Worthwhile Investment?' concludes that 'that if biometrics are seen as a tool for delivering more credible elections—as both donors and local political actors claim it to be—an expectation of large potential losses from post-election conflict would appear to justify the investment even if the expected impact of biometrics on electoral disputes were relatively small'. How effectively biometric technology can reduce the probability of violence depends on a number of factors, including the type of election fraud that is expected to take place and the political actors' level of commitment to a free and fair process.

Costs would need to be estimated for the start-up phase and continuing operations. It should be noted that costs will be higher than benchmark due to the security situation of Somalia. As discussed in the following section, Key options and recommendations, the FGS may want to consider a variety of arrangements for financing these costs, including a public-private partnership (PPP).

6. Key options and recommendations

There are a number of options and considerations presented in the report for the Federal Government of Somalia and other stakeholders, such as the Independent Electoral Commission, donors, and the private sector, to consider. The primary goal of the identity system is to provide every Somali citizen with a unique and authenticated identity in order to harness development and democratic benefits. The recommendations in this section are based on the aforementioned issues contained in the report including the tight timeline leading up to 2020; the issue of lack of trust; the lack of government presence in many populous areas; the possible delays in the development of voter, citizenship, and identity legislation; low capacity levels; the presence of the private sector; and security considerations. In some cases, the study team was able to make a clear recommendation; other issues will require more in-depth analysis to weigh the pros and cons in light of the Somali context.

Overall identity system development

The study suggests two options on the strategic choice of identity systems to adopt. The first option is to develop a foundational identity system (e.g., national ID card) that can be used as the basis of a voter list and other developmental applications by government agencies, international organizations, and private companies. The system is likely to be the most efficient and beneficial in the long term; however, it requires the government to prioritize the development of a national identity system before voter registration. This may be politically difficult, and means that delays in implementation of the foundational system could cripple the government's ability to develop services that depend on it.

The second option is to focus instead on creating new (and/or reforming existing) functional identity systems in parallel (e.g., a separate voter list, federal or state IDs, customer ID services for banks and remittance companies, etc.). While this may be the fastest short-term option, it misses an opportunity to develop a broader platform for service delivery that could strengthen overall government capacity and be a source of cost savings in the medium term. In theory, it is possible to establish a voter list or other functional registry first, and then use this as the basis of a broader national ID, as Bangladesh has done. However, this option creates a number of challenges, as the population captured in the voter list (typically citizens over the age of 18) is only a subset of the whole population (i.e., it would not include children, non-citizens, and those otherwise disqualified from voting). This would be a problem for many developmental applications of identification, which are intended to be inclusive of these groups (e.g., school enrollment, health care, drivers' licenses, tax ID number, and assistance to refugees, etc.).

With either option, the FGS has an additional choice to make: should a new system be created from scratch, or should it be built by reforming and expanding existing systems?

RECOMMENDATION: Create a foundational identity system first, achieving common standards and open sources to enhance interoperability

The building blocks of a robust, incentive-based foundational identity system should be established first as an investment to the country's future. The objective of the suggested identity system would be foundational, following common standards and interoperable for multiple purposes, such as the provision of state or other benefits including:

1. Voter registration and developing electoral systems
2. Service delivery, including remittance services
3. Improve security capacity of the state

4. Securing national borders and responding to security threats
5. Rolling out financial inclusion and social safety net programs
6. Improving population data for planning purposes
7. Improving health care by recording vaccination against deadly diseases and providing emergency care
8. Improving education provision by linking student records and reform programs, as well as teacher's registry to a functioning ID system

Gradually, the population can be registered based on verifiable documentation, if any is available. Examples of acceptable documentation for identity proofing may include a birth certificate, voter ID of Somaliland, ID card of Puntland, school certificate, police report, employment certificate, driving license, bank account, registration of SIM card form, or beneficiary/entitlement account with a donor agency. Additionally, local authorities or elders may certify identity and act as guarantors of individuals. As an identity is enrolled, the database based on 'one-person, one identity' can easily be converted into 'one citizen, one vote' by transferring the records of eligible voters to the National Independent Election Commission.

There will be a need to establish a set of guidelines, including data privacy and access protocols, for common standards applicable to any identity system in Somalia. Therefore, regardless of the option chosen, the study makes a strong overall recommendation that all identity systems in Somalia aim to achieve common standards and to use open source software to enhance interoperability.

RECOMMENDATION: Start fresh with a new, integrated system

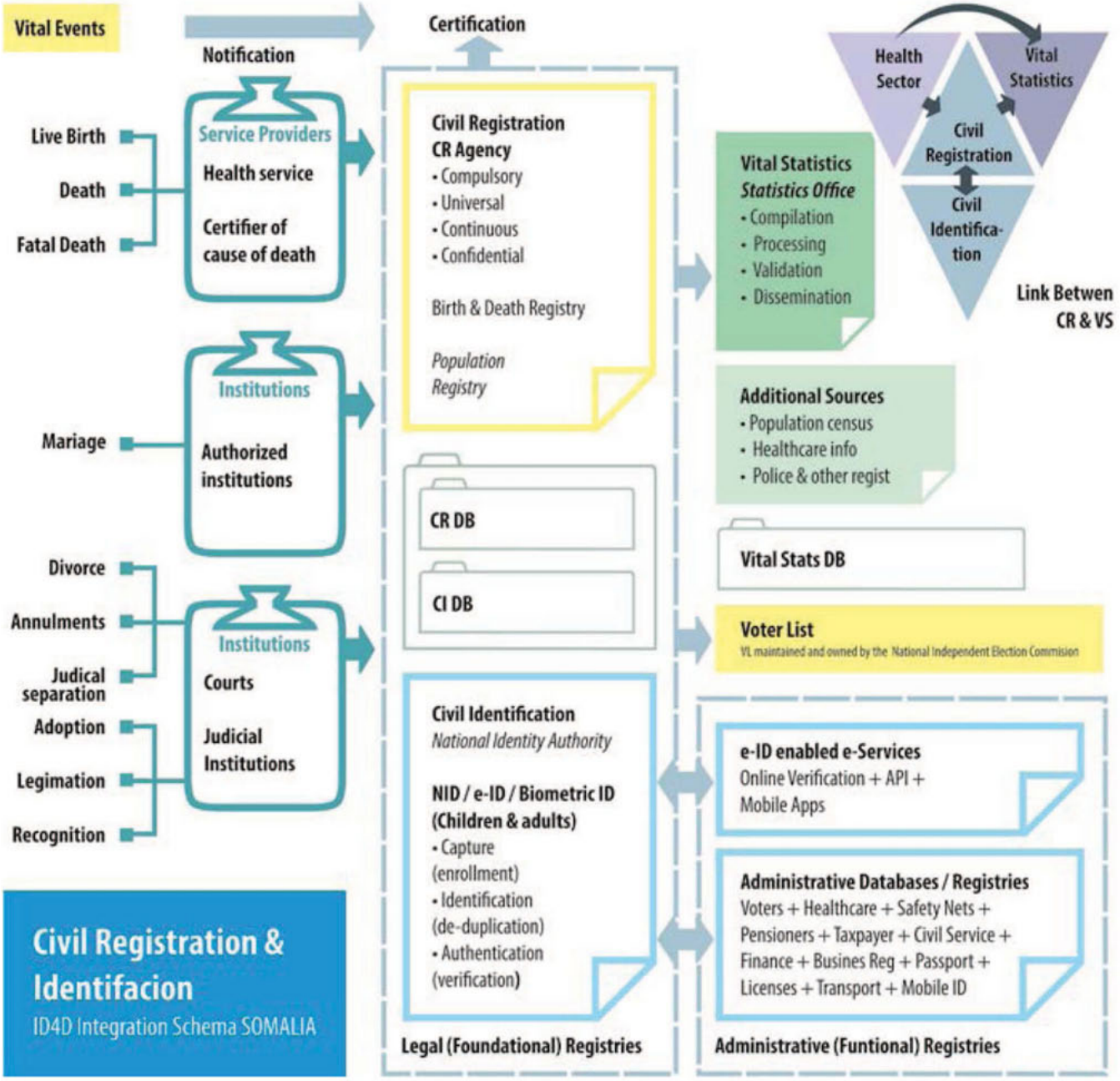
At the moment, the study suggests that there is no existing comprehensive identification system that can be transformed into a functioning one for the wide range of uses currently considered. Instead, it is recommended to start afresh with an incentive-based ID system with open architecture, where existing ID cards, voter ID, birth certificate, driver's license, passport, SIM card or food cards (by UN) can all become potential breeder documents (for authenticating identity information), among other forms of verification, which can be used to establish identity for the new system.

The capacity of civil registration institutions at the local (municipal) level could be built simultaneously so that birth, death, marriage, divorce, and other vital events can be recorded accordingly. An ID card and/or digital identity should be mandatory for entitlements or benefits claimed from the state or any international donor agency, SIM issuance and verification, opening a bank account, voting, and applying for a passport. The study team reviewed the World Bank's ID4D integration schema for an integrated identification system and recommends it as an optimal design strategy in the context of Somalia. As elaborated in Figure 4, the key components and interfaces of this design strategy are civil registration (CR), civil identification (CI), voter list (VL), and vital statistics (VS) modules. This strategic framework incorporates institutional and operational arrangements in the context of Somalia and realizes that there may be a number of integrated foundational registries supporting needs of Somalia.

RECOMMENDATION: Use existing data to seed the system where possible

Somalia is suffering from violence, war, a trust deficit, and terrorism. Although these disasters have weakened the existing ID systems, the need to reach vulnerable communities and IDPs increases. This combination creates an opportunity to drive demand for a new ID system. At the moment, there are various organizations/identity systems that are being designed/operated to reach specific vulnerable populations, specifically IDP's and refugees through UNHCR, WFP, and NCRI databases. Ultimately it would be beneficial if data from these systems are utilized for identity proofing, and populated into a National Identity System to generate unique IDs for these vulnerable communities, subject to a discussion of privacy concerns and user consent regarding the use of data. Likewise, private business such as the telecom sector, mobile remittance ventures, and banks have lots of customer data. It may be possible to use their customer data to generate unique IDs, and a mechanism can be developed to use their touch points, centers, business units, and networks for biometric enrollment and subsequent card distribution. The data from existing

Figure 4: Recommended System Design



Source: World Bank ID4D IMSA Framework with Author's customization for Somalia environment.

identity systems, if available, can be used to verify biographic information of the identity holder to assert the identity. This would hedge against the risk or possibility to bind a stolen identity to someone else's biometrics.

Data collection method

The FGS must determine whether personal data should be collected through a surge mechanism (e.g., a registration drive) where there is a concerted one-off effort to enroll individuals, and/or whether data should be continuously collected over time.

RECOMMENDATION: Combination of organic growth and mass enrollment with continuous updating

The study recommends a combination of approaches. Organic growth of registration based on the need to access services should be encouraged; for this it will be necessary to work with service providers to introduce mandatory enrollment for access to services at the earliest opportunity. Advantage should also be taken of opportunities for mass enrollment, such as during disaster response operations; plans should be put in place for this in advance such that it can be made operational at a short notice. If necessary, a mass enrollment campaign can help drive demand and inclusion (e.g., by registering in remote areas) and register many people quickly. However, a continual process is also necessary to ensure that data are updated, mistakes are corrected, and those turning the age of majority after any mass campaign are not excluded. This is particularly important for an identity system (either a foundational or a voter ID) that will serve as proof of identity for an election. Furthermore, early registration and continuous updating will help de-link data collection from any perceived political process. This recommendation is based on reducing the security and duplication risks to citizens and data collectors by avoiding one-off surge exercises.

Choosing facilities for registration

Another consideration is whether the government should use existing governmental or nongovernmental facilities (currently used for other purposes) for registration, or whether new, identification-specific facilities should be created for this purpose.

RECOMMENDATION: Use existing infrastructure

The study recommends that existing facilities be utilized as they are already 'accepted' in locations that may be contested or controlled by entities such as Al-Shabaab, but also because costs will rise significantly

and registration will be delayed if new facilities are developed. Such existing facilities could include private sector service providers such as remittance or telecommunication companies as points for the registration of people. Educational institutions such as universities, which also have access to Internet bandwidth, could also be used for registration hubs.

Linking ID to civil registration

There are a number of choices available to the FGS regarding the integration of civil registration with the ID system, as well as the management of civil registration itself, including whether or not to make the same federal-level agency in charge of both.

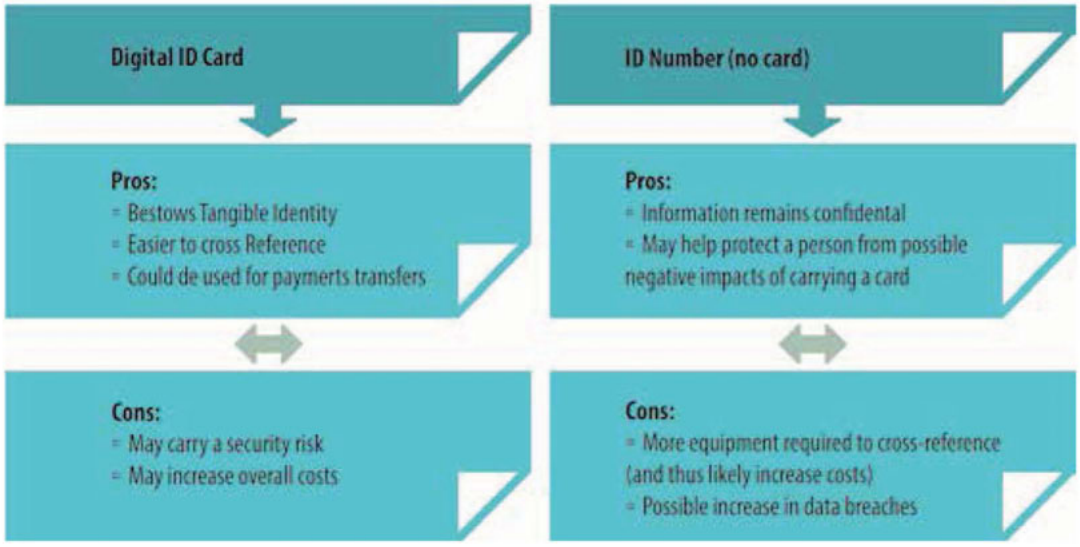
RECOMMENDATION: Develop civil registry in parallel

The study suggests that the civil registration process should be managed at the state/municipality level and that it should be done in parallel with the national identity system, as it will be likely to take longer to develop than a national ID. However, any civil registration process will require the same standards as, and interoperability with, the identity system.

Type of credentials

The FGS will also need to consider whether to issue an ID as proof of identity for authentication, or whether to rely instead on a unique identification number in combination with biometrics to authenticate individuals via the cloud (or both). If a card is chosen, the government will also need to determine the card technology (plastic with QR code, smart card, etc.). There are advantages and disadvantages of both options, as per Figure 5:[28]

Figure 5: Options and Decisions Diagram Card/No Card



Source: Author's elaboration.

28 In addition, an ID-in-the-cloud solution requires connectivity to authenticate securely. This may not be a feasible option in much of Somalia, unless it is combined with a mobile ID (e.g., using two-factor authentication, public key infrastructure (PKI), etc.).

RECOMMENDATION: Consider a mix of credentials and give users a choice

Due to the security situation and threats from Al-Shabaab, there may be a disincentive for citizens to apply or to carry an ID card in certain areas. Hence, a mixed model may be beneficial in the Somali context, and the ID card could be optional. Alternatively, multiple types of cards could be available, for example, a cheap plastic card with QR code, as well as a more expensive smart card conforming to ICAO MRTD standards. This could help to bring down costs and allow differential pricing that remains inclusive (e.g., basic cards could be free, and advanced cards could come with a fee). The choice could be given to the people. In either case, the unique identity will be created using a biometric system after going through a whole identity life cycle (registration, issuance, authentication, and management of data).

Inclusion of diaspora and noncitizens

Due to decades of civil conflict, poor economic performance, and weak institutions, as well as a traditional ethnic homeland that crosses nation-state borders, the Somali diaspora population represents one of the largest proportional diaspora populations in the world. As of 2015, the estimates for the global population of Somali diaspora (including those residing in neighboring states such as Kenya, Ethiopia, Djibouti, and Yemen) totaled roughly 2 million people. The diaspora community represents not only a significant population block, but also a significant economic, business, political, and cultural group within Somali society. As discussed previously, Somalia is a major receiver of remittances, as money is sent from the diaspora community to families living in the country. An important requirement of an identification system (or voter registration process) is to consider options for including Somali diaspora in a way that is legal, fair, and politically feasible.

Finally, although the priority of the FGS is to provide identification to citizens to serve as the cornerstone of basic democratic rights and entitlements, it is also important to plan for the provision of identification to such noncitizen residents in Somali territory, particularly those who are vulnerable due to refugee or stateless status.

RECOMMENDATION: Consider a special ID for diaspora members to facilitate a variety of benefits, including out-of-country voting

Many countries that recognize dual citizenship create incentive mechanisms like providing special ID cards for their overseas community to qualify for visa-free reentry and to provide the right to vote. The Somali diaspora needs to be included in the country's development and should therefore be included in the national identity framework. Conversations with diaspora association leaders indicated widespread interest in identification among diaspora members if this allowed them to participate in political processes, specifically voting in the 2020 election.

Given ongoing contestation as to whether the Somali diaspora will be eligible to vote, it is suggested that the FGS considers, in the meantime, that Somali diaspora could be registered with a special ID card that bestows certain rights, such as a waiver of visa requirements for visits to Somalia, but potentially differentiates the individual's rights from those of in-country Somalis depending on the emerging legislative framework.

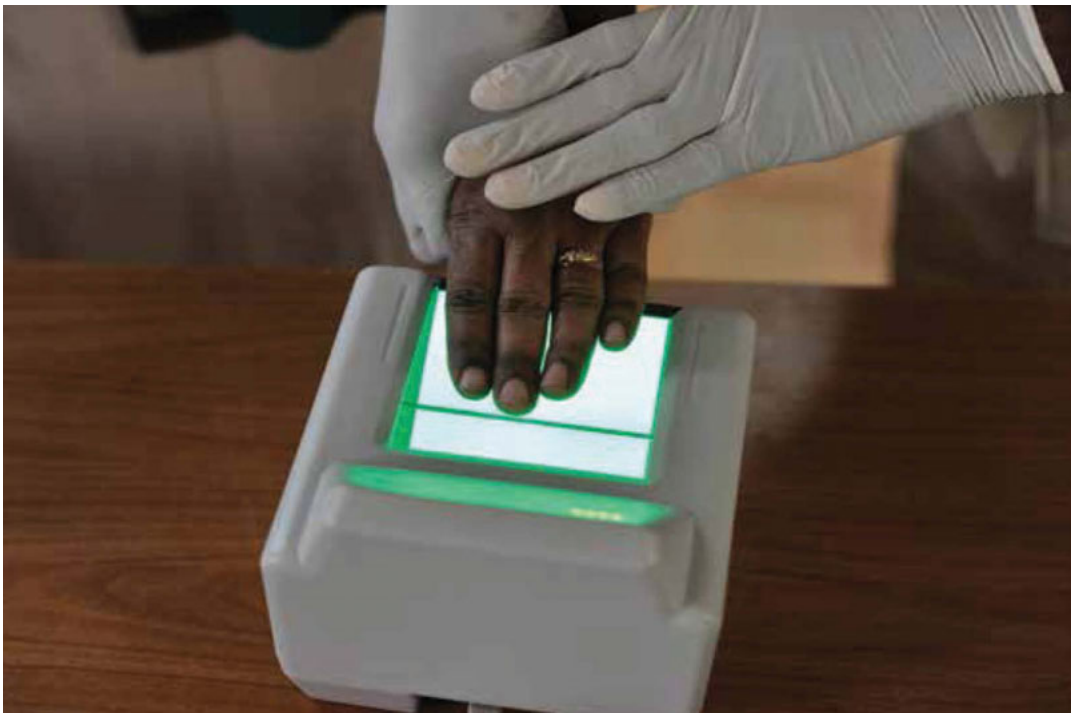
The NIEC, in consultation with the Ministry of Foreign Affairs and other relevant ministries, would need to design a comprehensive plan and detailed procedures for out-of-country voting. The special ID cards for Somalis residing outside of Somalia (these could be called, for example, 'National Identity Cards for Overseas Somalis', or NIDOS) can be rolled out through embassies and/or through private sector MTOs. Registration of Somali citizens living abroad, for a fee payable in the local currency of their residence, could become a source of steady foreign exchange and revenue which could defray NIS operation costs and cross-subsidize free identification for all citizens within Somalia. The team strongly recommends that registration for all citizens in Somalia should be provided free of charge.

Scope of data to be collected

The FGS will need to consider the scope of biometric and biographic data to be collected. The choice between implementing a single biometric technology or a fusion of biometric systems (fingerprint, iris, face, retina, or other) depends on many factors (for example, IT infrastructure, accuracy, cost, and cultural considerations). It is evident that multimodal systems are becoming popular because they produce better results with more accuracy, as multiple unique attributes are authenticated instead of reliance on a single attribute. The biggest driver in selecting between a single or multimodal system is accuracy, which is driven by population size.[29]

In addition, the scope of biographic data collected has important implications for functionality, cost, privacy, and security. Certainly, collecting more data fields (e.g., aunts and uncles, parent's addresses, etc.) will enable the use of the database for more functional applications, and may save resources as this data may not need to be collected at a later date. However, collecting more data fields can add to the initial cost of the system as enrollment time, data verification, and error rates increase. More importantly, however, collecting extensive and sensitive biographical data may violate individual's right to privacy, and could pose risks of abuse or misuse.

Based on global best practices, and in an attempt to obtain quality data to make socioeconomic decisions and statistical analysis, the study recommends that the below scope of data be collected. It should be noted, however, that there are significant cultural sensitivities on the provision of information within the Somali



29 Performance of a biometric measure is usually referred to in terms of the 'False Acceptance rate' (FAR), the false non-match or reject rate (FRR), and the failure to enroll rate (FTE or FER). The FAR measures the percent of invalid users who are incorrectly accepted as genuine users, while the FRR measures the percent of valid users who are rejected as impostors. In real-world biometric systems, the FAR and FRR can typically be traded off against each other by changing some parameter. One of the most common measures of real-world biometric systems is the rate at which both accept and reject errors are equal: the equal error rate (EER), also known as the cross-over error rate (CER). The lower the EER or CER, the more accurate the system is considered to be. Despite the tiny number of FAR or FRR errors which inevitably will occur, biometric systems have the potential to identify individuals with a very high degree of certainty, especially in a multi-model environment.

context and as such, these data field suggestions may need to be further refined based on what is realistic and what is acceptable. For example, in other countries, keeping data on citizens' ethnic background or religion is often contentious and inadvisable unless there are compelling advantages in doing so.

RECOMMENDATION: Multimodal biometrics

The study team recommends a multimodal biometric system in order to achieve data quality and hedge against imposters or failures of biometric technology. The team studied various biometric types (fingerprint, facial recognition, retinal, and iris, etc.) and recommended fingerprint and iris as the best choices for a multimodal system. Fingerprinting is the oldest biometric technology and has the largest market share of all biometric processes globally. Due to Muslim cultural considerations (hijab), females within the population in Somalia may show reluctance to be photographed. That leaves us with a choice of retinal or iris scans. The following pros and cons were considered while making a choice between retinal and iris scans:

- Retinal scan measurement accuracy can be affected by disease; iris fine texture remains remarkably stable
- Retinal scanning requires close proximity to an eyepiece, such as looking into a microscope; iris capture is a normal photograph process and can be performed at a distance
- Retinal biometrics are complex and have seen low commercial acceptance; iris scanning is widely accepted as a commercially viable modality
- Retinal scanning is considered to be invasive, iris is not considered invasive

In the light of the foregoing, the study team recommends that ten fingerprints and two iris scans should be collected for deduplication and authentication, in addition to a digital photograph (optional), where applicable. Following deduplication, a unique ID number would then be generated randomly, which would serve to identify the person throughout their lifetime.

RECOMMENDATION: Minimal biographic data collection

It is also recommended that the following biographic information be collected: name, father's name, mother's name (for family tree), mother's ID (if available), date of birth, address (current and permanent)/ region/district, gender, digital signature, mobile number (for SIM verification in future and mobile money), citizenship, profession, any disability (to roll out special programs as incentives for special persons), and highest level of education completed.

Since the national identity system will serve as the basis for future voter lists—and other potential systems such as regional IDs—it must also contain enough information to establish location of residency and perform polling station allocation for each registrant. This means that every registrant's record must contain geographic location in sufficient detail such that they could be allocated to a polling station on the basis of the information held that would allow them to be able to walk to that polling station without undue difficulty to cast a ballot on election day. A further complication may be for those that have multiple properties or addresses; in the absence of electoral law it would be reasonable to collect only data for one 'primary' address, but consideration should be given for the support of multiple addresses for each resident. NIEC should maintain its own data fields to assist in determining electoral eligibility and to associate actual polling locations for each voter. When citizen registry data is updated, NIEC may then need to review the changes and make any voter list modifications then required. Much of this should in practice be automated.

BIOMETRICS: Ten fingerprints, two iris scans, and digital photo

DATA: name, father name, grandfather name, mother name (for family tree), date of birth, village name for address/district/region/state, gender, signature, mobile number (for SIM verification in future and mobile money, profession, any disability (to roll out special programs as incentives for special persons), highest level of education completed, date of issue, date of expiry.

The voters list will contain the subset or extract of minimal data already listed in the above list.

It is essential that the address field(s) contain enough location detail such that voters will subsequently be able to be allocated to polling stations within easy walking distance, once polling station locations have later been determined by NIEC. The nature of this address information is likely to differ between urban and rural locations.

Compulsory ID versus incentive-based registration

The FGS has the choice of whether or not to make identification a legal requirement (i.e., mandatory), however this may not be welcomed unless there is a clear advantage of doing so.

RECOMMENDATION: Make ID optional but mandatory for key services

Rather than making the ID itself mandatory, it is suggested instead that identification be strongly encouraged by making it compulsory for access to key services and rights, such as voting, transferring, or receiving funds, SIM card registration, and taking exams, etc. Given Al-Shabaab threats to identity registration processes and Somali citizens' genuine lack of trust in identity systems in the past, it is likely that making identification mandatory will be insufficient to ensure uptake. Therefore, it is suggested that the FGS, with donors, explore options to provide an incentive for citizens to register. Incentives that other countries have used include access to disaster or humanitarian relief support (Pakistan), microfinance (Pakistan), student loans (Tanzania), and SIM cards, etc. The current drought response provides one such opportunity.

RECOMMENDATION: Use an incentive-based approach to drive demand

A robust foundational system thrives on incentives for citizens. In the case of Pakistan, for example, a similar initiative was carried out where disaster relief activities served as a catalyst to entice and register citizens in order to access relief support. The FGS can roll out financial inclusion and social safety net programs with the help of international donors, and these benefits and entitlements can be linked with an ID card or unique ID number issued by the government after biometric registration, resulting in increasing demand for the card. Similarly, an ID card for diaspora may entitle them visa-free entry for Somalis when they visit back home.

Institutional roles

Lastly, the FGS will need to decide the roles and responsibilities of Somalia's identity ecosystem, including which governmental and/or nongovernmental entities will create, own, and manage its various components.

RECOMMENDATION: Create a National Identification Authority

The study recommends that the government appoints an autonomous body (suggested name: National Identity Authority of Somalia, or NIAS) run by a stakeholder board of directors to implement the identity management system. NIAS can utilize the private sector (among other potential options) for registration points. Verification of identity needs to be of a high enough level of assurance to meet internationally recognized identity verification standards.

In order to kick-start the identity management system, the study recommends the creation of a project management unit (PMU), while a NIAS is being established. The voter list should be maintained by a constitutionally independent body with guaranteed state funding, the National Independent Election Commission. The NIAS needs to be interoperable and should be established at the federal level as proposed above with appropriate legislation. However, Civil Registration (issuance of birth certificate, marriage certificate, domicile, divorce certificate, driver's license, and other breeder documents) should be the responsibility of state, regional, or municipal governments. This would create a right balance of identity, civil registry, and election management authorities.

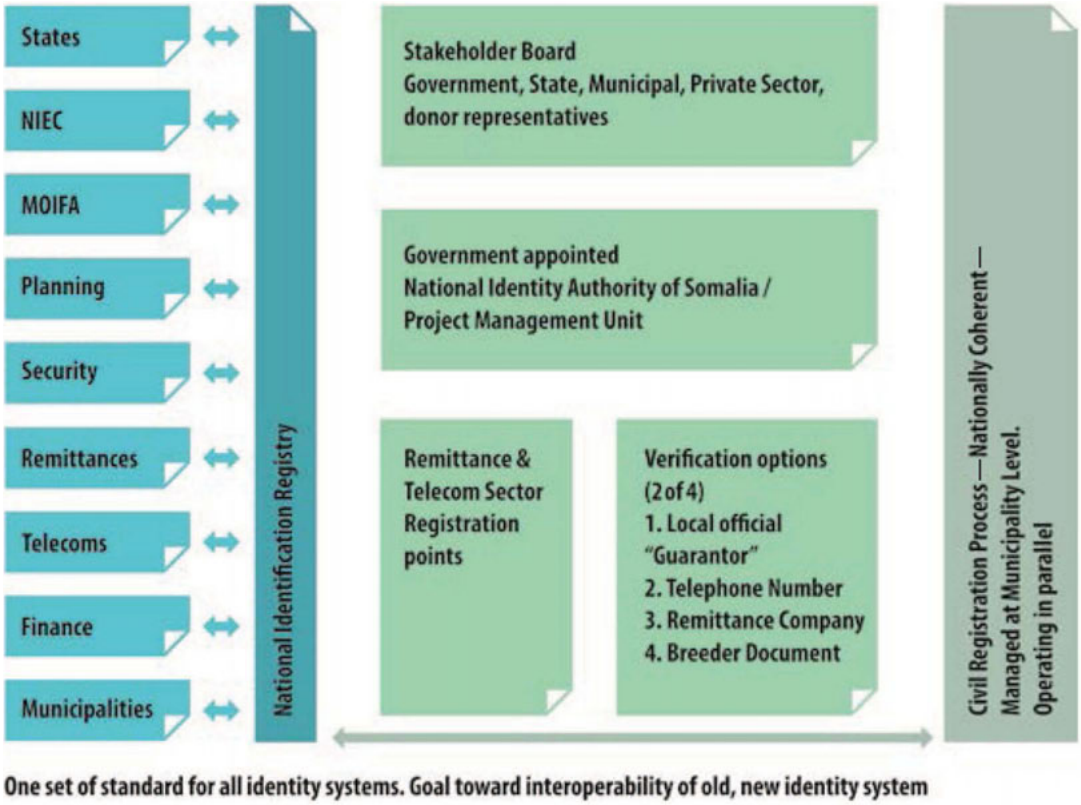
RECOMMENDATION: Consider PPP-type models and multi-stakeholder governance

Overall responsibility for legal identification remains with the government and the data management system (and the data) should be owned by the government. However, given the issues of capacities, trust, access, and lack of time, the study recommends further research into the feasibility and desirability of significant private sector involvement in the roll out of the identification system, including a potential a public-private partnership (PPP) model. The classic models of a PPP—e.g., build-own-transfer (BOT) or concession—involve a substantial role for the private sector in designing, building, and operating all or most aspects of an identity system for a set period of time, before transferring ownership to the government (e.g., national IDs in Albania and Chile). An alternative model of PPP that has emerged in a number of countries (e.g., India, Nigeria, Estonia, Finland, and Moldova) involves service agreements where the contracts with a private firm or firms to undertake a specific role in one or more stage of the digital identity lifecycle. Many of these partnerships go beyond standard procurement or outsourcing in that they involve significant capital investment and risk on the part of firms, are long term, and involve performance-based remuneration of firms. Assuming that potential pitfalls are addressed, these types of partnerships have the potential to capitalize on existing private sector capacity and infrastructure while de-linking the process to a large extent from the political process or political interference. In Somalia, a service-agreement type PPP—e.g., one that would leverage private sector penetration to enroll residents—may be desirable. Before undertaking a PPP, however, a deeper analysis of the legal and institutional basis for this type of arrangement is needed.

RECOMMENDATION: Clarify the roles and responsibilities of multiple stakeholders

It is suggested that there should be secure access to the data by multiple stakeholders for multiple purposes, cognizant of the need to develop data privacy rights, data access protocols and data access limitations. A model of the suggested structure is provided in Figure 6 below, reflecting the suggested governance structure and focusing on the interoperability of the model.

Figure 6: Suggested Governance Structure



Source: Author's elaboration.

Financing

Developing an appropriate foundational identity management system that is sustainably budgeted for and financed is likely to save costs over time and reduce fraud and leakages. Countries usually fund identity systems through budget allocations solely or through a mixed model, which includes budget allocations and commercial revenues from paid-for services such as customer verification. PPPs are also a potential option to reduce initial investment costs to government.

RECOMMENDATION: Subsidize IDs to ensure inclusion

Given Somalia's current and foreseeable budget deficit, and low income levels of Somali citizens, it is recommended firstly that the identity card/number should be provided for free in order not to be a barrier for the poor; this is of particular importance if registration is to be a requirement for inclusion in voter lists. Secondly it is suggested that investment costs for an identity management system be provided primarily through donor support, but that the fiscal model developed ensures that, at a minimum, ongoing costs are covered by commercial revenues derived from services such as KYC verification or expedited services. Further work will need to be carried out to develop a refined budget and costing model for Somalia.

RECOMMENDATION: Assess the financial sustainability of a PPP

As discussed above, a PPP-type arrangement could help leverage the capacity of the private sector to delivery identification in Somalia. This type of model would involve shifting some of the fiscal burden of the identification system from the government to the private sector. The sustainability and risks of such an arrangement should be carefully considered, specifically with regard to:

- Investment, operations, and maintenance costs of the system
- Potential benefits from its use including fiscal savings as well as the wider benefits
- Extent to which the costs of identity management services can be covered by service charges

Legal framework

Many countries with national ID systems do not have sufficient privacy legislation. This is true for much of Africa, where almost every country has national identity cards but many do not have an adequate legal framework to protect personal data. In India, where the state-of-the-art technology has already registered more than a billion people, the legal and institutional safeguards that would be expected were put in place only after mass registration. The topics of robust institutions and of personal data protection are important considerations when thinking about integration of identity systems, but they are also important elements in determining the barriers to universal registration and the administrative framework for both the legal and functional registries.

RECOMMENDATION: Jump-start reforms with a 'good enough' initial decree or legislation

Developing the necessary legal and regulatory framework to underpin an identification system (see below) is often a lengthy process subject to anticipated and unanticipated delays. It is therefore unreasonable to expect the Somali government to have such a framework in place before beginning any implementation of an identity system. In order to mitigate the risks and uncertainties of identification in the absence of comprehensive legislation, it is therefore recommended that the FGS begin by issuing a 'good enough' decree or initial legislation to provide a basic mandate for identity providers and ensure reasonable protection and security of personal data.

RECOMMENDATION: Develop comprehensive laws and regulations to govern the identification system and agencies

There are many aspects of Somalia's legal framework for identification that require additional, comprehensive legislation. Citizenship and Electoral laws are notable omissions which should be addressed with some urgency. In particular, it will be vital to agree on robust processes for determining the holding of, or entitlement to, citizenship and/or residence; these need to be broad enough to also cover diaspora and people of Somali origin. Also vital will be to prescribe the manner in which citizenship and residence are to shape electoral eligibility and participation on federal, state or more local levels, including agreeing on an electoral model and associated constituency structure.

In terms of identity management, a sound legal basis will be required to ensure citizens' data collection and data handling will be performed and managed responsibly and with sufficient protection of privacy. Somalia now has an opportunity to put together a legal framework for the proposed NIAS. Since the State and its institutions can do only what the law authorizes, it is imperative to understand the limitations and possibilities of the legal framework that pertains to personal data and information to assess whether the law reflects best practices or would need updating. For instance, there are valid concerns about the misuse of personal data for surveillance and other intrusive practices that could infringe on personal liberties. The poor and, in many cases, minorities living in Somalia are especially vulnerable to these dangers. This is reflected in the UN's Guiding Principles on Extreme Poverty and Human Rights:

> *"States should: (a) Revise legal and administrative frameworks to protect persons living in poverty from inappropriate intrusion into their privacy by the authorities. Surveillance policies, welfare conditionality and other administrative requirements must be reviewed to ensure that they do not impose a disproportionate burden on those living in poverty or invade their privacy."*

A legal framework needs to be developed, giving authority to govern and manage the identity system to an autonomous authority (NIAS). Initially, a Program Management Unit within the FGS can be established to kick off the project. The organization should consist of board members proposed by each region/state, industry consortia (telecom, mobile money, banks, IT) and a Chairman (being one among all equal members and appointed by the Prime Minister/President for a three- or five-year term) should run the organization. Such structural reform must be approved by the legislators. At minimum, the legal framework must address the following:

- Aim and purpose of the NIAS
- Relationship with other organizations (Civil Registration, States or Regional, NIEC, Immigration and Control, Ministries etc.)
- Responsibilities of NIAS regarding Civil Registration, along with detailed rules and sanctions
- Limitation of use of personal data records
- Data quality recommendations
- Data management responsibilities
- What are the legal and regulatory arrangements that determine collecting, storing, and accessing, as well as securing personal data and the ID database?
- Accountability and transparency measures, including measures for grievance redressal and oversight

Planning for elections in 2020

The registration of 95 percent or more of adult citizens in time for the 2020 elections is a worthy goal, and considerable effort should be made to achieve this. However, this timeline should not be pursued at the expense of a lasting high quality identification system that is effective as the basis of national voter lists for many years to come. Fast action and decisions will certainly be required, but those actions and decisions should not compromise quality in pursuit of speed. There are alternative ways to run the 2020 election if it turns out that the proposed registration scheme has not achieved sufficient coverage nationally by then; nonetheless, it is essential that voter registration become an integrated component of the identification system once it is fully rolled out with national coverage, since elections held without effective voter registration will not remain credible in the longer term.

RECOMMENDATION: Develop contingency plans for voter registration

The goal should be that all adult citizens will be registered in a national or nationally coordinated scheme and that this registration database will be used in preparing voter lists. Any person not registered would not appear on the voter list and therefore would not be eligible to vote. Clearly, advanced registration in an identification system can only be considered an electoral requirement once an overwhelming majority of potential voters are registered in the scheme.

If, in the later planning stages of the 2020 election, it is considered that insufficient citizens have been registered in the national identification system, resulting in potential exclusion or disenfranchisement of electorate, the following should be considered as risk mitigation strategies to justify inclusion in the scheme as a prerequisite to electoral participation:

- Elections should still be held, preferably with a hybrid program of voter registration in advance of the election.
- If necessary, election day registration could also be considered.
- People already registered in the national ID system by then would not need to actively register in any hybrid voter registration scheme.
- In the case of election day registration those with ID cards (if these are issued) showing appropriate age and location should need to provide no further proof of eligibility.
- Knowing the enrollment rates in each location would help in logistics planning, but provision would still need to be made for large numbers of additional registrants.
- Inking of fingers would need to be prioritized as a means of preventing widespread multiple voting.

The above requires that the citizen registration system will be sufficient to permit the NIEC to allocate voters to polling stations without need for any further registration of, or communication with, individual voters.

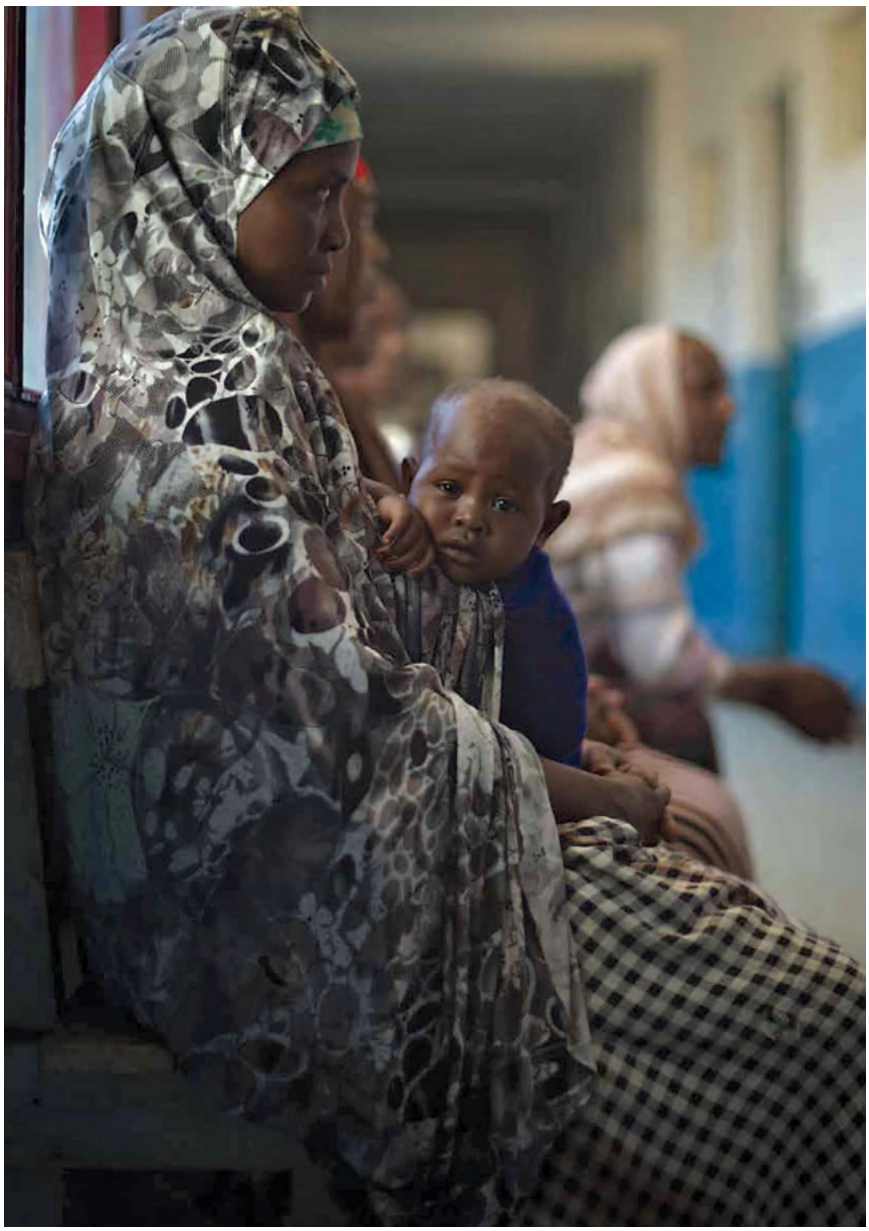
RECOMMENDATION: Consider various options for including diaspora in the voting process

It is recommended that diaspora identity systems are linked with the ability of diaspora to participate in political processes, specifically voting in elections for those legally eligible to do so. The objective would be to ensure official registration of all Somalis and all people resident in Somalia, with sufficient data regarding citizenship and addresses/locations to provide flexibility in facilitating or restricting voting to particular groups of people. For example, it could be that one election type (e.g., Presidential or Upper House) has all Somali citizens as the electorate, while another (e.g., Lower House) may be open only to citizens with permanent residence in Somalia, and a third (e.g., Municipality) is elected by all local residents regardless of citizenship.

As described above, a National ID card for Overseas Somalis (NIDOS) could be issued to facilitate overseas voting. This would be associated with a current address in the foreign country and could also contain

data of a family or previous address in Somalia. A system of voting in Somali embassies, consulates (once allegations of financial governance within Embassies has been addressed), as well as potentially using overseas remittance companies as points of registration for both NIDOS (and potentially also using regular Somali ID documents or passports) and voting (this would require additional legislation). Somali citizens temporarily living outside Somalia for work can be registered in the constituency of their address in Somalia. In a similar way, a Somali resident card could be issued to noncitizens living within Somalia if required to help administer provision of services and/or for security purposes.

Hence, the criteria for obtaining an overseas Somali ID card has to be clear and in sync with constitutional and legal provisions. Depending on the content of any citizenship or electoral laws passed by parliament, Somalis living outside of Somalia may be eligible to apply for a NIDOS card even if Somali citizenship is not permitted or recognized by their country of citizenship, and holding of a NIDOS card may or may not confer voting rights.



7. Next steps

Timeline

Developing an identity system within a short time frame is an ambitious goal. Achieving it requires laying out infrastructure, setting up building blocks for a new system, developing an architectural blueprint, and starting the registration process with significant incentives for citizens to enroll. In order to create a system that will be capable of underpinning elections, it will be imperative that decisions going forward are made quickly, that funding is secured rapidly, and that a feasible, enabling, and secure environment is sufficiently in place to begin registration.

Action items

In light of the above key findings and recommendations, the following steps are proposed to accelerate the development of an identification system in Somalia:

1. **Convene a multi-stakeholder group or Project Management Unit (PMU)** to facilitate and implement initial decisions regarding the identification system. This group could include members from the FGS, Upper and Lower House, and federal ministries including NIEC, federal governments and municipal authorities who have a large stake in identification systems, representatives from private companies who would be principle users of identification services, international organizations and development partners, and members of local civil society and academia.
2. **Consider the recommendations highlighted in this report and build PMU consensus on big-picture issues,** including (a) *the overall purpose and architecture of* the identification system, including short- and long-term functionality, (b) the governing structure and *roles and responsibilities* of different stakeholders with regard to all phases of the identity life cycle (enrollment, credentialing, authentication, data storage and management, oversight and redress), (c) a *timeline and strategy* for enrolling the population, (d) standards for *data privacy and access, (e) potential* business models.
3. **Create longer term governance structure.** If the FGS follows the recommendations in this report and chooses a foundational identity management system, it will need to develop a mandate for an autonomous body (e.g., a 'National Identification Authority of Somalia', or NIAS) and stakeholder board (comprised of members of the same or similar organizations as the PMU). These bodies can be created through legislation or an ordinance by the President. They must have clear definitions of roles and responsibilities and be staffed based on apolitical capabilities. Once the autonomous identity agency and its board are functional, they can take over steering and implementation responsibilities from the multi-stakeholder PMU. Development partners should provide technical assistance for setting up these institutions.
4. **Conduct an in-depth assessment of the costs, financing options, and risks associated with specific technologies and implementation plans** in order to develop a realistic budget and sustainable business model. In addition to determining both start-up and maintenance costs associated with different design and roll-out options, this assessment should consider various financing models, including a rigorous evaluation of the feasibility—legal, institutional, technical—and desirability of a PPP-type arrangement for enrolling individuals in the ID system. In addition to financial and operational risks, this (or a separate) assessment should also consider security risks of the identification strategy to Somali residents and identity provider personnel.

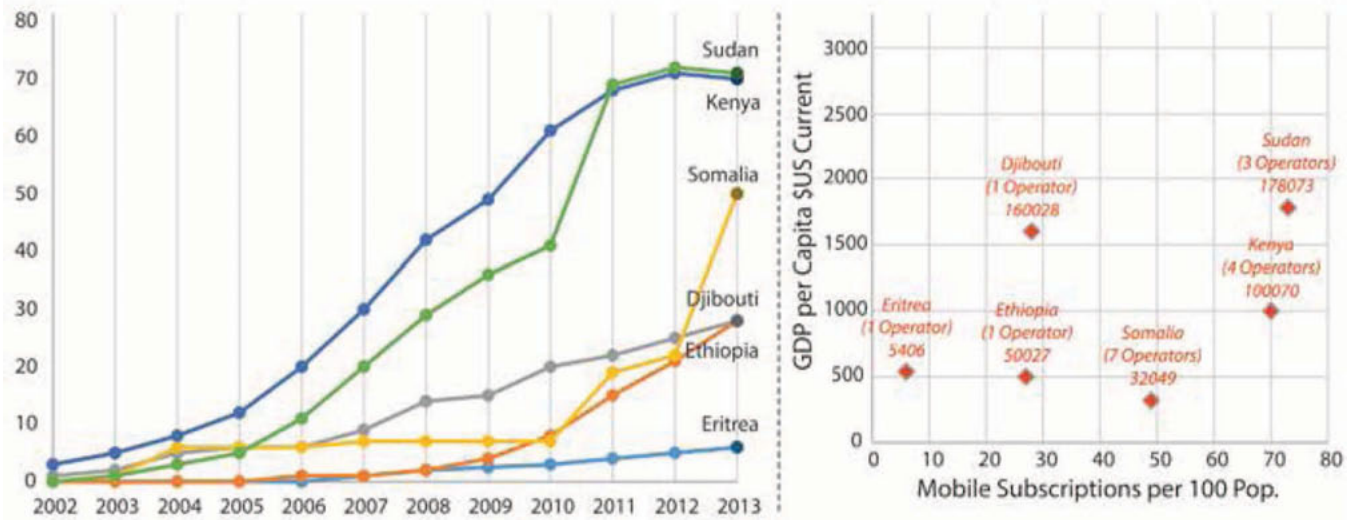
5. **Begin reforming the legal framework** by developing a 'good enough' initial decree or legislative language to initiate the identity management system. Once key decisions regarding the design of the identity system have been reached, conduct a more in-depth assessment of legal requirements (by a qualified legal expert) as a first step in the longer term process of developing a comprehensive legal and regulatory framework for identity management.
6. **Mobilize donor support in a coherent manner** in order to maximize resources and avoid duplication of identity systems. Consider the London Conference on Somalia as a possible platform to launch the identity initiative and coordinate various international agencies and donors.
7. **Begin the bidding process with technical support** from the donor community. The FGS should ensure a transparent, open, and competitive bidding process for procurement as per international standards.
8. **Conduct a geographic mapping and assessment exercise** to assess the need for, and potential accessibility of, registration facilities, and to provide a basis for recording residence location data in required detail.

Annex A: Detailed assessment of ICT sector of Somalia

Telecom

The mobile communications sector is one of the brightest spots in the Somali economy. Private, unlicensed mobile companies, using satellite for international communications, have emerged to meet the high demand for communications, especially with the large Somali diaspora. Penetration rates are actually higher and prices lower than in neighboring Djibouti and Ethiopia, which enjoy higher levels of stability, but have retained state-owned monopolies. However, the fact that the ICT sector and the financial sector are both largely unregulated and have the same holding companies active in both fields is a potential source of risk for the Somali economy. Critical areas—including remittances and mobile money services and mobile services—are influenced and, in some cases, controlled by large companies. The market structure is still evolving, with de facto consolidation around larger companies, resulting from mergers and alliances. Although consolidation can bring some consumer benefits and help in achieving economies of scale, the future licensing framework will need to take into account competition policy considerations and enforce interconnection.

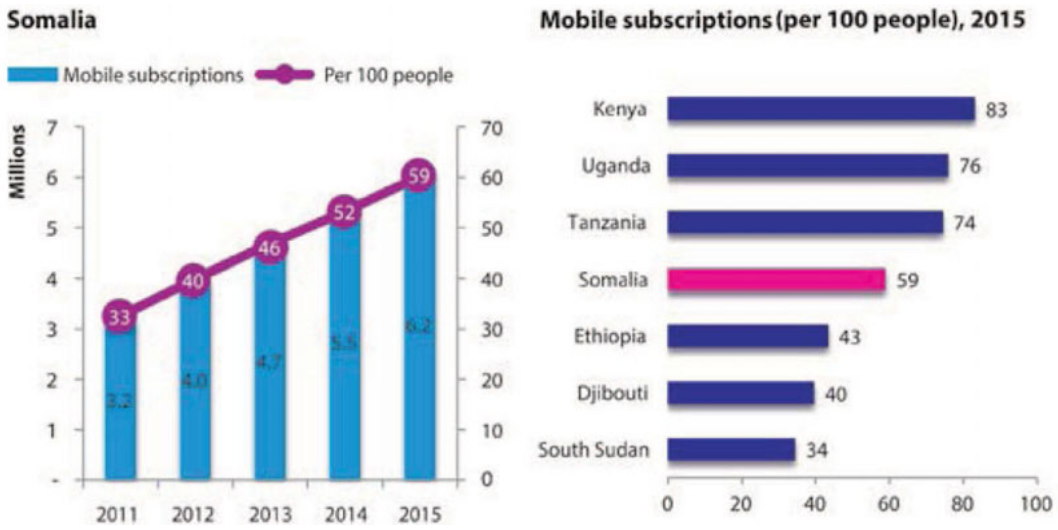
Figure A1: The Benefits of Competition: Mobile Penetration Rates, over Time and in Relation to GDP per Capita, in Somalia and Its Neighbors



Note: Sudan includes South Sudan before 2011. GDP per capita for Somalia is based on estimates for Somaliland only, given data constraints.

Source: Adapted from ITU World Telecommunication/ICT Indicators and World Bank World Development Indicators.

Figure A2: Mobile Subscriptions



Note: 2015 penetration figures based on 2014 population.

Source: GSMA (mobile subscriptions), World Bank (population).

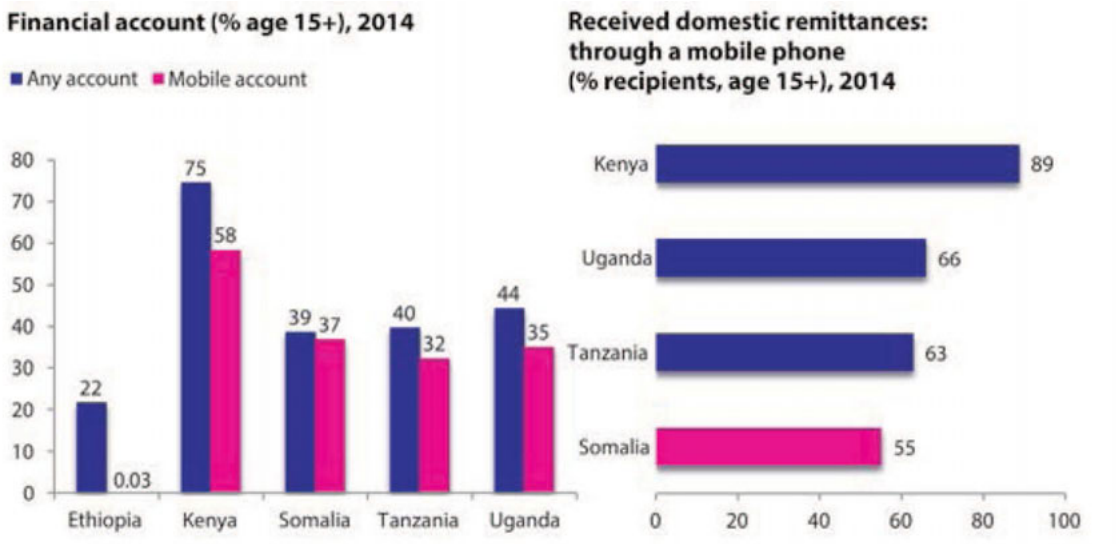
Mobile use

GSMA, the global mobile operator association, reported that there were 6.2 million cellphone subscriptions in Somalia in December 2015, a penetration rate of 59 subscriptions per 100 people (Figure A2, left). Somalia's mobile penetration positions it in the middle of other countries in the region (Figure A2, right). The mobile industry is of growing importance for the country. Aside from supporting voice and text communications for citizens and businesses, mobile also provides Internet access and has emerged as a financial platform.

Mobile money

Somalia had the second highest level of mobile money use in the region in 2014, with 37 percent of respondents to a World Bank survey reporting they had a mobile money account (Figure A3, left). Mobile money has largely substituted for the lack of traditional bank accounts. Some 55 percent of respondents who receive domestic remittances reported that they received them via a mobile phone (Figure A3, right). Under the World Bank Somalia ICT Sector Support Project, a very recent World Bank Household Survey (January 2017) on mobile money usage was conducted and confirmed that 73 percent of the population above the age of 16 use mobile money services, and the system largely dominates domestic transfers with two-thirds of those sending or receiving money domestically using the method. It is worth mentioning that of those Somalis receiving a salary, more than half receive their salaries and allowances directly on their mobile money account. Overall, Somalis praise Mobile Network Operators for providing much needed services in the entire country. However some do not trust them as the system remains largely unregulated. Mobile money is deemed fast and convenient by Somalis, with a 92 percent satisfaction rate. The quantitative data collection highlights that only 43.8 percent of the population owns an official ID document, and this number comes down to 23.9 percent in rural areas and 20 percent in IDP camps.

Figure A3: Mobile Money



Source: Adapted from Global Findex 2015 (Global Financial Inclusion Database).

Internet and Facebook use

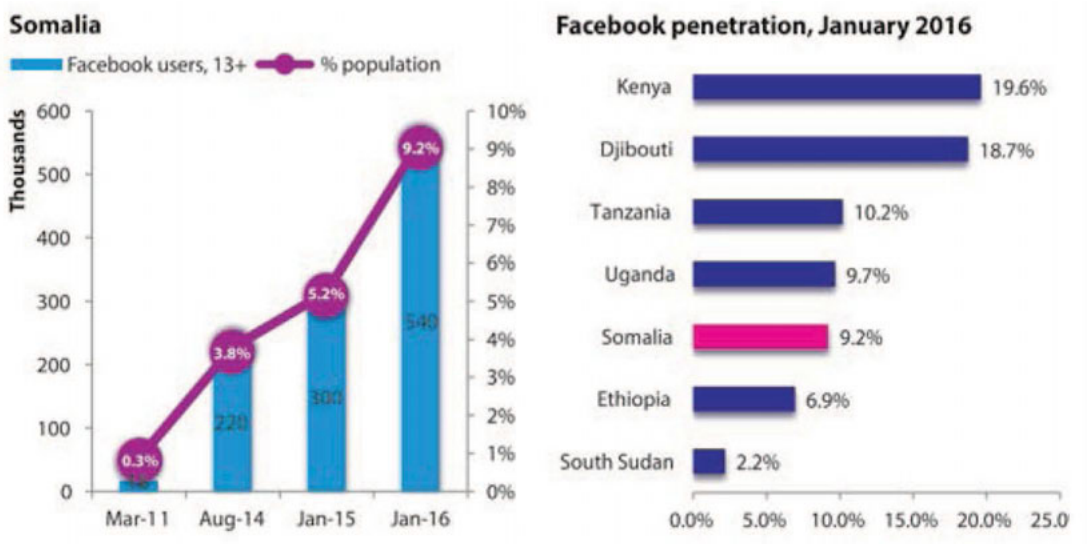
Across Africa, the ICT sector contributes up to 7 percent of GDP per capita (eTransform Africa, 2012), but it is largely absent or inefficient in Somalia. Lack of regulation, infrastructure, and thus penetration all lead to underperformance in this sector. Yet, despite an absence of meaningful foreign commercial investment, Somali mobile phone operators service approximately 6.4 million subscriptions (an estimated 3 million discreet users) in Somalia and have introduced 3G mobile services with limited penetration (<0.5 percent of the population). Some operators began offering 4G LTE services in 2014, but penetration has remained incredibly small and service areas very limited (approximately 1,000 subscribers in total). Nonetheless, mobile subscriptions have grown over 21 percent in the past 12 months alone, and there is little reason to believe this trend will slow or reverse in the medium-term (TeleGeography, 2015).

The Internet sector in Somalia remains underdeveloped with less than 3 percent of the total population being able to access the Internet.[30] Until early 2014, connectivity was provided almost entirely by satellite and very small aperture terminals (VSATs), which are expensive and unreliable, particularly if used for data traffic (up to US$3,000 per megabit per month).[31] However, Internet penetration is evolving with new fiber connectivity that arrived in Somalia in 2014 in three locations: in Mogadishu (undersea EASSy cable), in Hargeysa (terrestrial cable from Djibouti) and on the Kenya border to the south (terrestrial cable from Garissa).

In the absence of national surveys, statistics on Facebook use provide a proxy for Internet access. According to Facebook, there were 540,000 users (age 13 and above) in Somalia as of January 2016, an 80 percent increase over the previous year and over 30 times greater than subscribers in March 2011

30 TeleGeography, 2015.
31 TeleGeography, 2015.

Figure A4: Facebook Users and Penetration



Note: Penetration figures based on 15+ population.

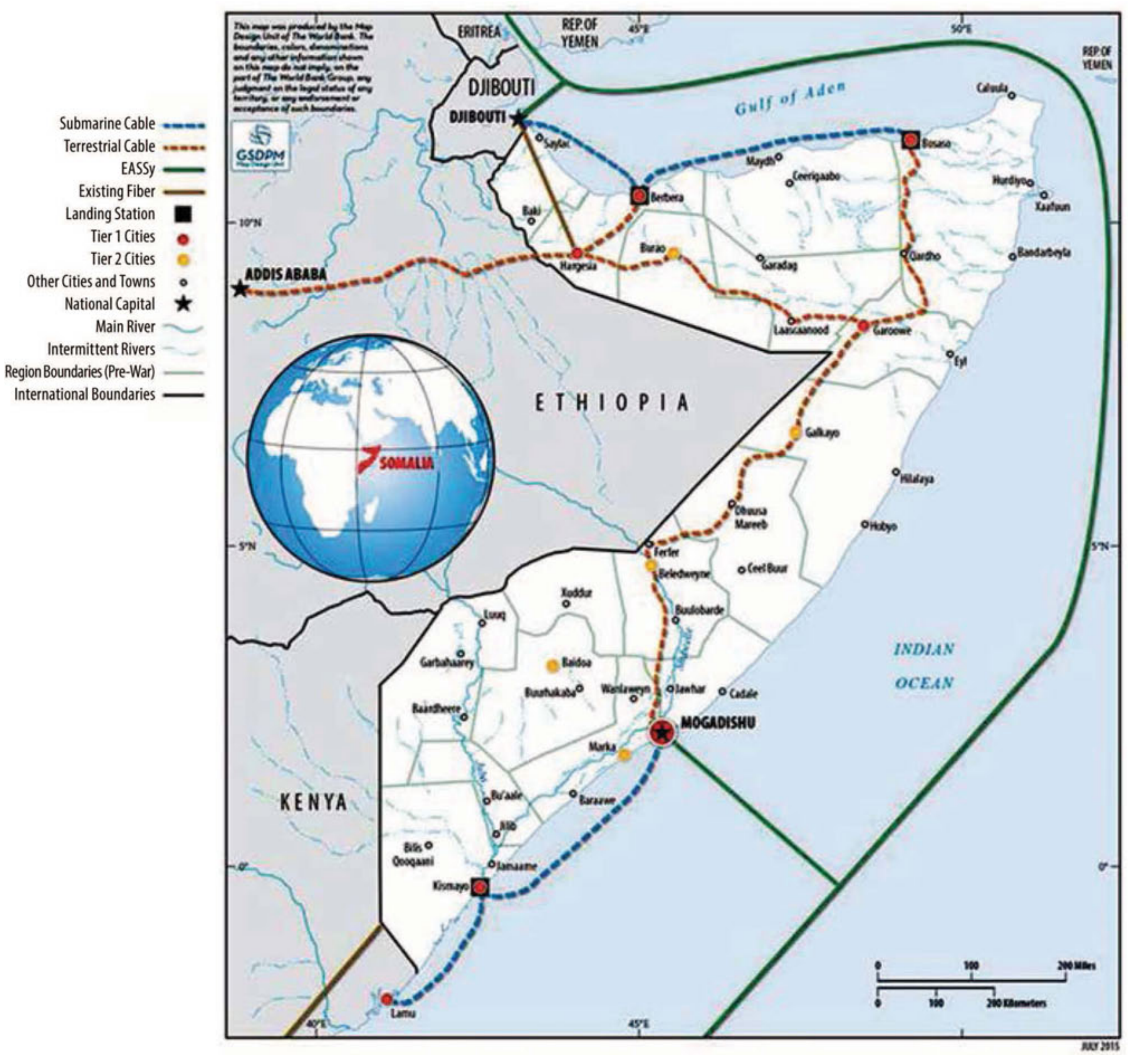
Source: Adapted from Facebook ad platform.

(Figure A4, left). This rapid growth is tied to growing access to international bandwidth plans to expand access with new landing stations and submarine cables (e.g., DARE consortium; OMANTEL initiative). These developments have led to lower Internet prices and increased quality. Facebook penetration in Somalia stood at 9.2 percent of the population in January 2016, positioning the country close to the middle of regional peers (Figure A4, right).

The Internet sector in Somalia remains underdeveloped with less than 3 percent of the total population being able to access the Internet.[32] These Somali telecommunication companies also provide services to every city, town, and hamlet in Somalia. There are presently around 25 mainlines per 1,000 persons, and the local availability of telephone lines (tele-density) is higher than in neighboring countries, for example three times greater than in adjacent Ethiopia. Nevertheless, serious challenges remain. Internet usage reaches only a tiny minority of the population, and the lack of secure and affordable communications is one of many barriers holding back the donor community in its efforts to bring aid and development to the country. At the moment, the main challenge is the transition from an unregulated telecom market to a well-regulated market with a legal and regulatory framework inspired by global and regional best practices. The large operators coordinate spectrum allocations amongst themselves, which can also lock out new market entrants offering WiFi or WiMAX services. It would be expected that the government, or the regulator, would enforce interconnection and market entry, as it benefits the market as a whole.

32 TeleGeograhy, 2015.

Figure A5: Somalia Network Topology



Source: World Bank.

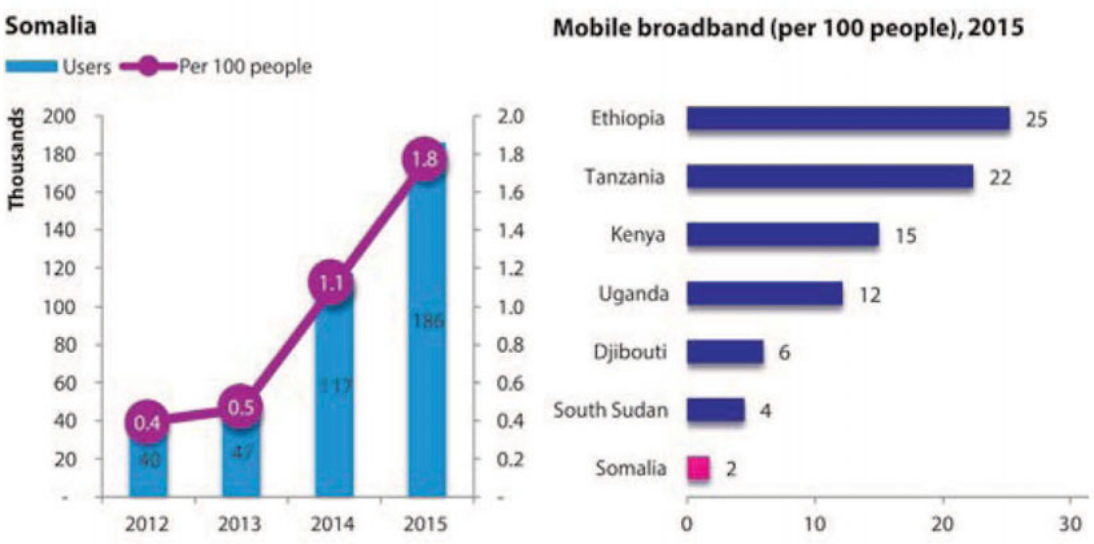
Broadband

Solid cellphone and social media growth has not been accompanied by a significant rise in mobile broadband access. According to GSMA, with just 186,000 mobile broadband users (Figure A6, left), Somalia has the lowest ratio of mobile broadband users to mobile subscriptions among peer countries in the region. Only 3 percent of Somalia's mobile subscriptions are high speed and penetration is just 2 percent of the population, lowest among all peer countries (Figure A6, right). Security issues have hampered mobile broadband take-up, as well as limited coverage, 3G competition, and inefficient spectrum allocation.

To enhance high-speed connectivity for the FGS, a Government Backbone Network is being developed in Mogadishu. A double-ring fiber network to connect major ministries (around 15 key institutions) around Mogadishu (48 km) with microwave redundancy is now operational. Plans to expand connectivity (supply of bandwidth) and communications rooms program (to assist with international and domestic communications) for the other Federal States are under way. This connectivity could also facilitate the registration and rolling out of the national identity system as well as connectivity provided for a central database.

There is also a program to promote access to international bandwidth and open educational resources at affordable prices for the higher education sector and universities (with the EU AfricaConnect2 Program and UbuntuNet Alliance). Universities could also become registration points.

Figure A6: Mobile Broadband

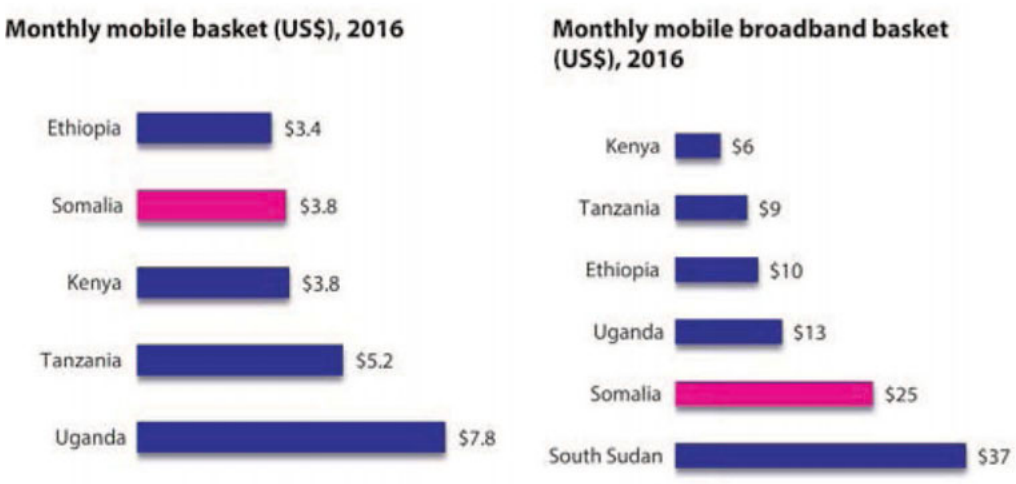


Source: Adapted from GSMA.

Price comparison

Somalia's mobile prices are among the cheapest in the region. A monthly basket of voice calls and text messages is US$3.8, the second lowest among peer countries after Ethiopia (Figure A7, left). On the other hand, mobile broadband prices are the third highest among comparator countries at US$25 per month (with 1GB data usage) (Figure A7, right). In contrast, mobile broadband prices in Kenya are some four times less.

Figure A7: Mobile Voice/Text and Broadband Prices



Note: The monthly mobile basket is derived from the 2010 OECD basket methodology ("40 calls prepaid"). The mobile broadband basket is derived from data bundles offering at least 1 GB usage per month. Prices are for the largest mobile operator by subscriptions. Converted to US$ using 2014 annual average exchange rates.

Source: Adapted from operator websites.

Annex B: Detailed findings of the existing identification systems of Somalia

Banadir ID card of Mogadishu

The Mogadishu municipality of the Banadir region produces birth, death, and marriage certificates and identity cards. The latest system was introduced in 2016 with a primary purpose of providing identity. The plastic card with an embedded chip (16 GB) is used for identifying the person, issuing a passport, opening a bank account, and obtaining a SIM card. There are no applets or any functionality available on the chip. The municipal government is trying to make it compulsory for all citizens to obtain an identity card after biometric enrollment. A digital thumbprint and photograph of the applicant are taken along with necessary demographic and biographic information and stored in the database centrally (at the municipality). The team interviewed various government officials and dignitaries and observed that Mogadishu municipality has introduced various ID card initiatives in the past as well, but changes in administration resulted in reinventing the wheel. Under the new initiative, 5,300 cards have been issued. Approximately 25,000 were issued ID cards under the old initiative, which is a very small fraction of the population of Mogadishu (1.5 million).

There is no unique ID number issued. The "citizen number" is the serial number on the card. We are told that thumb deduplication is taking place but we were unable to verify that. The card is not ICAO compliant, and it is very costly. The applicant pays US$17 for the smart card, but the breeder documents which are prerequisites for cards, cost extra (a birth certificate is US$18, and certificate of identity confirmation or police report is US$24). The system backup and disaster recovery procedures are ambiguous and have never been tested. Additionally, the financial governance structure, ensuring privacy rights and data access arrangements, remains unclear.

Puntland state ID system

Perhaps the most developed identity system in Somalia is the Puntland Identity System. However, while the data collected from sources in Puntland demonstrate that there is a sophisticated and developed system in place, the team has reason to doubt the veracity of the data provided, as it indicates an unrealistic level of saturation of ID cards in the region. Therefore, only limited information will be included in this report on the Puntland Identity System.

The Puntland ID is provided to give unique identities to Somalis in the Puntland region. The primary purpose of the card for the government is to distinguish between residents and nonresidents of Puntland. At the moment, there are no additional functions, and service delivery is not attached to the card. It is primarily used for security purposes and to monitor population movement. The information provided states that up to 800,000 (out of approximately 4 million) people have received the ID cards, however to some, this is extremely unlikely, as the price point would be unaffordable for a majority of people in Puntland to afford the cards.

The Puntland ID is provided by the Puntland State Ministry of Interior and issued in regional centers in Puntland, specifically in Garowe, Bosaso, Qardho and Burtinle. The cost of the card to the citizen is US$16, and it is provided to all residents of Puntland above 5 years of age upon request (not mandatory). An ID number is provided to the individual; however, it is unclear if this is a card number or unique identity number for the registered individual. Registration is conducted at the municipal level, and the data is then

sent onward to the state government for processing, storage, and management in the state databases. The cardholder is verified by the Local Authority, which has a verification process used to identify each person applying for the Puntland ID Card. The Local Authority sends a "Proof Form" to the verified person, and then he/she comes to apply for the Puntland ID Card. During this process, double verification is carried out, and it is the responsibility of the registration clerks to ensure that the data collected from the applicant matches the data on the card and is entered into the system. After issuance of the card, a clerk cross-checks the data on the card with the data in the form.

The cards are biometric and capture 10 fingerprints in addition to iris scans. Non-biometric photo capturing and a signature pad are also used to enroll individuals into the system. Specific information on the technical specifications of the biometric registration was not provided. A private enterprise must have provided the biometric registration tools, and a contract between the Puntland government and a private company must exist to provide the backend system; however, which companies these are have not been clarified by the Puntland government. The Puntland Ministry of Interior, however, has said that software for the database was custom designed, and the licenses are owned by the Puntland State Government.

In terms of security, the card is not chipped but relies on a magnetic strip, as well as a barcode and Machine Readable Zone (MRZ) as its security features to protect data. In regards to physical security, it uses microprint and ultraviolet print to prevent forgery. However, it is clear that the card does not meet international standards on security. Additionally, the financial governance structure, including privacy rights and data access arrangements, remains unclear.

Somalia Passport system

The Department of Immigration and Naturalization manages the Somali Passport system, and in 2013 a new chip-based Somali passport was released. This passport is believed to comply with major components of ICAO standards technically; however, it is widely not recognized as a valid travel document outside of Somalia due to perceived lack of verification. A survey of fifteen EU countries found that nine countries did not recognize or accept the biometric Somali Passports that are being issued by the Department of Immigration. Three countries (France, Belgium, and Austria) stated that they evaluate the credibility of Somali passports on a case by case basis, or that they have no experience with Somali passports as identity documents. Therefore only two, Latvia and Slovenia, widely accept Somali passports as valid travel documents. In the survey, the widely established reason for rejection of the Somali passport as a valid form of identity was a perceived lack of authentication of the holder. Globally, Somalia is ranked 101st out of 104 countries on the Henley and Partners Visa Restrictions Index 2016, followed only by Iraq, Pakistan, and Afghanistan. A 'passport card' (some call it an identity card), is also issued with the biometric passports, and the card states that it can act as proof of Somali Citizenship. However, there is not any legislation or wide acceptance of the card as such. An ID card (e.g., from the immigration department) and a birth certificate are prerequisite breeder documents for a passport. For applicants within the country, passports cost US$102.50; for those outside the country who apply through a Somali embassy, the cost is US$130 per passport.

The team conducting this study was not able to conduct a full profiling exercise and technical assessment of the passport card system, as access was not granted by the respective government agencies. Therefore, only basic information can be provided about the passports and passport cards.

Over time, experimentation had been done with the Somali passport to make it forge resistant. The Somali passport issued in 1991 was reissued in 2007 with slight changes. But due to low functionality and poor security features, the passport was reissued in 2013 in order to adhere to ICAO specifications. The passport now contains a 64 kb chip to store individuals' data, including biometric information (ten fingerprints). In terms of the immigration database and management system, Somalia operates MIDAS, which has been provided and is supported by IOM. Ninety-one terminals running MIDAS have been installed at 15 ports of entry throughout Somalia. The system has been used to manage 1.5 million people moving into and out of Somalia from 2014–2016. In total since 2007, 3 million Somali passports have been issued by the

Department of Immigration and Naturalization. These passports have been issued both in Mogadishu and abroad through Somalia's 33 diplomatic missions (who charge a higher fee) around the globe. Additionally, the financial governance structure, ensuring privacy rights and data access arrangements, remains unclear.

National Commission for Refugees and Internally Displaced Persons registration system

The National Commission for Refugees and Internally Displaced Persons (NCRI) has proposed a biometric registration system that will be employed to register returnees and Internally Displaced Persons (IDPs), as well as refugees. In the first phases of implementation, this system will be focused on registering roughly 30,000 Somali returnees from Yemen as its first application. So far, the system has been implemented in a pilot phase and has registered 600 people. It has the potential to register up to one million IDPs; however, this will require sustained funding and capacity support that has not yet been secured by NCRI.

The NCRI system has been designed by Camel Cash, a cash transfer company based out of Nairobi, Kenya, with links to FSB (First Somali Bank). The system's primary purpose is to both collect and manage data on IDP and returnee populations, but also to implement a debit system to NCRI beneficiaries. This service will focus on providing cash transfers to beneficiaries, which will track spending and verify transactions on health, education, and food.

The NCRI system is based on biometric data collection of two fingerprints, as well as photographs, which are stored in a 128 kb chip on the NCRI-issued ID card. The chips contain data on beneficiary age, family, and place of origin/entry (in the case of returnees); in addition, it will track the transactions carried out by the beneficiary. Transactions are tracked through POS systems that will be distributed to various enterprises in high density areas, and the NCRI Card will effectively serve as a debit card, with limitations provided by allowances on each individual or family.

Individuals are registered at various points. For returnees, there are ongoing discussions to have beneficiaries registered in Yemen at the point of departure, while the data collected would be shared with corresponding NCRI offices in Mogadishu, Bosasso, and Kismayo, and the Somaliland authorities in Berbera. The points of registration for IDPs will be regional centers; however, in the first pilot phase this will take place exclusively in Mogadishu and points of entry to Somalia.

The use of cloud-based data storage has been selected in order to make the information accessible to multiple offices. The registration will take place on handheld devices compatible with android operating systems, and is designed to operate both online and offline. When Internet service is restored, the data are directly uploaded into the cloud. Each individual is given a 16 digit unique ID number, which will also correspond to the family data, in order to track funds and transactions based on family beneficiary numbers. The data recorded for each beneficiary will be the following: unique person ID, mother's name, father's name, date of birth, sex, marital status, nationality/place of origin, household data, and individual status, i.e., IDP/Returnee/Refugee (for refugees the UNHCR case number will also be recorded).

Multiple verification processes are undertaken to minimize human error, as well as to verify the identity of the beneficiary (using identity proofing, i.e., cross-checking various documents from humanitarian agencies such as UNHCR/WFP provided by returnees). All work will be verified and double-checked by superiors at the registration points. The card system gets accurate information from the NCRI system via an Application Programming Interface (API). During distribution, the card will be swiped on the machine and data will be verified by the user.

The cards can be produced on-site and distributed to beneficiaries within two days at the point of registration. This will require card printing machines present on-site, which will significantly raise the cost of the program. However, the points of production have not yet been set and it will depend on funding. Therefore, it is highly likely that there will be limited production centers, which will increase the

turnaround time. Each card will record the following information: name, additional/family names, date of birth, photograph, date of issue, and expiry date. The security features put in place on each card are a unique ID number, magnetic strip, and the 128 kb smart chip. The cards meet ISO standards.

The database is MySQL, is run on Personal Home Page (PHP) and Java J2EE, while the operating system is run on Berkeley Software Distribution (BSD) Linux. The backend is stored on a cloud-based system; however, there will be a centralized data system in Mogadishu that will be physically secured using biometric login.

Somali National Army (UNOPS) registration system

A biometric registration system has also been developed for registering and managing payroll for the Somali National Army (SNA) and police, which is currently being operated by UNOPS. While there have been significant challenges in the development and implementation of this project, UNOPS is confident that their system, when operated, should provide a verifiable identity up to 95 percent of the time. However, it has taken five years to reach this rate, and even now there are inconsistencies in the reported numbers of soldiers and police reported by the SNA and the records of UNOPS and the Ministry of Finance. For example, according to the UN Eritrea and Somalia Monitoring group, official records provided by the SNA list the current armed forces at 24,000 soldiers and police. However, according to the registration system implemented by UNOPS, the actual number is much closer to 14,500. This discrepancy can be accounted for by roughly, 10,000 'ghost identities' that have been detected because of the biometric registration systems that have been put in place.

The UNOPS registration system is based on two identifiers, facial recognition, and a ten finger-fingerprint identification. The authentication of identity is done through a Quick Response (QR) code coupled with biometric technology, and scanners have been provided for points of entry and exit from secure areas, as well as with service providers such as government departments, agencies, or ministries. The QR code has allowed for UNOPS to avoid fraudulent cards from entering circulation even if they are printed illegally, they are easily detected when used. UNOPS is confident that if used properly, and operating procedures are put in place, the system is trustworthy and is able to sufficiently verify identity to provide security for high risk targets. The other security feature that has been put in place on the card is a holographic laminate that is only available in the official printing stations. As such, there have been cases where forged cards have been easily detected.

In order to address the challenge of database recognition of names and to avoid duplication of identities in the database, the system is designed to take four names from the individual, as well as three names of the individual's mother; these two identifying points are matched up, and if similar names arise under the same mother they are discounted as duplicate records. Furthermore, UNOPS has employed extensive double verification techniques, and has carried out a complete audit of their systems and identities once the cards had initially been distributed in order to ensure that they had collected all the required information, and had avoided ghost registration. Due to the protection issues related to the possibility of child soldiers being registered and enlisted into the SNA, a stringent age verification system has also been employed by UNOPS, which is based on age determination through background verification and systematic reviews of a previously enrolled system. As such, UNOPS has expressed high confidence that they do not have any child soldiers enlisted in the SNA. Similar procedures and precautions will have to be engaged in any process related to voter registration.

It must be considered that the UNOPS ID serves as a functional identity system as well as a primary form of identification for police and soldiers. First, the identity card functions as a travel document for police and soldiers, as the current passports are unobtainable due to cost for government employees on limited incomes. Second, the ID functions as a critical payment system, in that specific banks have been engaged through electronic transfers of funds, which allows army and police to present their IDs in order to receive salaries. This has increased the reliability in payment, and allows for UNOPS as well as the Ministry of Finance to track payments made through this system.

One limitation of the UNOPS ID is that there is no expiry date ascribed to the identity. While protections are put in place, in that if a police officer or soldier leaves the service of the state, they are required to turn over the ID, this poses significant challenges. Specifically, it does not allow for the technological and biometric features to stay a step ahead of forgery, as the same systems will be engaged down the line. Secondly, policy around the cards is a challenge, and questions remain over how the system will run or be managed once it is handed over to the Ministry of Finance and Somali National Army; and this aspect of the identity system will need to be addressed before the project's closure next year. Further, questions remain over how the system will be funded once it is handed over, as licenses alone for the implemented technology cost roughly $270,000 annually to run a program that manages $800,000 in salaries.

Clan-based electoral college

The citizens who were eligible to cast a ballot in the 2016 electoral process form a very small subset of those citizens who would be so entitled in a 'one person, one vote' election. In addition, the electorate itself was selected prior to balloting so the process bears very little resemblance to conventional voter registration exercises.

The 54 seats of the Upper House are determined by selection within the regional assemblies rather than by wider election; the electorate are therefore the members of the regional assemblies and are already fully known and registered. The 275 seats of the Lower House were filled by a process more akin to a wider election but with only 51 electors per seat. The electors were drawn from the subclans sharing the seat and represent the diversity of the relevant community, including civil society and youth. Each Electoral College should contain a minimum of 30 percent of women. The identities of electors do not appear to be verified in any formal way; rather, they are already known to the clan elders or within the community of the relevant clans or subclans. The total size of the Lower House electorate is therefore only 275 x 51 = 14,025 voters, which is not enough to constitute a significant body of registered voters in Somalia.

Somaliland voter register

Somaliland has taken an initiative to come up with a high quality voter register. A massive data collection exercise was conducted to register eligible voters in the State. Basic biographic data with biometrics (two iris scans) of 3 million citizens were collected within the last few months. The overall registration figure of 3 million was not confirmed by the mission, and some say that it is disputed. Nevertheless, the centralized database was established in the State capital. The voter cards are to be issued as per project plan in the current year, and rollout is to start soon and be completed by the end of the year. There are six regional centers established where the card collection, once started, will commence. Each Registration Center has the copy of their portion of the database as well. These registration centers were also used to register the citizens. IRIS deduplication is achieved by comparing IRIS scans. Deduplication is first performed at the region level, and there are plans that once a centralized database is populated, it will be performed again centrally. The data are backed up at separate location on a separate server. The central database is organized as a relational SQL database. Truecrypt, a proprietary encryption software was used to encrypt the data during registration to ensure security breach. The details of voters' ID cards were not available for mission.

World Food Program's e-card

WFP is providing relief interventions through a mix of in-kind and cash-based transfers as appropriate. WFP is also working with local authorities to provide daily school meals to primary school students and nutrition assistance to malnourished HIV/TB clients. WFP is using new technology known as SCOPE, which allows near real-time electronic management of its programs. Following biometric registration, individuals receiving WFP assistance are issued electronic transfer cards (e-cards) to purchase food in vetted local shops or to receive in-kind food assistance. Fingerprints act as a signature, and assistance can only be redeemed by the individuals registered on the card. WFP has been supporting 1.4 million vulnerable people in food insecure areas throughout the country.

Annex C: Detailed assessment of legal framework

Historical context

A Somali Citizenship Act was first enacted in 1960.[33] This Act—which was underpinned by the Somali constitution—stated that any person born in Somalia, whose father was Somali or had become a naturalized citizen, could acquire Somali citizenship.[34] As expected, this broad definition created a lot of ambiguities, thus making it difficult to implement voter registration.

Moreover, the democratic government faced multiple challenges. On the one hand, many urban settlements did not grow at the same speed as Mogadishu, and the local administration services were limited, often poor or notional. Conversely, in a cluster of cities such as Mogadishu, the urbanization rate was so high that the local administration struggled to cope with the new arrivals, deal with new informal settlements, and provide social services. In addition, the administration struggled to reach people beyond urban centers since many were still scattered in agricultural areas. In addition, nomadic communities were not easy to reach and had little contact with local administrations who were not a visible force that could connect with nomadic communities and successfully roll out identity cards to citizens across the country.

Although the democratic government did not have the chance or the time to enhance identity and voter registration systems, two universal elections were held in 1964 and 1968 as well as two local municipal elections. The 1964 and 1968 elections were characterized by an absence of clear and credible voter registration systems, accurate and reliable data (on the number of registered voters), and identity cards (that would determine whether a person was eligible to be included in the voter list and could be used on election day to mark voters in the list who have already cast a ballot). This, in turn, made fair elections impossible since Polling Station Chiefs, District Commissioners, and Electoral Commission Chairmen could tamper with the results and rig the process.[35] Allegations of electoral fraud leveled at regional and district authorities were not uncommon and sometimes resulted in violent clashes between competing groups across the country.[36]

In addition, voters were allowed to express their preference in whichever electoral district they may be on the day of voting—certainly one way to accommodate a nomad's claim. In the absence of an electoral certificate or any other identity documents and in a bid to avoid a vote being cast more than once, each voter's left hand was marked with indelible ink upon entering the polling station.[37] To address statistical flaws, several MPs submitted a bill to carry out a population census in 1963 and one was scheduled before the elections, but this failed to move forward.[38] Instead, 47 constituencies were created, where seats were allocated based on their size and importance of the towns.

33 See 1960 constitution Article 1.
34 See Law No. 28 of 22 December 1962: Somali Citizenship Law Article 2.
35 Interviews with people who participated in the 1964 elections criticized the Electoral Law, citing that it gave a lot of power to commissioners and police officers engaged in security. This resulted in a number of highly contested elections where the results were disputed. See: Local Administration and Local Council Election Law 19 of 14 August 1963.
36 Mohamed Trunji, *Somalia: the Untold Story: 1941–1969,* Loopress: Leicester pp. 462 and 527. Interview with former District Commissioner and Electoral Commission staff on 23 September 2016.
37 Ibid, pp. 464–465.
38 Ibid, p. 462.

After the 1969 military coup d'état, the dictatorial one-party regime continued to recognize Somalis as one ethnic community and polity.[39] This was a strategic move on Siad Barre's part, intended to promote irredentist ambitions and foster support from 'freedom fighters', eventually paving the way for a Greater Somalia that did not recognize the colonial boundaries dividing Somali-inhabited territories across the Horn.

The military regime did not implement any electoral systems and develop voter registration laws since it did not hold national elections (with the exception of a constitutional referendum in 1979 which was also characterized by the same shortcomings). The military regime did not amend the 1962 Citizenship Act nor enact any new citizenship laws. During this period, the regime made active steps toward expanding the registration process to rural areas (which were also becoming more urbanized) and imposed strict laws intended to encourage citizens to register for identity cards. One way the government tried to achieve this was by pressuring people to require identity cards so as to secure employment, businesses licenses, and other government-related activities (such as securing tenders and contracts). School registration required birth certificates and these were impossible to obtain without parents' identity cards.

Following the collapse of the Somali state in 1991, there was a proliferation of false identity cards, often the same ones used during Somalia's military administration. Unsurprisingly, this created a lot of chaos, as there was no way of verifying whether the identity cards were authentic. In the end, all Somali identification documents ceased to be recognized as official documents.

The absence of a fully functioning government saw the rise of remittance companies in the 1990s, as the Somali diaspora sent huge amounts of money back home. In the two previous decades, remittance companies or MTOs had registered their clients and provided them with unique identity cards that were not recognized by their competitors. In order to acquire one of these identity cards, a guarantor had to be brought in to verify a client's identity. Only then were clients able to get an identity card, which made it possible to either send or withdraw money. In addition, even though clients were issued with identity cards, a guarantor was again required for any transactions over US$5,000. Telecommunication companies also began to register clients the same way. However, these identity cards were not recognized as legal and genuine forms of citizen identification since they had not been issued by local administrations.

After the Arta Conference in 2000, the Transitional National Government (TNG) attempted to introduce a Citizenship Act but this was not passed in parliament.[40] The Transitional Federal Charter (TFC), which was passed in February 2004, also narrowed the definition of a citizen in Somalia and convinced neighboring countries that Somalis had moved on from the vision of a Greater Somalia.[41] Internal political wrangling ultimately overshadowed this endeavor, even though the Transitional Charter followed previous constitutions. As a result, the TNG failed to establish identity card registration offices since the Citizenship Act had not been approved (there were of course many other reasons).

In the end, the Transitional Federal Government (TFG) did not enact citizenship laws but began to indirectly register people by issuing identity cards alongside passports—a widely criticized move because identity cards were considered to be associated with citizenship whereas passports were immigration issues. If a person required a passport, they would submit their application to an immigration office with a birth certificate and a certificate of good conduct. The immigration office was responsible for issuing a passport but not registering citizenship, and this created a lot of overlap. The data collected by the immigration office were also not comprehensive enough to use to register people as citizens because necessary data were missing. The TFG began to issue new passports in 2006, which was passed by the TFG parliament before being fully rolled out in 2008. Identity cards were issued alongside these passports but were not considered a replacement for identity cards since these identity cards were not registered in the municipalities of the citizens' constituencies and had some missing information (spouse/children).

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39 See 1979 constitution Article 4/1 that stated "Somali people are one race."

40 The Citizenship Act draft was not passed in parliament because of the concept of 'u dhashay iyo ku dhashay'—the primacy of autochthony.

41 See Transitional Charter Chapter 3, Article 10.

In addition, not only was there a lack of genuine national identity cards but regional administrations—many with their own Constitutions and/or Citizenship Acts[42]—each had their own registration offices that were in no way linked to each other. Although the TFG attempted to rectify this and provide identity cards, such efforts did not have an impact since some people were opposed to the idea, fearful that the process could be politicized.[43]

The Constitution and body of legislation in place today continue to be established in an ongoing process, which in some areas still lacks the legal maturity of many other nations. The following sections summarize the pertinent clauses and regulations in passed legislation and in draft bills currently being considered.

Federal constitution

While deferring implementation details to separate laws, the intention of the federal constitution is clear on many relevant points, notably:

Citizenship

- (7.4) The country's territorial boundaries are well defined, following those identified in the 1960 constitution.
- (8.3) The people of the country are its citizens, even if they have also become citizens of another country.
- (54) The allocation of powers and resources shall be negotiated and agreed upon by the Federal Government and the Federal Member States (pending the formation of Federal Member States), except in matters concerning: . . . (C) Citizenship and Immigration . . . , which shall be within the powers and responsibilities of the federal government.

Electoral participation

- (11.3) The State must not discriminate against any person on the basis of age, race, color, tribe, ethnicity, culture, dialect, gender, birth, disability, religion, political opinion, occupation, or wealth. The last of these is particularly relevant when considering possible financial costs of any registration required for inclusion in the voter list.
- (22.2) Every citizen who fulfils the criteria stated in the law has the right to elect and to be elected.
- (42.2) The exercise of equality, freedoms, and other rights is inseparable from duties. Accordingly, it is the duty of each citizen: . . . (g) To strive to vote in elections.

Information

- (32) Every person has the right of access to information held by the state or by another person which is required for the exercise or protection of any other just right.

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42 Somaliland has its own constitution and Citizenship Act following its cessation. Puntland has its own constitution but not a Citizenship Act. Since 2013, Federal Member States (FMS) adopted different constitutions with each FMS stipulating their own articles which addressed issues related to citizenship. (Somaliland cessation constitution Article 4 stipulated Somaliland's citizenship "ethnic originally from Somaliland before 26 June 1960 is considered a Somaliland citizen"). It is clear Somaliland's definition of citizen is specific to Somaliland clans that originally hail from a British protectorate. Puntland (Article 5) discusses citizenship and anyone who originally hails from Puntland is considered to be a Puntlander and the Puntland parliament will establish how to acquire/lose Puntland citizenship. Article 39 stipulates that anyone born in Puntland or has legally acquired citizenship is considered a Puntlander. Puntland citizens will not lose citizenship if he/she is a national of another country as well.

43 Interviews with Gen. Gafow National Intelligence security (NIS) commander on 3 October 2016.

Responsibilities

- (111G.2) The mandate of the National Independent Electoral Commission includes: . . . (c) The continuous registration of voters and revision of the voter's roll; . . . (e) The delimitation of constituencies and wards; . . . (g) The settlement of electoral disputes; (h) The facilitation of the observation, monitoring and evaluation of elections; . . . (l) Voter education.

State constitutions

It should be noted that any individual State within Somalia may have its own Constitution and that in some cases the clauses of such a Constitution may contradict those in the Federal Constitution or its associated laws. As an example, Puntland has a Constitution containing the following clauses:

> *4.2 Every person born in the territory of Puntland or whose parents or one of them were born in the territory of Puntland shall be deemed as a national of the Puntland State.*
>
> *37.1 To become a citizen it is necessary to be a national of Puntland State and eighteen (18) years of age.*

There are a number of exception clauses in Federal laws that mean people born in the territory of Somalia (such as to parents who are foreign diplomats) are not necessarily entitled to Somali citizenship; this raises the possibility that Puntland citizens may not always be Somali citizens, which potentially may cause complications when considering the issuance of citizen ID cards within each State.

One curious observation regarding the content of the Puntland Constitution in particular is the following clause:

> *40.1 The citizen is under the obligation to: (a) vote in all the elections, . . .*

While this does not directly relate to voter registration per se, it does however raise the idea that, if a Federal ID scheme is introduced and considered mandatory for inclusion in the voter list, it then could be a Constitutional requirement—at least within the state of Puntland—to achieve 100% registration of all adult citizens.

New draft citizenship law

The following describes a draft citizenship bill which has been drawn up and is being considered by the Ministry of the Interior and Foreign Affairs. It does not yet constitute Somali law and there is no indication at present that it will be passed without significant revision.

The Somali Citizenship (Amendment) draft Bill 2016 contains many detailed clauses defining under what circumstances a person should be deemed to be a Somali citizen and under what circumstances such citizenship could be granted or removed in individual cases.

Before considering citizenship itself, the law first defines what it means for a person to be Somali, which, unusually, is quite different to and much broader than what it means to be a Somali citizen:

> *3. For the purpose of this Law, any person who by origin, language or tradition belongs to the Somali Nation, shall be considered a "Somali."*

The default determinator of citizenship is then the following clause:

> *4.1 A person is a Somali citizen by birth or descent, if before or after this Law entered into force, he or she:*
>
> - *at the time of their birth had at least one parent who is a Somali;*
> - *was born in Somalia, and had at least one parent who was born in Somalia; or*
> - *is a child born in Somalia and who would otherwise be stateless.*

In line with the Constitution, the Citizenship Law (6) reinforces the right to retain dual citizenship.

For noncitizens to be granted citizenship, there are detailed prerequisites (5.1) which all should be met. These include being adult, speaking Somali, having lived in Somalia effectively continuously for eight years, having not been sentenced to a lengthy prison term in any country during that time, and having Somali tax affairs in order. The eight-year qualifying period for citizenship eligibility cannot (5.2) contain any period of employment as or for a foreign diplomat, nor for any foreign military, police, or peacekeeping service. Stateless adults can also gain Somali citizenship (5.5) after a period of 3 years of effective residence, as long as they have not been sentenced to a lengthy prison term in any country during that time.

Citizenship can be gained by marriage (9.1) if the marriage has been to a Somali citizen and for at least two years, and such granted citizenship by marriage may be retained (9.2) after divorce or after the death of their spouse.

Honorary citizenship may also be granted (10.1) but (importantly for the purposes of citizen/voter registration) are not entitled to vote, to stand for election or to hold elected office in Somalia. It therefore will be necessary to record and hold data to be able to make this distinction in the voter list.

The law makes a provision for children to be granted citizenship (7.2–7.5), by adoption or by grant if they are born to Somali parents, or by grant if they are found abandoned in Somalia.

The law (7.1) would require all children born in Somalia to be registered immediately after birth, regardless of citizenship status. Anecdotally it seems unlikely that this requirement is being comprehensively implemented at present.

Citizenship may be renounced voluntarily (11.1) by any citizen holding dual citizenship.

Any granted citizenship may be revoked (12.1) for a number of reasons, including fraudulent application, marriage of convenience, and criminal or military activity against the state of Somalia. This will not automatically revoke the citizenship of any spouse or children (12.2) and can only be applied to those with dual citizenship (12.3).

Political parties law

The Law of Political Parties and Multi-Party System (2016) has little to say on subjects relevant to citizenship or to civic/voter registration. However, the following clause is important:

Application for an official registration of a party must be in writing and signed by the chairperson of the party or his/her representative. A temporarily registered political party may be fully registered when:

a. The number of its signatory members is ten thousand (10,000) people who are voters and is registered in at least nine of the 18 regions that existed in 1991, in accordance with Article 49, Paragraph (1) of the provisional constitution.

b. Members mentioned in Paragraph (a) of this article must reflect regions, clans, gender balance, minorities, and discriminated/marginalized groups.

In terms of data collected and maintained for each person, this suggests it will be required to collect region, clan, and gender; and ideally also membership of any minority or discriminated/marginalized groups. In terms of data verification it would be ideal if this data was collected for every ID card holder at the time of card issuance; however, collecting and storing such sensitive data for every person in Somalia raises serious concerns about potential use or misuse of this information. Without having access to this information, the options for verifying 10,000 signatories against these criteria will be limited, but as the law technically only requires the supporter list 'to reflect' the diverse criteria it may be that there is no actual requirement to know the details for each and every listed person. Alternatively it would be possible to require potential political parties to publish their supporter lists with enough identifying details such that members of the public could challenge the presence of names on the list, in much the same way that public voter list display currently takes place in many countries.

Electoral commission law

The document "Establishment of the National Independent Electoral Commission (2015)" contains several clauses of note.

The NIEC has as legal duties: (14.1c) Registration of voters and constantly reviewing the voters roll, and (14.1d) Delimitation of constituencies in a best suitable manner for conducting elections.

The "constant reviewing" phrase suggests a requirement for continuously updated voter data rather than periodic voter registration exercises.

While it will inevitably depend on decisions made later about electoral representational models, "Delimitation of constituencies" in most countries would involve balancing regional electorate sizes based upon the voter or citizen population in each region. This in turn requires detailed knowledge of the number and geographic location of the entire voter population.

Finally, in matters of the right to vote, the right to stand for elections, and the final result, disputes cannot be resolved by the NIEC alone and may be appealed to the constitutional court (15). This raises a question about any possible Election Day voter registration, since there would be no opportunity for any person to appeal an eligibility decision in time to cast a ballot if the decision were to be reversed.

Annex D: Stakeholders consulted

Organization
AMAL Group
Benadir Regional Administration
Central Bank of Somalia
Creative Associates International, Inc.
Dahabshiil Group
Department of Immigration
Federal Cabinet Office of the Speaker
Federal Constitutional Affairs
Federal Financial Reporting Centre
Federal Government of Somalia
Federal Minister of Public Works and Resettlement
Federal Ministry of Constitution
Federal Ministry of Finance, EAFS
Federal Ministry of Interior & Federal Affairs
Federal Ministry of Internal Security
Federal Ministry of Justice
Federal Ministry of Planning & International Cooperation
Federal Ministry of Posts & Telecommunications
Federal Ministry of Public Works & Resettlement
Federal National Security Office
Federal Office of the President
Federal Office of the Prime Minister
Federal Parliament
Federal Parliament Budget, Finance, Planning Committee
Federal Parliament Committee Chair
Federal President of Somalia (2012–2017)
Financial Service Volunteer Corps
Galmudug Federal State
Galmudug Federal State, Constitution and Reconciliation

(continued)

Organization
Galmudug Federal State, Endowment & Religious Affairs
Galmudug Federal State, Humanitarian Affairs
Galmudug Federal State, Justice
Galmudug Federal State, Labour
Galmudug Federal State, Livestock
Galmudug Federal State, Ministry of Finance
Galmudug Federal State, Ministry of Women & Human Rights
Galmudug Federal State, Port and Marine Transport
Galmudug Federal State, Public Works
Galmudug Federal State, Water and Electricity
Galmudug Federal State, Youth
Higher Education & Somali REN
Hormuud Telecom
International Organisation for Migration (IOM)
Jubaland State
Media and Communications
Mogadishu Municipality, Benadir Regional Administration
National Independent Electoral Commission
National Intelligence Security Agency
NCRI
PIU of FGS MPT, ICT Sector Project
Puntland Federal State, Aid Coordination, Planning and International Cooperation
Puntland Federal State, Foreign Affairs
Puntland Federal State, Ministry of Planning and International Cooperation
Puntland Federal State, Puntland Security
Security Sector, National Security Office
SIMAD University
Somali Banking Association, International Bank of Somalia
South West Federal State
United Nations Office for Project Services (UNOPS)
US Global Development Lab, Digital Development, USAID

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ID4D
IDENTIFICATION FOR DEVELOPMENT

WORLD BANK GROUP