
Mapping UN Activity in Support of Identity Management¹

Findings and Policy Recommendations

Report presented in fulfillment of UNDP Consultancy Contract
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This report is the outcome of a study commissioned by the UNDP that was conducted over a period of two weeks in December 2015. It briefly documents current identification management practices and policies across 8 UN agencies interviewed (as well as the International Organization for Migration) that have points of entry and experience with identification systems. It highlights areas of consensus as well as gaps in policy and differences in approach. In addition, the report provides a set of recommendations aimed at facilitating a preliminary engagement of the UN system for the creation of a UN system-wide policy framework for identification management, as well as inform debates on best practices in the field of technology-assisted, sustainable identity management and population registration.

¹ This report was written by Dr. Joseph J. Atick, Chairman of Identity Counsel and Chairman of ID4Africa, under contract BPPS/IC/2015/0220 from UNDP.

LIST OF ACRONYMS

APAI CRVS	Africa Programme for Accelerated Improvement of CRVS
CRVS	Civil Registration and Vital Statistics
IOM	International Organization for Migration
ILO	International Labour Organization
IMS	Information Management System
NID	National Identity
NPR	National Population Register
OHCHR	Office of the United Nations High Commissioner for Human Rights
PII	Personally Identifying Information
Primero	Protection Related Information Management
SDGs	Sustainable Development Goals
UIN	Unique Identity Number
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children’s Fund
UNODC	United Nations Office on Drugs and Crime
UNOPS	United Nations Office for Project Services
UNSD	United Nations Statistics Division
WHO	World Health Organization
WFP	World Food Programme

Section I: Introduction

Motivation for Current Study

Target #16.9 of the recently adopted new global development agenda, the Sustainable Development Goals (SDGs), urges all countries to “provide legal identity for all, including birth registration by 2030.” Whereas most countries have legal provision for birth registration and operate at least basic civil registry systems focused on registering and certifying some life vital events (mostly birth), **many Member States do not operate comprehensive ‘birth-to-death’ population registration² and identity management systems** that provide for the full enjoyment of legal identity that SDG Target 16.9 envisages.

Considering their promised impact on development, identification systems have, in the recent past, attracted significant attention from development agencies and international organizations, including several United Nations bodies. As this has happened rather rapidly, many of these agencies

Proof of official identity has become a necessity for fully functioning in society (developed or developing). It is now also recognized as an important instrument for socioeconomic development and for the efficient management of populations in many contexts.

either have approached the question of intervention on identity matters **on an ad-hoc or project-by project basis** (without documenting or institutionalizing knowledge and policy) or **have adopted agency-wide proprietary practices for certain narrow aspects of identity management** without necessarily coordinating with other UN organizations that may be called upon to intervene in the same or similar contexts.

The move to comprehensive identity management, from birth-to-death and all stages in between, involves complex issues with regards to both the policy framework and matters of sustainability. Introduction of a comprehensive national population register that incorporates a traditional ‘foundational’ register such as the civil register (births, deaths, marriages, etc.), requires states to decide how to link, if at all, any or all other state functional registers, and how to coordinate between the various stakeholders that own the different aspects of the identity ecosystem in the country.

Without adequate **data protection legislative frameworks**, and empowered **data protection bodies** ensuring respect for the law, there is scope for abuse. Furthermore, in cases where there is multiple linking of registers, there is the challenge of data integrity and the risk of data contamination via accidental or nefarious means, and the possibility of creating a ‘single point of failure’ in a person’s digital identity. Equally relevant, lack of clarity on institutional frameworks

² As well as having a basic civil registry that records major life events, some countries also operate “national population registers” or “national identity registers” that attempt to document various categories of persons living on their territory, either permanently or temporarily. Many of these schemes, although not all, involve the issuance of an identity card to all person recorded. The term “national ID card scheme” is often used, in modern day contexts, to refer to schemes that issue cards with ‘smart’ characteristics such as computer chips that contain a series of data fields, including some that may not appear on the card itself.

within a country can lead to conflicts that undermine success and put investments, from both national and international sources, at risk.

While ID systems are routine national government activities, there is an **opportunity for the UN to play an important role in accelerating their responsible development by offering advocacy, financial and technical support**. This is not new. Within the UN system, different agencies have thus far engaged in different limited aspects of identification systems development. However, the scope and the nature of these engagements are rapidly evolving. For example:

- **UNICEF** has, over the years, assisted partner countries in matters related to birth registration and child vaccination registration programming and now finds itself needing to position its support within the context of integrated identity management where civil registers represent a foundational piece of a much more complex and rich overall system. This is because many of their partner countries are moving in that direction.
- **UNHCR** has in the past operated ‘single camp’ refugee registration exercises, but now is faced with the need to deploy a global identity management platform that manages identity of refugees across camps, across all countries and all times.
- **UNDP** has traditionally supported biometric voter registration exercises and is now the one UN agency being approached by some partner countries for support in developing comprehensive population registration systems, including national ID (NID) card schemes.

It is apparent that the opportunity for engagement by the UN now goes way beyond the scope of what was typically involved in pure civil registration programs familiar to the UN system. So in many ways the UN may be entering new, uncharted territory, **where new competencies and experiences are required and where no one UN agency ‘holds the pen’ on matters related to overall population registration and identity management**. Simply stated, at the current time, no UN agency has basic policy principles on population registration and identity management that would respond to the holistic type of engagements that are being encountered today and are sure to expand in the coming years.

There are existing initiatives in this field, such as the World Bank Group’s ‘ID4Development’ initiative³ and the existing Global Civil Registration and Vital Statistics Group, the Secretariat for which is provided by the UN Statistics Division⁴ but neither represents a full, UN system-wide

³ Some information about this group can be found

<http://www.worldbank.org/en/topic/governance/brief/identification-for-development>

⁴ The Global Civil Registration and Vital Statistics Group is a “group of international and regional organizations coming together to forge stronger alliances in the area of civil registration and vital statistics (CRVS). With growing recognition of the value of CRVS to human rights, good governance, and development planning, monitoring and evaluation, there has been renewed interest in strengthening national CRVS systems. CRVS is also emerging as an essential underpinning of the post-2015 development agenda, and considered as an essential element of National Strategies on the Development of Statistics (NSDS). The Group aims, among others, to converge strategic priorities towards the improvement of national CRVS systems, through active interaction and greater collaboration among members, and coordinate global efforts to deliver as one. The TOR for this group can be retrieved from

http://unstats.un.org/unsd/demographic/CRVS/Global_CRVS_Docs/TOR_2014_Final.pdf

comprehensive approach to policies, principles, and innovative approaches on holistic population registration and identity management.

In response to this current situation and in view of the perceived risks of such systems, therefore, UNDP, through this study, is seeking to

- Develop an organizational position and policies that could inform its engagements;
- Facilitate preliminary engagement of the UN system in order to explore the possibility of creating a UN-system-wide policy framework on identity management.

This initiative is particularly topical in the context of the continuing, and evolving, global debate on matters related to privacy, cybersecurity, data revolution, and the use of citizen information by state security forces, matters on which there are vastly different perspectives among UN Member States. When taken within the context of SDG #16.9, it becomes even more compelling as States are expected, in the eyes of the international community and the commitments that they have made, to provide legal identity to their people.

Scope

It is within this context that the UNDP launched the consultancy that led to this report, which had **as primary objective the mapping of UN agencies' activities in support of identification management in order to help inform UNDP policies on this matter**. While the goal is responsive to an immediate UNDP need, it is a first step towards an exercise of harmonization, where UN agencies could explore adopting common and interoperable approaches to the question of how to implement identification systems **either for their own operations or in support of engagements in countries that seek their assistance**.

Harmonization will take time to complete as it requires developing consensus around a series of sensitive issues. This is not the objective of this report whose scope, in that regard, is limited to providing a series of policy recommendations for initiating the harmonization exercise.

The report is based on the analysis of findings collected through a series of interviews with representatives of the targeted stakeholders. Figure 1 shows the 9 institutions that were interviewed between November 23 and December 23, 2015 in relation with this study.



Figure 1 UN Agencies, as well as the International Organization for Migration, that were interviewed for the current study.

While the agencies listed in Figure 1 are key identification management stakeholders within the United Nations and IOM, the list is not exhaustive.

Methodology: Axis of Inquiry

The interviews examined a host of issues. Examples of questions that were asked during the sessions, included:

- What are the points of entry and experiences that the organization have with identification or population management?
- How core is identification management or population registration to the mission of the organization?
- Does the organization have a set of policy principles or organizational position statement that guide its identification practices?
- What are the issues and challenges experienced within the operational context?
- What obstacles may be there that could impede the harmonization of identification practices and policies across the UN system?
- Are there cultural, gender or religious sensitivities encountered in the field and how are they addressed by the organization?
- What written documentation in terms of policies, guidelines and operational manuals exists that impact identification practices?
- How does the agency see the impact of the SDGs on their identification engagements (notably SDG #16.9)?
- Does the organization have an operational definition of legal identity?
- What position does the agency have regarding privacy and data protection policies?
- How about data sharing with partners? With host governments? Any centralization of data at the UN agency level? What are the modalities of access? How is the database secured against theft (information security protocols)?

- What are the risks seen in promoting the adoption of identification technologies (biometrics, smart cards, mobile, etc)?
- What are the risks seen in the development of registers (civil registers, population registers, social registers, national ID, etc.)?

Time constraints

This report should be considered as preliminary. The overall study had a very short duration (13 days in total including report drafting) and was conducted at a time when some key representatives of targeted organizations had limited availability due to year-end scheduling challenges. This meant that the interview time was limited to 60-90 minutes with each agency. In addition, we were unable to secure interviews with organizations such as WHO, WFP, ILO, UNOPS, UNODC, and the UN Economic Commission for Africa, that we suspect have relevant engagements with identification matters, and that should be considered as key stakeholders to be included in any future follow-up that builds on this study.

Organization of the Report

The report is organized as follows. In Section II, we present a summary of the raw information gathered during the interviews with the 9 agencies. It documents points of entry, organizational positions and concerns relative to identification management specific (as opposed to common) to each agency interviewed. Section III presents the general findings of the inquiry. These are themes and issues that emerged in common across multiple agencies. Finally, Section IV builds on these findings and presents a set of recommendations for policy actions to rectify certain gaps and inconsistencies noted. These represent an initial set of inputs that would inform any policy dialogue on identification management at the UNDP or as part of an interagency discussion aimed at harmonization of policies and practices.

Open Exchange

NO confidential information was solicited from or provided by any agency interviewed. All information exchanged was done consistent with the high-level of transparency under which all the UN agencies, and IOM, operate.

SECTION II: INDIVIDUAL AGENCY INPUTS

Summary of Raw Data Collected During the Interviews, November 23-December 23

1. UNICEF

Points of Entry and Experience:

UNICEF is concerned with identity management through their principal mission of child protection. More precisely, promoting children's right to **birth registration** falls clearly within UNICEF's mandate and represents **one of the six strategic priorities of the organization**.

UNICEF has had about 85 engagements around the world related to Civil Registration and Vital Statistics (CRVS). These range from providing financial, to policy, to technical support attuned to national contexts.

UNICEF is a member of the Global CRVS Working Group and they see the development of functional CRVS systems as core to their operational mission. As a consequence, the question of population registration is of significant interest to UNICEF as long as it is formulated within the framework of CRVS or if it links to, or reinforces, CRVS.

Organizational Position:

- UNICEF does not have an organizational position related to national population registration over and beyond civil registration.
- UNICEF has highly developed operational guidelines that they encourage countries to follow in the implementation of birth registration in context of civil registration programming. Their manual, *A Passport to Protection*, is rich with details and is freely available online.⁵ It represents best practices as to the process of putting together a functional birth registration system. It outlines a 'step wise' approach consisting of 8 stages, starting with situation analysis, organizational review, legal review, demand assessment, policy requirements, communication development, identification of gaps and priority interventions and identification of possible UNICEF support.
- UNICEF supports SDG #16.9 and proposed, as indicator, to use the percentage of children under the age of 5 years that are registered in the birth register.⁶
- While UNICEF acknowledges that the indicator for 16.9 that they support does not address the broader question of legal identity for all, they are satisfied to be focused purely on birth registration, since that is the limit of their mandate.

⁵ Can be retrieved from http://www.unicef.org/protection/files/UNICEF_Birth_Registration_Handbook.pdf.

⁶ The final text of the indicator reads "16.9.1 Percentage of children under 5 whose births have been registered with a civil authority, disaggregated by age."

Trends:

- Ten years ago, a significant portion of UNICEF’s work focused on public awareness campaigns around the importance of CRVS. Today UNICEF is focused on working with and through the CRVS systems themselves that are now in place.
- Over the last ten years UNICEF moved away from service delivery to supporting systems and institutions that deliver service around registration.
- While the focus continues to be on countries that have reported low registration rates, the engagement is shifting – both deepening and broadening. Today UNICEF deploys social norms methodology⁷ across many countries (not just those with low overall registration rates) to attempt to understand why particular minority groups in these countries continue to represent ‘hold-outs’ for civil registration, or pockets of resistance to universal registration.
- Over the last few years, UNICEF has been involved in technology for CRVS, especially mobile registration. This is primarily because they see the risks of mobile registration if done incorrectly, and they see the opportunity to try to mitigate those risks by ‘being at the table’ early on in the adoption life cycle.
- Today UNICEF sees more linkage between civil registration systems and health systems. They have not been engaged nor do they have any organizational position on the linkage between civil registration and national ID systems.
- Another visible trend that they have seen is the significant and steady increase in investments in CRVS. This is driven by increased interest from donor countries, in particular the EU, Canada and the USA. UNICEF speculates that this may have to do with the challenges these countries face around immigration and border control.

Concerns:

UNICEF raised several concerns related to the question of identity management, which can be summarized as follows:

- **Potential elimination of the birth certificate:** as national identification systems develop and are online, there is some talk, in some global policy circles, of some countries moving towards eliminating the issuance of paper birth certificates. UNICEF would like to maintain the emphasis on the need for birth certificate issuance as a policy principle since they believe the birth certificate is an encouragement to people to register births in the first place. It is a form of a receipt and an immediate attestation of the registration; if eliminated, it could eliminate a motive for early registration. A broader issue here relates to the extent to which eventual elimination of paper certificates could mean a move towards establishing the legal primacy of digital records over paper records. One of the longer-term, knock-on effects of this could mean an eventual situation where identity is protected via digital sources rather than paper sources, which eventually could mean that identity is state-given and not personally-declared, i.e. the person is not who they say they are, but who the state says they are. This could raise civil liberties concerns.

⁷ Which aim to uncover reasons why certain groups stand out from their peers.

- **Maintaining registration free:** UNICEF advocates maintaining the birth registration free of charge, even when done as late registration. They particularly emphasize the need to NOT charge for birth certificate issuance. In that regard they differ from other agencies of the UN, such as UN Statistics Division, which accept, as a matter of policy, the compromise that countries may charge for late registration and issuance of a certificate, as long as the registration act itself is kept free when done within the legal time limit.
- **Technology driving registration instead of need and policy:** UNICEF was concerned that the current ecosystem for CRVS seems to be dominated by ICT technology firms that are pushing for commercial agendas at a rapid pace. This is not allowing countries to assess their true needs and to develop the appropriate policies before jumping into technological implementation. They provide, as example, the rush to embrace mobile birth registration at a time when issues related to data quality and reliability and fitness for the purposes of CRVS have not been fully assessed.

Data Handling:

Generally speaking, while UNICEF does not centrally accumulate data that can be characterized as PII (Personally Identifying Information), it does provide a host of Information Management Systems (IMS) that have been developed over the years to support specific projects and are field deployed in many locations worldwide. The entry points for these systems are mostly emergencies (e.g. in Liberia during the Ebola crisis and Nepal in the aftermath of the 2015 earthquake). The associated IMS systems collect and process personal data. These include:

- IA-CPIMS (Interagency Child Protection Information Management System);
- GBV IMS (Gender-based Violence Information Management System);
- CAAFAG: Children associated with armed forces and groups IMS;
- UASC: Unaccompanied and separated children IMS;
- RAPIDFTR: Rapid Family Tracing and Reunification information system.

In addition to few others, all these information systems have been unified into UNICEF's next generation integrated IMS called Primero (Protection Related Information Management). As a consequence, UNICEF expect Primero to continue to collect an increasing amount of personal data. It was not clear how this data is centralized or aggregated. Nevertheless, UNICEF acknowledges the need for a data protection policy to address the disposition, protection and handling of this type of data. Apparently a policy is currently being explored.

Organizational Arrangements:

UNICEF does not have a governance body specifically focused on providing oversight in the area of population registration. The work is highly distributed across regional offices and local offices that have their own initiatives within their individual control structures. They are constrained and guided by the Office of Protection at UNICEF headquarters.

UNICEF convenes in New York a meeting, twice a year, for all the Regional Protection Advisors around the world. They dedicate one day to Birth Registration.

2. UNFPA

Points of Entry and Experience:

UNFPA touches identification systems through their work in the area of reproductive health, infant mortality, combating child marriages, and promoting the rights of young people (especially adolescent girls). Their 130 country offices are often approached by local authorities seeking assistance related to CRVS and population registers. In that regard they work closely with UNICEF and they follow standards and principles for CRVS established by UNSD.

While in the past their engagement has been sporadic, opportunistic and reactive to demand, this is changing primarily as a result of the adoption of SDG #16.9. UNFPA is in the process of revising their strategic plan, which is expected to involve a more holistic approach to health that emphasizes better programming of CRVS systems and development of registers.

Organizational Position:

- Thus far UNFPA's approach has been *ad hoc* and responsive to demand for field assistance by various countries for local engagements, with the result that many UNFPA country offices are involved in CRVS initiatives. In reality there is no clearly spelled policy that defines UNFPA's organizational position on identification and registration of populations, nor does the UNFPA have the expertise required to systematically address the development of such policies. On the matter they tend to work collaboratively with UNICEF and UNSD and have provided significant input to the inter-agency efforts related to the development of SDG indicators, including SDG16.9.
- UNFPA has not formulated any organizational objections or reservations related to ID systems, nor have they addressed what type of non-discriminatory principles would be required to ensure that the systems contribute to the public good.
- UNFPA does not have a proposal for an indicator to measure the progress in legal identity. They are supporting the indicator proposed by the Inter-Agency Expert Group on SDG Indicators (IAEG-SDG),⁸ which measures the percentage of children under the age of 5 that are registered in the CRVS system. UNFPA was one of the organizations that pushed for lowering the age from under 5 to under 1 as a more appropriate indicator.

Concerns:

Lack of funding: UNFPA sees significant budget cuts looming on the horizon that could impact their ability to become a more active stakeholder in the identity landscape. This is resulting in a significant shortfall in resources available for ongoing development work. This dramatic drop in financial resources deeply impacts UNFPA's ability to adapt to the new environment which emphasizes identification and registration as the basis for a more holistic and comprehensive approach to population development.

Data Handling

In general, UNFPA does not have access to Personally Identifying Information or sensitive data. In rare cases they may have access to such data within project specific contexts. In those instances,

⁸ For more information about this group and its TORs see <http://unstats.un.org/sdgs/iaeg-sdgs/>.

they follow the UNSD guidelines on data confidentiality. That said, they recognize the need to examine what new issues related to data handling emerge in an increasingly data rich world governed by the Sustainable Development Goals.

3. UN Women

Point of Entry and Experience:

UN Women has not had a significant amount of engagements that touch directly identification systems, although there are some, including a new partnership in [Nigeria](#) to register half a million women with ID cards enabled with electronic payments functionality.⁹ In addition, UN Women's humanitarian, HIV/AIDS, and Peace and Security programming integrates identification issues in programme design and recommendations. Corporately, UN Women have a significant stake in the development and successful implementation of these systems, as they believe that identification systems can aggravate gender bias, if done without sensitivity to gender. Alternatively, they can improve gender equality if implemented with careful attention to realizing the inherent empowerment of women that they are capable of producing as an outcome (see below).

Organizational Position:

UN Women continues to be very supportive of the need to encourage women to participate in civil registration and national identification systems. In general, this is because the possession of ID correlates with the recognition of certain rights. More specifically:

- CRVS registration improves access to health services, an area of significant interest to UN Women.
- Registration in identification systems and the possession of an identity credential or card empowers women in general. In particular, it empowers women to vote, maintain property rights, claim inheritance, be counted as 'head of household' eligible for assistance under social protection programs, and as an entry point into the financial ecosystem.
- Absence of civil registration can lead to negative consequences for women in cases of divorce related to custody and child support.

UN Women advocates the disaggregation by sex of any indicator related to identification systems. In particular, while SDG #16.9 does not explicitly call for breaking out the indicator reporting by sex, UN Women insists that data collected must be disaggregated by sex so that reporting enables gender analysis, including of gender inequality in legal identity.

Concerns:

While in general UN Women see ID systems as positive, they have raised several concerns related to the *access and usage* that could result in discrimination against women if not implemented correctly. These lead to policy recommendations for identity systems to make them pro-women:

⁹ They have also been engaged in previous civil registration drives for women in [Egypt](#) and [Tajikistan](#).

- Ensure that enrollment centres are accessible to women, by having enough of them so that women do not have to travel significant distances. Enrollment campaigns should also include the use of mobile registration, where registration officers are able to go house to house or to local civic centres in each village or commune in order to save mothers from the need to travel long distances to enroll.
- Allowance should be made for the fact that in poor, rural areas of some countries, women may leave their place of birth to live with their husbands in their place of birth and can therefore face greater difficulties to obtain civil status should rules require them to travel back to their home village.
- Work through advocacy to mitigate the impact of social norms that present obstacles to women registration.
- Work to eliminate laws for civil registration that have a negative impact on women participation (e.g. the need to declare the name of the father before a child is registered, or the need to present a marriage certificate).
- Ensure that ID systems are accompanied by pro-women education and sensitization campaigns that explain to women the procedures and the technologies involved and the rights that they acquire in the registration process.
- The financial and opportunity costs associated with obtaining civil registry documents for family members needs to be addressed, as this may lead male children/family members to be privileged over female.

Data Handling

UN Women aggregates data of a statistical nature from other sources. In general, they do not deal with any personally identifying information. As such, they have no specific policy in place pertaining to data protection.

4. UNDESA Statistics Division (UNSD)

Point of Entry and Experience

UNSD is a Division of the UN Department of Economic and Social Affairs (UNDESA). UNSD has a long history of engagement with civil registration processes through their work on civil registration and vital statistics, going back to 1953. While their mandate is focused on official statistics methods, collection and dissemination it became clear, back then, that a linkage between civil registration and vital statistics-gathering information systems was required to continually produce the type and quality of data required for good governance at the national level.

From an early stage UNSD developed its programmes on the premise that civil registration, and population registers as its modern instrument, continually produce a source of vital statistics and that they should be reinforced for that purpose.¹⁰

¹⁰ Regarding census exercises, census-like small area statistics are, in UNSD's view, irreplaceable components of contemporary statistics.

Today UNSD continues to be one of the lead UN institutions that focuses on civil registration and identity matters because of their data producing value: civil registration is followed by generation and dissemination of tabulated data (vital statistics) and indicators (vital rates). They argue that civil registration is the foundation upon which national identification systems should be subsequently built, on the basis of their view that legal identity is established by issuing a birth certificate to every newborn baby and is retired by issuing a death certificate for every deceased person.

UNSD acts as the Secretariat for the Statistical Commission, and for the Global Civil Registration and Vital Statistics Group as well as for the Inter-Agency Expert Group on Sustainable Development Goal Indicators.

Organizational Position:

- UNSD has developed an extensive body of principles and guidelines related to civil registration, vital statistics, population and housing census.
- Their positions are outlined in a series of publications which includes an 8-volume handbook series (**Handbook on Civil Registration and Vital Statistics Systems; and Principles and Recommendations for Vital Statistics Systems**),¹¹ which is now in its third revision, and is available free of charge electronically from the UNSD website (or for a small fee for the printed version).
- While the UNSD position on this matter is deep, it is not broad. The position is highly focused on all aspects of putting in place a civil registration system as well as on the collection of reliable data. The organization is silent on matters related to national identification systems such as national ID cards, and on the policy, legal frameworks, etc. required to put in place such systems. They do plan to address these issues in technical detail as part of the process of revising the handbook on management of civil registration systems.
- **UNSD does not believe it is possible, in the near future, to arrive at a set of principles surrounding the practical expression of legal identity that would be acceptable internationally. “The views of the Member States are so diverse that it is unlikely that a consensus would emerge given the cultural, political and legal differences that would have to be bridged.”**
- UNSD acknowledges that the development of SDG #16, the associated targets and the corresponding indicators within the SDG process were much more politically influenced than technical, reflecting the fact that there is no clear consensus around identity across the world. The final language for Target 16.9 for example *“By 2030 provide legal identity for all, including birth registration”* is a mix of two concepts, one that can be measured (birth registration, which is, in UNSD’s opinion, an actual recognition of legal identity) and another that has not been defined (legal identity) and for which no measurable indicator is likely to emerge that would be acceptable for all.
- Nevertheless, UNSD believes that adoption of SDG #16.9 is a major step forward because it reinvigorates the dialogue around identity registration and it underscores what is commonly accepted as international standards (birth registration). What remains as areas of discord fuels healthy continued dialogue.

¹¹ The series can be retrieved online from the UNSD publication website for example <http://unstats.un.org/unsd/pubs/gesgrid.asp?mysearch=handbook+on+civil+registration>

- UNSD note the fact that currently there are 230 indicators as part of the SDG process, which is considered unwieldy, and given the effect that increasing the number on the bases of disaggregation for population subgroups would have, this raises the question of whether disaggregation by sex in the context of Target 16.9 (something desired by UN Women, OHCHR and others) will happen as it will increase that number.
- When it comes to cost and access to civil registration, UNSD clearly recommends that registration should be free of charge. They understand countries charging for late registrations.
- UNSD has advocated the importance of registering death, not just births. While birth impacts directly UNICEF's mission, for example, adult death arguably does not. As a consequence, UNSD, working through the UN Statistics Commission, has been pushing for comprehensive birth and death registration and, ideally, registration of all vital events in between.

With regards to SDG #17.19, which addresses the importance of statistical capacity development in developing countries, this is expected to be assessed in two ways: 1) have conducted at least one Population and Housing Census in the last ten years, and 2) have achieved 100 per cent birth registration and 80 per cent death registration. UNSD already has a well-functioning mechanism to monitor census implementation in the world, and has also been collecting the information regarding birth and death registration for the publication of the Vital Statistics Report. UNSD is of the view, however, that the quality of data on registration coverage furnished by national statistical offices greatly varies. Hence, they plan to scale up their efforts to assess the quality of vital statistics.

Concerns:

UNSD raised several concerns related to identification systems. These include:

- Lack of consensus around a framework and an operational definition of legal identity that could inform the identification priorities of Member States beyond CRVS.
- Lack of standards around the components required for a national identification system.
- Lack of a clear position at a fundamental level as to who 'owns' the associated data. This is especially true for programs that use biometrics.
- Increased obsession of countries with biometrics without necessarily anchoring these developments within frameworks that support the linkage to statistical analysis and instruments.
- Lack of irrefutable evidence linking biometric identification systems and empowerment. Considering the cost of these systems, in many cases UNSD believes investment could be better spent institutionalizing strong civil registration systems.
- Mobile registration raises certain concerns when the distinction between notification and registration is not stressed.
- Lack of progress on death registration is of concern.
- The importance to be aware of shortcuts in population registration. They believe identification systems must be sustainable over long periods of time and not the by-product of one time campaigns that aim to satisfy immediate needs. ***Anything short of establishing a universal, continuous and permanent registration system, which also results in reliable vital statistics, should, according to UNSD, not be supported.***

Data Handling:

UNSD has in place a set of data confidentiality principles. These were formulated as part of their fundamental principles for statistical data handling. Often those principles are adopted in the language of the national statistics acts or laws governing the collection of data related to census by national statistical bodies. These confidentiality principles, while adequate for statistical context, fall short of full-fledged data protection policies required when dealing with predominantly PII.

5. UNDESA Population Division (PD)

Point of Entry and Experience

The UN Population Division is a division of UNDESA, just like UNSD. UNPD does not have direct engagements with systems that generate personally identifying information. They are also one step removed from CRVS systems. Their work is focused at national level analysis of data to produce demographic insights relevant for development. They do not have access to identity registers' or data.

Organizational Position

While UNPD has no need to develop an official position relative to identification systems, their experts have definite opinions about these systems and the measures required to safeguard them and to maximize their utility as instruments of development as well as sources of reliable statistical data. Among what was expressed during the interview:

- Identity registers are very crucial for the ongoing generation of data and vital statistics. They believe it is not sufficient to rely on census, and that a more permanent data stream emanating from the identity registers, whether the civil register or national population register, is necessary to support socio-economic indicators.
- They strongly believe in the importance of record linkages across databases. Of course this would have to be done within the context of a comprehensive data protection framework.
- UNPD emphasizes the need to conduct ongoing validation processes on all identity registers in order to ensure the quality and integrity of the data, and to assess levels of coverage and completeness of registration.
- UNPD sees strong value in the adoption of biometric technologies to improve the robustness of the identification systems and to avoid double counting.
- UNPD is strongly in favor of a more systematic use of data encryption procedures, starting from the initial point of data capture and extending throughout the information system to minimize the risk of a security breach.

6. OHCHR

Point of Entry and Experience

OHCHR does not have any engagements that operationally deal with identification systems. The concept of legal identity, however, is of huge significance and interest to OHCHR, given their human rights mandate and the implications of the concept of legal identity for the human right to recognition as a person before the law (legal personality). The organization does not systematically work on human rights aspects of identification systems; they may do so on an *ad hoc* basis.

Organizational Position

- OHCHR believes that the question of identification is an important and timely topic in view of the increased activities around the SDGs.
- OHCHR advocates for disaggregation by gender and other status of indicators related to identification systems.
- They believe in the positive potential of identification system in empowering and attributing legal rights to individuals.
- But they also recognize that identification systems create new risks for the protection of human rights (e.g. for individuals' right to privacy) and, as such, the human rights community needs to be involved in the deliberation around these systems.
- They emphasize the need for participation and transparency in the development and operation of such systems.
- The organization believes legal identity should not be a barrier to access to services and, as such, it should be used to empower. **Its absence should not lead to disenfranchising or denial of service to the rights' holders by states as duty bearers.**

Concerns

The right to privacy and the need for safeguards in terms of the gathering, storage and sharing of personal data/identifying information was raised as a concern. This directly concerns companies and governments, but also the UN, where it is gathering such information or supporting the establishment of such systems within States. Violations of the right to privacy can have an impact on other rights (freedom of expression, freedom of assembly, and even right to life) and particularly affect certain rights-holders (notably human rights defenders and journalists).

While traditional concerns regarding the potential misuse of identification systems are well noted, a new concern emerged during the interview with OHCHR that merits closer examination. This has to do with the interest in the *Human Rights-based approach to data collection* advocated by OHCHR.¹² This framework calls for disaggregation of data by parameters such as sex, ethnicity or minority status in order to measure, assess and report human rights indicators relative to those who are most marginalized, excluded or discriminated against.

While this approach can be made safe within the context of statistical data collected during surveys, it can be dangerous when the source of data is no longer censuses and surveys. This can happen if censuses are eliminated and, instead, National Population Registers are tasked with the responsibility of producing both vital statistics data (as demanded by many other UN agencies) as

¹² (please see OHCHR Guidance Note "A Human Rights based approach to data", available at <http://www.ohchr.org/Documents/Issues/HRIIndicators/GuidanceNoteonApproachtoData.pdf>).

well as disaggregated data (as required by a human rights approach to data). If the NPR becomes the source, it could lead to the expansion in the scope of NPR, where governments could justify the collection, storage and personalization of sensitive data related to ethnicity, religion, etc. This can be a step in the wrong direction as viewed by those that would advocate that National Population Registers should focus on enumerating the populations and not to play the role of a source of data generation for a rich set of indicators. In this regard, the overriding human rights principle “do no harm” should always be respected. This issue is dealt with further in the Section III below.

7. UNHCR

Points of Entry and Experience:

UNHCR is very unique among the family of UN agencies because of the fact that they enroll, store and process identity data related to a population of interest core to their mission, namely refugees and displaced persons. As a result, they have developed field experience related to identification systems and population registrations.

UNHCR, over the last 15 years, has accumulated two types of experiences related to identity registers and identity management:

System Type	Explanation and Examples
‘In theatre’ local deployment	<p>A system typically used to manage identity in one location or within one country. Thus there is no capability to cross reference individuals encountered across regional or global encounters. These systems include:</p> <ul style="list-style-type: none"> • Bioregistrator (fingerprint based): a system consisting of enrollment software and fingerprint scanners deployable in the field that can be used to capture biographic as well as biometric data from refugees. The system runs on a local database server where all the biometrics are stocked and processed for de-duplication. • IrisGuard (Iris based, not developed by UNHCR but deployed on an outsourced basis by a private company in Jordan). Currently the system contains 2 million iris templates of Syrian refugees based in Jordan. It also includes the capability of performing unconditional cash transfers by linking it to a proprietary banking systems that dispenses cash via automated teller machines. While UNHCR does not operate this system nor does it have custody of the collected data (it was outsourced by the Jordanian government to the local company), they coordinate support.

	<p>In addition, more recently after UNHCR has developed its centralized system (BIMS), they have also deployed it using local field servers.</p>
<p>Centralized global identity management system</p>	<p>Biometric Identity Management System (BIMS): is an enterprise grade comprehensive global identity management system developed by UNHCR and deployed in the first instance in January 2015 (for refugees in Thailand) and in May in Chad and is expected to be deployed in 10 locations around the world within the next 12 months.</p> <p>The system uses enrollment and registration stations that can be deployed in the field anywhere but aggregates the enrollment data and de-duplicates it using biometric matching, all running in a data center in Geneva (soon to be moved to Copenhagen).</p> <p>The system is able to detect recidivism and duplicates in the population of interest ('1 to Many' matching using biometrics). Once an individual is enrolled, the system can be used to authenticate enrollees by performing 1 to 1 matching. The system benefits are principally:</p> <ol style="list-style-type: none"> I. It ensures that a refugee only receives entitlement once, hence it eliminates double counting even across multiple camps. II. It ensures that aid is provided only to the person who is entitled (by linking aid to identity) III. Can provide a profile of a refugee over extended period of time that could aid with management of long term refugee needs. <p>The system currently has 600,000 identities and over the next 5 years it is projected to grow to reach 7 Million unique refugees.</p> <p>The system uses 10-print fingers and 2-iris. It captures the face but it does not use it in either matching or in authentication, since the robustness of face matching technology is not yet to the point that would allow its use in difficult lightening environments such as that encountered outdoors in camps</p> <p>BIMS fits into an information management system (IMS) called ProGres which includes case management, identification and verification modules as well as other elements that support the business workflow of UNHCR.</p>

Data Handling

Since UNHCR collects and consolidates personal data into various repositories, they have invested in building a data protection policy. The policy took some time to develop, given the sensitivity and the pressure UNHCR is often under in local fields of operations by host countries relative to registration exercises. The policy was finally adopted in May 2015 and can now be accessed at <http://www.refworld.org/docid/55643c1d4.html>.

Concerns

UNHCR's concerns are very operational, which is expected considering that identification systems are a tool that they use in real deployments worldwide on an ongoing basis. Some of the issues are political and others are technical. Among them we can cite:

- **Data ownership, control and sharing:** UNHCR concerns continue to revolve around the question of who owns and controls collected data. This is a very complex and political question. The architecture of the BIMS system, when it is centralized, imposes a restriction on their ability to improve governments' capacities to capture data about refugees on their own. This is because the data processing of BIMS takes place centrally in Geneva, which means governments would be pushing data collected in their countries, through the cloud, to a centralized location. This is unlike other field deployments of complete systems, which could be given to governments in areas of interest and empowered to use them to perform the enrollment.
- **Authentication continues to be a challenge:** Field authentication in a cost effective way continues to be a challenge for programmes of assistance. While the BIMS system is capable of de-duplicating enrollees to ensure one registration for each beneficiary, it does not yet provide for a low cost mechanism for authentication of beneficiaries to ensure the entitled person is truly the individual receiving the aid. BIMS is an online system, hence significant ICT infrastructure would be required to ensure that encounters with claimants are checked against the centralized database. An alternative could be to field deploy subsections of the database, which is problematic from an ICT standpoint but also raises question of control. Ideally the use of a verifiable credential, a low cost ID card linked to identity, or mobile devices, would be the ideal. These have not yet been explored.
- **Children, as a group, continue to represent a challenge:** Children are a challenge to any biometric system since they do not provide good fingerprints before the age of 12. In the deployment that UNHCR has done in Thailand they have taken the fingerprints of children starting at 6 years old, but in reality most of those prints are not useable or at best marginally useable (the thumb is the only one that may be useful, considering its size). But enrolling children with biometrics that are not useable seems to have a deterrence effect on the population, and UNHCR believes it has helped in managing the well-known problem of 'children shopping,' where the same child is moved around from one family to another (among neighbors or relatives) and registered multiple times in order to increase the amount of entitlement a group may end up receiving.
- **Mandate to end statelessness means UNHCR needs to intervene to facilitate birth registration:** This is a challenge since it involves significant amount of politics in the

host country related to legal consequences of birth registration and nationality and it is not simply an operational process.

- **Pressure to give access to data for security reasons:** UNHCR-collected data may be among the most sensitive data encountered within the UN system. It contains the identities of groups in areas of conflicts and hence the data attracts the interest of the country of departure, country of settlement and various international anti-terrorism and anti-crime organizations that are concerned about the possibility of refugees being infiltrated by groups that seek to do harm. The recent Syrian refugee crisis and the desire by some counter-terrorism bodies to access refugee identity data in the aftermath of the November 2015 Paris terrorist attacks demonstrates this point.

8. UNDP

Points of Entry and Experience:

When it comes to identity registration and management, UNDP has a very important role to play through its democratic governance practice area. Essential to the democratic process is a robust and reliable electoral register. While this has been the traditional point of entry (in response to requests from Member States or under resolutions of the Security Council and under the overall parameters established by the DPA USG for Political Affairs, in his capacity as UN electoral Focal Point), the scope of UNDP's role is expanding beyond the assistance, to electoral management bodies, in the development of the voter rolls. This is happening because of the desire, of some Member States, to migrate from 'one-off' campaigns to sustainable and more permanent processes for the development and maintenance of not only electoral registers, but broader population registers and national ID card systems. Within these frameworks these become foundational national identity registers linked to civil registers and from which voter lists can be produced.

Assisting Member States in realizing the sustainability of voter registers has been a strategic objective of UNDP for a long time. One that the organization has had to balance against field realities and donor partners' mode of funding, which tends to focus on funding specific elections at specific points of time, or indeed successive electoral cycles, instead of holistic systems of identity management and sustainable institutions that progressively prepare and manage elections. Nevertheless, entry into the realm of legal identity management via the voter lists is a pragmatic approach towards the development of more permanent registers for many reasons:

- Voter registration is a process whose need is supported by many stakeholders, including the political parties within the country and the international community.
- The process has very specific and well defined deliverables.
- The process has clear (often constitutionally set) deadlines that ensure the rapid buildup of the process.
- It is a process that donor partners are often more willing to fund.

This is unlike national identity projects that are often underfunded, have indefinite timelines and can have very fuzzy deliverables.

While the point of entry is opportunistic in the sense that it is passing through an often well-defined and well-funded process, the real opportunity lies in migrating from these temporary registers to permanent institutionalized registers with strong ties to foundational identity.

Concerns

While there is agreement on the need to move one-off registers into more permanent identification solutions capable of providing legal identity, there are concerns that result from the significant obstacles that impede doing that. The challenges and concerns include:

- Lack of institutional and funding continuity.¹³ Often UNDP works with electoral management bodies which have not only a strong independence from centralized government ministries, but who also often have a very high degree of turnover, reflecting the electoral cycles and the political changes happening in the country. As such UNDP counterparts are typically not permanent institutions that can assure continuity and ‘joined-up’ thinking among Government ministries.
- Often these registers are developed in countries that lack capacity, which are attempting to register voters either during a conflict or immediately post-conflict, with a high risk of political interference that puts pressure and significantly influences what would otherwise be normal registration exercises. In some cases, the national institutions lack understanding of the technical processes involved, have been influenced by vendors or what they have seen in neighboring countries, and prioritise less informed collaboration.
- Funding is often uneven, focusing on individual elections (even if often, these days, programmed in an ‘electoral cycle’ manner, one or two years in advance of elections).
- Timelines are often compressed.
- Transfer of identity assets that are electoral registration outcomes to permanent resources is not a trivial exercise, since it needs to be done within a legal framework accepted to all parties. Recent experiences in certain African and Asia Pacific countries indicate that loss of confidence in the integrity of the civil register or the national identity could lead to political demands for separate voter registration, even if those exercises represent investments that can be wasteful.
- Often electoral registers are produced under a highly compressed time frame that is not experienced by other identity registration processes. This has consequences to the cost of registration per person and/or on the quality of data captured for certain fields (for example, there is often no detailed attention paid to the precise date of birth. The register needs to just establish whether the person is major and entitled to vote). To make these registers reusable and sustainable for other broader purposes requires a different methodology of registration.
- Electoral registration leads to significant movement of confidential and sensitive data which could create opportunities for data risks. These result from the nature of the registration exercises which may involve temporary infrastructure (field registration) to the

¹³ The Secretary-General, in his biennial report to the General Assembly on the UN’s work in support of democratic elections in both 2011, 2013 and 2015, has raised concerns about the unsustainability of high-tech electoral system and practices chosen by some developing and post-conflict countries, which is widely interpreted to be reference to stand-alone biometric voter registration systems.

need to move data to third parties to perform the deduplication and cleaning, which is often outsourced and has been on occasion, conducted overseas.

- The final proposal for the SDG #16.9 indicator represents a missed opportunity for legal identity. A definition that relies on measuring birth registration for those under the age of 5 does not attribute the right value to registers such as the voter lists that are capable of being used to measure the coverage of legal identity in a country. It can be said that a robust, well developed voter register that has been de-duplicated with biometrics may be a better measure of legal identity for a group of individuals that would otherwise be missed by measures that focus on infant civil registration.

Data Handling:

UNDP does not formally take custody of any personal data when supporting national-led voter registration processes. It often provides technical assistance related to ICT that lead to systems that collect data but, generally speaking, the data generated by them is owned by the electoral management body or other organs of the state (even if the individual voter register is often accessible to UNDP experts via the technical assistance advisors often embedded within the electoral management body). As such UNDP does not have a data protection and privacy policy. Nevertheless, the organization understands the need for information security and confidentiality and, in their procurement assistance of countries, do implement legal clauses to ensure that service providers are held to a high standard for data handling. From what we were able to tell, there is no specific policy that UNDP requires counterparts to adopt for data protection.

9. IOM¹⁴

Point of Entry and Experience

The IOM is not a UN body but its work is of significant interest and relevance for the UN and it has been using identification systems in different contexts and at different levels within the scope of its programming (ranging from direct assistance to humanitarian repatriation, resettlement, and assisted voluntary return). Beneficiary registration is occasionally warranted and includes the recording of personal data.

Furthermore, IOM uses a Displacement Tracking Matrix (DTM) to track human mobility in the context of crises, including internal displacement caused by conflict and natural disasters, as well as cross-border mobility. There, the primary goal is to identify numbers, locations and priority needs of displaced and affected populations, and data is primarily collected at the group level through key informants combined with direct observation. DTM tools and methodologies can also be used to capture household and individual-level data through surveys and registration exercises.

Through the DTM, IOM has established itself as a key actor providing the humanitarian community with actionable data on humanitarian needs and is continually striving to further enhance existing systems to enable more efficient sharing of information as well as enhanced data analytics. For

¹⁴ Although not a UN body, IOM has observer status in the General Assembly and the UN-IOM relationship is currently under review.

example, in Haiti, IOM registered over 1.5 million people, which was the largest scale registration exercise.

In addition, IOM was among the first organizations within the UN system to adopt biometric systems on large scale. For example, they used biometrics for registration in Darfur in 2008, and it has recently undertaken large-scale biometric registrations in the context of emergency responses in South Sudan, DRC, and, most recently, in Nigeria. They are also currently partnering with the Australian Government to provide a biometric data sharing platform in the Asia-Pacific region for 'Bali Process' Member States to exchange biometric identity data with each other for identity management purposes.¹⁵

Concerns

IOM's concerns regarding identification systems emanate from their sensitivity regarding the handling of collected data, to ensure that it is done in a manner consistent with IOM's Data Protection Manual, or equivalent. The manual is intended to guide the handling of personal data, but in its programme implementation, IOM is also striving to apply these standards to other types of data, including non-personal data captured through DTM exercises.

In terms of reservations, IOM tends to be cautious about collecting certain types of information (e.g. on ethnicity) in contexts where this information is highly sensitive and especially if the operating environment makes it difficult to guarantee that all data will be securely stored at all times. They also aim to collect data that has an intended use, i.e. to balance an increasing demand for ever more data with reflections about which data is really needed, and prioritize accordingly.

Another concern is the need to inform those from whom data is collected about the intended primary use as well as any conceivable secondary usages of the data. They also share different types of data with different audiences. For example, any protection-sensitive information captured through the DTM, even if not at the level of personal identifiable data, is shared only bilaterally with concerned protection actors, rather than being published as part of the general dataset and reports.

Data Handling

IOM has a comprehensive policy to protect its beneficiaries' personal data. IOM was one of the first agencies to develop and launch a comprehensive Data Protection Manual, which is publicly accessible at http://publications.iom.int/system/files/pdf/iomdataprotection_web.pdf.

The Manual was launched and entered into force in 2009, and it highlights IOM's policy and operational guidelines, 'do's and don'ts' as well as best practices when it comes to collecting, handling, storing and sharing personal data responsibly. Although the Principles and the Manual were developed specifically for beneficiaries' personal data, IOM believes they are also used as a benchmark when handling sensitive non-personal data.

IOM has developed its own Border Management Information System, called the Migration Information and Data Analysis System (MIDAS), a high-quality, affordable system that can collect,

¹⁵ The **Bali Process** is an official international forum, established in 2002, to facilitate discussion and information sharing about issues relating to people smuggling, [human trafficking](#), and related transnational crime and appropriate responses to these issues. Over 50 countries and numerous international agencies participate in the Bali Process. It is co-chaired by the Governments of [Indonesia](#) and [Australia](#).

process and record information for the purpose of identification of travelers, data collection and analysis.¹⁶ MIDAS is improving access to such technologies for States with limited resources; as such, it provides modular systems at affordable cost and solicits funding from interested donors. IOM have also developed an Identity Management Masterclass training course that they offer to governments in the context of their wider border management programming. They have taken the first step by training their own staff on this subject matter to equip them for the onward provision of this training. IOM does not, at any time, have possession of any data that MIDAS may capture. The systems, once they are installed, become the property of the beneficiary country and a deed of donation is signed to that effect. Advice is offered to them by IOM on data protection.

¹⁶ MIDAS, which has a biometric capture capability for verification purposes, is exclusively used in border management. 20 countries worldwide now use it as their border management information system.

SECTION III: GENERAL FINDINGS

In the course of the interviews with the identified UN agencies documented above, a certain set of consistent themes and issues emerged. These are listed below, grouped into four categories. Some were expected and are listed here for reference. These are discussed one-by-one immediately thereafter:

General

1. Engagements of UN agencies with ID systems pass through vastly different ‘points of entry.’
2. The UN agencies interviewed have not yet adopted an organizational position relative to identity management beyond basic civil registration and vital statistics (CRVS).
3. The UN system lacks a uniform vocabulary for identity management.
4. Dialogue around the SDGs and their indicators is driving significant interest in the question of identification.
5. There is no consensus around an operational definition of “Legal Identity.”
6. Many believe the currently proposed SDG #16.9 indicator is inadequate but cannot construct a more compelling alternative.

Systems and Technology

7. UN competences today are concentrated in CRVS expertise.
8. Concerns about death registration remain an open challenge.
9. The distinction between identity registers and ID documentation is fuzzy.
10. There are concerns that the identification agenda is being technologically driven.
11. There are mixed views on the use of biometrics in registration exercises.

Safeguards

12. Identity Registers/ID Cards are viewed as tools of individual empowerment, but with caveats.
13. Identification systems can empower women but may result in the opposite outcome if not accompanied by explicitly pro-women policies.
14. There is a need to engage the human rights community early.
15. There is a need for transparency in identity management practices.

Data

16. Personally Identifying Information (PII) is already being collected within the UN System.
17. Existing policies on personal data protection are not harmonized and are not widely adopted within the UN system.
18. Demand for data within the UN system is growing.
19. There are concerns regarding data disaggregation in the context of identification systems.
20. There is universal recognition of the need to examine what new issues related to data handling emerge in an increasingly data rich world governed by the SDGs.

F1: Engagements of UN agencies with ID systems pass through vastly different Points of Entry

In Table 1 we compare the different entry points and summarize the experiences of each agency with personal data handling; with the view that issues related to personal data protection may play a fundamental role in any harmonized policy development.

Agency	Points of Entry	Personal Data	Data Policy
UNDP	<ul style="list-style-type: none"> • Demand by states and government agencies for technical assistance and coordination in support for initiatives to develop, update and maintain voter registers, usually under the authority of independent national electoral commissions. • More recently, demand for technical assistance and support of programmes that migrate electoral registers to national ID programmes (approximately 6 Member States), or which attempt to establish stand-alone NID systems. 	<ul style="list-style-type: none"> • National scale identity registers that cover eligible voters. Often includes biographic, biometric and other personal data. • UNDP does NOT own or have permanent access or custody to such data, which is developed by national authorities (typically electoral commissions) and remains under their control (except for brief periods when data may be transferred to vendors to perform de-duplication or cleanup). • Data remains within national boundaries (rare exceptions when transferred temporarily for deduplication). 	<ul style="list-style-type: none"> • No agency specific policy in place
UNHCR	<ul style="list-style-type: none"> • Need to register populations of 	<ul style="list-style-type: none"> • Various sets of identity registers, 	

IOM	<p>refugees, asylum seekers, displaced individuals, beneficiaries and other persons of interest to UNHCR or IOM.</p> <ul style="list-style-type: none"> • Mandate on ending statelessness means that UNHCR will occasionally intervene on birth registration. • Support to state and government agencies in projects that involve developing similar systems and in migration data collection and management (IOM). 	<p>rich in personal data, result from the registration efforts.</p> <ul style="list-style-type: none"> • In one case (UNHCR) the data is under the control of the agency itself rather than national authorities. • Data is often transferred outside the national boundaries of where it was collected. • Data is also consolidated and centralized in agency headquarters. 	<ul style="list-style-type: none"> • UNHCR adopted a personal data protection policy in May 2015 (see detailed discussion and reference above) • IOM adopted a data protection policy in 2009.
UNICEF UNWOMEN UNFPA OHCHR	<ul style="list-style-type: none"> • Interest in identification systems by these agencies arises from the recognition that legal identity is a prerequisite in many cases for an individual to be able assert and claim his or her rights. • As such, agencies that have mandates to protect the rights of certain groups (UNICEF, UN Women) or to promote human rights in general (OHCHR) have strong interest in ensuring that identification 	<ul style="list-style-type: none"> • Generally speaking, no mass personal data is collected or retained, with some important exceptions. • Exceptions include field generated data related to emergency case management campaigns. 	<ul style="list-style-type: none"> • No agency specific policy on personal data protection is in place, since agencies do not collect such data even as part of their assistance to matters such as birth registration (specific to UNICEF). • These agencies adhere to the Statistical Confidentiality Act as elaborated by UNSD.

	<p>systems are accessible, empowering to all, and are not discriminatory in any way – especially to their constituent groups.</p> <ul style="list-style-type: none"> • UNICEF, financially and/or technically, supports various CRVS efforts because they see birth registration as a prerequisite for protecting children by preserving their legal rights. • Birth registration is 1 of the 6 strategic priorities for UNICEF 		
<p>UNSD UNPD</p>	<ul style="list-style-type: none"> • Interest in identification registers (as well as population censuses) by these agencies comes from the fact that they view them as a reliable source of data and vital information required to conduct statistical analysis. • Over the last sixty years they have played an important role in developing guidelines and policy that advise countries on how to build CRVS systems, with strong 	<ul style="list-style-type: none"> • Only aggregated or statistical data is compiled and stored by these agencies. • No personal data is retained. 	<ul style="list-style-type: none"> • No agency specific policy on personal data protection since agencies do not collect such data. • They adhere to the Statistical Confidentiality Act as elaborated by UNSD. See the privacy and confidentiality clauses in I.376 and I.377 of <i>Principles and Recommendations for Population and Housing</i>

	emphasis on data generation for statistical and economic analysis.		<i>Censuses, Revision 3, 2014.</i>
NOT INTERVIEWED WFP	<ul style="list-style-type: none"> Expect interest comes from the need to deal with the identification of beneficiaries. 	<ul style="list-style-type: none"> Expect personal data to be collected and stored in databases of beneficiaries under the control of the agency. 	<ul style="list-style-type: none"> NOT DETERMINED
NOT INTERVIEWED WHO	<ul style="list-style-type: none"> Expect interest in identification arises from the need to produce data related to health. Mostly statistical but may involve individualized registers in some cases. Strong interest in the full chain of CRVS and not just birth registration, including tracking causes of mortality. 	<ul style="list-style-type: none"> Expect mostly statistical data with no personally identifying information. Expect exceptions to come from case management of certain programmes that require identification as a follow through long term care and treatment. 	<ul style="list-style-type: none"> NOT DETERMINED

Table 1 Comparison of points of entry of the UN agencies into identification systems.

F2: The UN agencies interviewed have not yet adopted an organizational position relative to identity management beyond basic civil registration and vital statistics (CRVS).

While there is strong interest in identity management, there are no organizational positions developed as of yet beyond CRVS (with the exception of UNHCR and IOM, where establishing and dealing with unique identities is part of their workflows). This **includes no official organizational objections or reservations related to ID systems, or explicit protection principles** that would be required to ensure that these systems do no harm. This is an expected finding as it was one of the motivations for initiating the current study.

F3: The UN system lacks a uniform vocabulary for identity management

It was clear that definitions such as identity, identification, registration, population registers, de-duplication, biometrics, smart cards, credentials, etc. used in relation with population management, in many cases meant different things to different agencies and people.

F4: Dialogue around the SDGs and their indicators is driving significant interest in the question of identification

All agencies interviewed indicated that they have had renewed interest in the question of identification and the provisioning of legal identity as a consequence of the dialogue around SDGs and their indicators (especially SDG #16.9). **All felt that addressing the question of harmonizing identification practices and policies across the UN system was a positive and timely development.**

F5: No consensus around operational definition of Legal Identity

While SDG #16.9 is creating renewed interest in identification, it was clear no agency has adopted an operational definition of *legal identity*. Consistently we have heard that part of the challenge is the **lack of consensus among Member States about what constitutes legal identity** both from an *obligations bearer* as well as from a *rights holder* point of view. Legal, cultural and local operational differences and expectations are significant on this matter that some expressed skepticism that a uniform operational definition of legal identity could be constructed in the near future.

At the same time, many recognize that there is ample jurisprudence within the multiple UN pronouncements and conventions on human rights¹⁷ that cover matters such as the right to legal personality, the right to a name, right to be recognized by the law, the right to nationality, etc. For the most part those same people acknowledge that this body of jurisprudence, provides inspiration and constraints and NOT an operational framework for legal identity that can be used to fix an appropriate indicator and, more importantly, advise partner countries on priorities and on how to achieve them.

F6: Many believe the currently proposed SDG #16.9 indicator is inadequate but cannot construct a more compelling alternative

The lack of consensus around legal identity becomes even more apparent when discussing the indicator for SDG #16.9. While this indicator has been declared 'green' and removed from further consideration by the Interagency Expert Group on SDGs (IAEG-SDG), several individuals interviewed

¹⁷ Review of that body of jurisprudence was outside the scope of this limited study.

acknowledged the inadequacy of the adopted indicator, which measures legal identity by measuring the percentage of children < 5 years old who are registered in the civil register. The belief is that, at best, this is an incomplete indicator, but no one was ready to offer something measurable that is more compelling. This issue will be reexamined in the Policy Recommendations section below.

F7: UN competences today are concentrated in CRVS expertise

This is the result of historical engagements, where majority of UN agencies have thus far focused their attention on Civil Registration and Vital Statistics (CRVS). These include UNSD, UNICEF, UNPD, and UNFPA. Unlike the question of legal identity, CRVS has always enjoyed strong consensus and support from Member States for the last 60 years. Registration at birth in the civil register is universally viewed as the *entry point* towards legal identity, and, in UNSD's case, it is considered as an adequate definition of legal identity.

Today, there is ample policy, operational and technical guidelines that can be relied upon in support of CRVS programs in any country. The challenges that remain are mostly operational and programmatic and include ensuring that registrations do take place in timely manners, maintaining data quality, and performing registration of adults (insertion of the backlog of those that were 'missed' for birth registration into the civil register). All of those challenges as well as recommendations for policies are addressed in a large body of practical knowledge published by UN agencies concerned with CRVS.¹⁸

The only agencies interviewed that have been forced, by the nature of their mandates, to go beyond CRVS are UNDP, UNHCR and IOM. For those agencies, registration and identification of unique adults is a preoccupation because it is a fundamental issue in elections and in management of refugee and displaced populations. But they all agreed that they need to evolve their competencies to address more holistic issues related to identity management.

F8: Concerns about death registration remaining an open challenge

All agencies placed significant weight on birth registration, which they **equate as a first right or as an entry into the ecosystem of legal identity** that activates a personal claim for entitlement. Nevertheless, there is concern, by a few, that the emphasis on birth registration should not take away from the importance of promoting death registration. Absent a concerted advocacy effort on the part of the UN, death registration will remain feeble despite some inherent motivations.

¹⁸ These include the *Handbook on Civil Registration and Vital Statistics Systems*, which appears in 7 volumes (Series F) and *Principles and Recommendations for a Vital Statistics System, Series M*. Both are publications of UNSD and are currently in their third revisions. In addition, UNICEF publishes and maintains: *A Passport to Protection. A Guide to Birth Registration Programming*, and co-published *Toward Universal Birth Registration: A Systematic Approach to the Application of ICT*.

Motivation for Systematic Death Registration

- Improving health statistics and management by better understanding causes of mortality etc.
- Preservation of inheritance and succession rights.
- Improving trust and robustness in the overall identity system. While birth represents the activation of legal rights at a personal level, death should represent the expiration of those same rights and should be captured systematically. Nevertheless, in many places death is far from being reported systematically. This opens up huge opportunities for identity fraud which can undermine trust in the ID system. This is because it is often easier to assume the identity of a deceased person than invent a new identity that has no roots in the birth register or a national population register. Thus many argue that a robust national population register must be able to deactivate those individuals who are deceased.

F9: Distinction between identity registers and ID documentation is fuzzy

We found there was not always a clear distinction, in the use of language, between “identity registers” and identity documents such as ID cards or nationality certificates, etc. In many cases, this reflects the view of many Member States that automatically link an identification system with identity cards. This issue is of significant importance when it comes to deciding how to allocate the investment in identity system development to the various components (registers, credentials, mechanisms of authentication). In general, **there was no sensitivity within the UN system as to the relative value of these various components or their priorities.**

F10: There are concerns that the identification agenda is being technologically driven

Consistently there were concerns about the risks of the identification agenda being driven by technology. There is a perception of an aggressive industry and vendor influence that is pushing Member States **to adopt new technologies for population registration and identity management that often have not been vetted or understood within the context** of the adopting country, or as a consequence of a well-informed policy for population management. Examples of technologies that are driving the agenda today are mobile birth notification/registration and smart national ID cards systems gathering biometric data from citizens, etc. The concerns come from the fact that the increased cost of implementation may divert precious resources away from good *sustainable and institutionalized* practices into one off campaigns to pay for technology that is often not sustainable.

F11: There are mixed views on the use of biometrics in registration exercises

On the issue of biometrics in identity management, not everyone had an opinion but the opinions expressed were **polarized along two extremes**. Some saw, in **biometrics, a game changer** that allows individuals to join the legal system in the absence of any other documentation (i.e. due to flaws in, or a lack of, civil registration). Others saw in them **a potential distraction** away from the fundamental objective of fully functional CRVS. Those people argue that biometrics are not

required to establish uniqueness in a world where a strong CRVS system is in place. They cite concerns about cost and potential abuse (increased surveillance through enhanced identification). What was even clearer is the absence of an organizational position relative to biometrics. The opinions that were expressed represented individual opinions and in some cases they were conflicting even within the same organization.

F12: Identity Registers/ID Cards are viewed as tools of individual empowerment but with caveats

There was a general agreement that *evidence of “legal identity”* is a prerequisite for individuals to claim their rights. As such there was uniform support for enrollment of the population in identity registers and issuing them with credentials. When it came to **birth registration and the issuance of birth certificates, the support was unconditional and enthusiastic across all agencies of the UN.** When it came to other registers such as *national population registers*, the support was subject to **certain caveats**. The hesitation can be summarized in the following concerns:

- Population registers sometimes contain **data fields that history has shown could be subject to abuse** (e.g. ethnicity, religion).
- **Population registers localize people** and as such can enable control of the population by authorities, which raises concerns if those authorities are not constrained by the law.
- Identification systems that attribute unique identity numbers to each individual can enable surveillance and tracking of the population and hence can violate privacy and human rights.
- **Population registers could have a negative impact on vital statistics** if used to replace census and surveys or if they are not integrated with the instruments that generate or consume vital statistics on an ongoing basis. Some believe that this is beginning to have a negative impact on certain UN agencies’ ability to access statistical data about populations, even though such population registers could provide near real time demographic and other data if designed right. This concern has another consequence of more significance as discussed below.
- **Population registers could increase exclusion if they are not accessible to all without discrimination.** Discrimination could be an unintended consequence of badly implemented registration practice. For example, if the requirements for registration are stringent (such as “must register in home district”), migrant workers may find registration onerous and may opt not to register, which could deprive them of health care or other benefits. In other cases, it could be part of an intentional policy which biases registration in favor of regions or groups to the exclusion of others.
- **Some have expressed the opinion that there was no direct and conclusive evidence that links registration and development as of yet.** This was a minority view, but it cautions against embracing mass registration exercises (which are sometimes costly, as is the case of mass biometric registrations) without first examining the developmental benefits of the investment and its timing.

F13: Identification systems empower women but may result in the opposite outcome if not accompanied by explicitly pro-women policies

Further to the previous points above and more specifically, the majority of agencies interviewed accepted **the anecdotal evidence that identity credentials empower women** but some expressed **concerns about the strict imposition of ID** as a prerequisite for provisioning of service accessible to women absent the right pro-women protection framework. In a society where IDs would be needed to conduct daily business, without ID, women are vulnerable to being excluded. In that context they would need IDs to own property, get access to education, employment, vote, get married or divorced, claim child custody, have a bank account or claim social protection, healthcare and other government services. The consensus is that a society that builds an ID system as a foundation for access and participation must do so with extreme care to ensure that the **ID does not become an obstacle that could disenfranchise traditionally economically and socially disadvantaged groups such as women.**

Concerns Specific to Women

Examples:

- In situations where not enough enrollment centers are established around the country, there is a risk that this may favor enrollment of men, who are able to travel long distances to enroll and receive an ID credential. In many cases women caring for children have family constraints that prevent them from traveling long distances to seek enrollment in the identity register and receive an ID card.
- There could also be cultural barriers that prevent women from seeking ID cards. So an identity program that does not address those cultural barriers, in fact, harms women. For example, ensuring that an ID card is accessible to a woman without the consent of a male relative is crucial for achieving equity within identification systems.
- The concept of 'head of household' being a male could be inadvertently made official by a formal identification system that ties benefits to the head of household. This could make it more difficult for women to receive such benefits as they are required to be recognized through an official ID as head of household to receive them.
- The cost of enrollment and credentials could have a bigger impact on women participation than men. Generally speaking, it is believed that if there is a significant cost, families may prioritize male members in getting the ID document since they could justify its need for employment, security and mobility more than a female member.
- In certain cultures, the need for women to be photographed without a head cover could represent an issue that prevents women from seeking to enroll and obtain an identity card which would have a photograph of their uncovered face printed on it for all to see.

F14: There is a need to engage the human rights community early

A concern that was expressed several times during the interviews, and related to the previous point above, had to do with identification systems creating new risks for the protection of human rights. As a cautionary step, the recommendation was to insist on the participation of the human rights community early on in the deliberation process regarding identification systems.

F15: There is a need for transparency in identity management practices

Another concern that was expressed very often, was the need for *transparency* in identity management practices. This comes with the need to ensure that individuals identified understand their role as rights holders, with total access to information regarding why these systems are put in place and how they actually work.

F16: Personally Identifying Information (PII) is already being collected within the UN System

The collection and processing of data are essential for the operations of virtually all UN agencies. Thus far, the majority of UN agencies have not yet dealt with significant amounts of PII nor do they have permanent access to personal data from countries where they have interventions. What they have access to is **national level (sometimes subnational) aggregated data** that is used for statistical analysis. But this is changing and there are already **significant and growing number of exceptions**, where UN agencies do **collect, process or have access to personal data**.

UN Programs Collecting PII

- Field Driven Data Initiatives at UNICEF (see section on UNICEF for more detail): this is case and incident data that is generated by specific projects and is managed by an integrated Information Management System called Primero. It includes significant amounts of PII.
- UNHCR and IOM databases of refugees, internally displaced persons and other individuals of interest to these agencies.
- UN agencies that support the development of identification registers, such as UNDP with electoral registers and UNICEF or UNFPA with civil registers, are necessarily engaged in supporting the collection and processing of personal data. This places a certain responsibility on these organizations to ensure that the efforts they are supporting do conform to internationally accepted standards on data handling.

F17: Existing policies on personal data protection are not harmonized and are not widely adopted within the UN system

Up until recently, most agencies have not had a **significant need to develop specific policies for data handling**. By in large, statistical confidentiality as defined by the UNSD had been enough to address data concerns. In the minority of cases where agencies had to go beyond statistical aggregates, explicit policies have either been adopted or are in the process of being adopted (see box). But those policies are not harmonized, have significant loopholes and are not familiar to the other agencies.

Examining the situation globally, it is fair to say that the UN system does not have a long history with personal data protection policies. This deficiency could become significant in the near future for two reasons: (i) The new emphasis on more data and on disaggregation of data creates new risks for misuse of data (as explained below). (ii) It hampers the UN's ability to advise or evaluate data handling practices of identification programs put in place by sovereign governments.

Existing Data Protection Policies at the UN

- *Policy on the Protection of Personal Data of Persons of Concern to UNHCR*, adopted May 2015.
- *IOM's comprehensive Data Protection Policy and IOM's Data Protection Manual* adopted in 2009.
- *Guidelines of Data Handling in Child Protection*, under development by UNICEF and impacting 10 countries.

F18: Demand for data within the UN system is growing

Almost all agencies indicated they expected to be dealing with increasing amounts of data in the course of conduct of their missions. This may be **partly due to the increased focus on SDG indicators that require new types of data to assess progress**, or as a byproduct of advances in information technology where programs are now routinely producing massive data exhausts, which beckon analysis.

This is not surprising. Enterprises today run on data and the UN agencies are no exception. Big data and analytics are likely to continue to play an increasing role in UN activities and those engines consume massive amounts of data. While generally speaking this need for data may not in itself elevate risk since the majority of data is not PII, **it does create appetite for new sources of data**. Those could **elevate the risk** depending on how personal data is folded in and what anonymization processes are deployed (supply side risk). In F19 we present a particular risk that can be introduced that was identified in the course of this mission.

F19: There are concerns regarding data disaggregation in context of identification systems

Several agencies expressed interest in disaggregation of data in order to monitor and track certain indicators. Notable among them are the UN Women and OHCHR. For example, OHCHR which advocates a **Human Rights-based approach to data**, requires **disaggregation of data along disadvantaged or vulnerable groups**, in order to measure and report on human rights indicators. While this approach can be made safe within the context of statistical data collected during surveys, it can be **dangerous when the source of data is no longer censuses and surveys**.

This can happen if censuses and statistical surveys are eliminated, or reliance on them is diminished, and **instead National Population Registers (NPR) are tasked with producing** both vital statistics data (as demanded by other UN agencies) as well as **disaggregated data** (as demanded by the Human Rights approach to data).

When this issue was raised, some felt this could be a step in the wrong direction if not done carefully since it would mean that NPRs start to legitimately contain data that has the potential to harm or discriminate against data subjects depending on the country context. There was also general agreement about the need for NPR data minimization **in the sense that National Population Registers should focus on enumerating the populations and not play the role of a source of data generation for the rich set of indicators.**

F20: There is universal recognition of the need to examine what new issues related to data handling emerge in an increasingly data rich world governed by SDGs

There was general agreement that the implication of the SDG indicators on **data generation, ownership and data protection** are far from being understood at this stage and hence represent risks. The interviews showed that there was clear and significant interest within the UN system for dialogue specifically focused on data risks in context of SDG indicators. Considering that this would be a common matter across the UN, addressing them together would be a realizable synergy.

SECTION IV: POLICY RECOMMENDATIONS

In this final section we provide an initial series of policy recommendations to address gaps and priorities for UN agencies to consider in building organizational positions relative to identity and, in due time, harmonize the practices system-wide. In summary form, these recommendations include the need to:

1. Clarify and communicate individual UN agency roles in identity engagements;
2. Adopt a common vocabulary for identity management;
3. Revisit the question of how to measure progress towards the provision of legal identity;
4. Promote metrics for assessing the developmental impact of identification systems and their functional fitness;
5. Develop a conceptual framework for identity management based on a fair implementation of a rights-based approach to ID policy;
6. Standardize personal data protection policy throughout the UN system;
7. Build a comprehensive risk model for ID systems and develop recommendations for safeguards or protection principles;
8. Conduct impact studies of ID systems on women and use that knowledge to refine ID systems policy to ensure it is pro-women;
9. Develop a clear policy regarding unacceptable data in ID registers;
10. Evaluate investments in identity systems at the appropriate granular level;
11. Advocate sustainable systems as opposed to one-off campaigns or solutions;
12. Promote awareness about the importance of linkage to CRVS as well as systematic death registration to ID system integrity;
13. Promote ID solution strategies anchored on standards-based or open non-proprietary architectures;
14. Pay attention to institutional frameworks, and business models, from the perspective of sustainability;
15. Encourage digital migration as a matter of policy;
16. Build domain knowledge to support evidence-based decisions related to identity system investments.

P1: Clarify and communicate individual agency roles in identity engagements

This was raised by several agencies interviewed. The outcome of this inter-agency dialogue should be a policy statement that can:

- Serve as a guide to agencies and partners as to who does what in identity engagements at the UN.
- Ensure no gaps in intervention remain as a result of confusion on roles and responsibilities.
- Help agencies assess the alignment of their competencies with their agreed-to role.
- Identify synergies and opportunities for inter-agency or multi-agency collaborations to avoid redundant efforts.

More specifically, the primary **objective should be to map, in sufficient detail, the set of agency terms of reference against types of roles in interventions** in all aspects of identification from CRVS, foundational identity systems, general population registers, social registers, national identity cards, voter systems, e-ID programs, and functional identification systems used for administration. Some of this already exists, as shown in the table below, but it needs more specificity and expansion to cover other pertinent aspects. Consideration should also be given to creating an ‘inter-agency identity management working group’ to disseminate information and coordinate among the stakeholders and help avoid redundant or conflicting support and investments in identity systems. How this group would interact with existing CRVS working group would have to be established in the TOR of this new group.

Terms of Reference/Mandate	Role
Protection of Children	UNICEF leads on birth registration programming.
Ending statelessness	UNHCR has competence and intervenes on birth registration
Ensuring democratic governance	UNDP supports national-led voter registration; Has competence to support national ID system development
Provide global statistical information	UNSD leads on CRVS standards, concepts, definitions,

Table 2 Select examples of TORs and the identity roles that they lead to for UN agencies.

P2: Adopt a common vocabulary for identity management

Harmonization requires a common language, which is easier to establish than a UN system-wide policy framework. It would require an Inter-agency working group to be tasked with **the responsibility of making available a UN dictionary for identity and population management**. Luckily a strong foundation for such deliverable already exists from other institutions and could be built upon. Although not reviewed by the UN, the Inter-American Development Bank (IDB), for example, has published a *Dictionary for Civil Registration and Identification 2015*, which exists in English and Spanish and the African Development Bank is funding its publication in French. This reference can be retrieved from <https://publications.iadb.org/handle/11319/3679>.

P3: Revisit the question of how to measure progress towards the provision of legal identity

The absence of an operational definition of legal identity is problematic from the perspective of several UN agencies that are not concerned with birth registration, such as UNDP. In fact, **basin the indicator for legal identity on birth registration of infants below the age of 5 alone misses a significant dimension in the provision of identity** to the whole population. Under that definition, a country that has near 100% registration of new births but that does not have performant national or voter ID systems would score highly, yet it clearly represents a dysfunctional identity ecosystem because there is no mechanism to empower individuals to exercise their legal rights, as a significant fraction of the population does not figure in any identity register in the country.

Operational Definition of Legal Identity:

An Example

The concept of legal identity could be tied to the concept **of being empowered to exercise legal rights that should be protected in a country** (right to vote, right to be elected, right to reside in the country, right to own property, right to education, right to work, etc.). As a consequence, this could be tied to being “in the system” or to being present in an attestable fashion in any one of the **legal registers in place**.

A legal register is an identity list that confers legal rights on those who appear in it. It could be:

1. The Birth Register,
2. The Voter Register,
3. The National ID Register.

A proof of legal registration (attestation) could be in the form of a **birth certificate, a voter card or a national ID card** (or in possession of an ID over the cloud). An indicator that measures the percent of the population that is in possession of any one of these credentials would provide an accurate measure of the state of development of the identity ecosystem in a country. This can be estimated through spot surveys of a statistically representative sample of the population to determine the percentage of people that hold any one of the documents or means (online) that can be used for attesting to their identity.

While the discussion around the SDG #16.9 indicator is closed, this recommended policy dialogue should be formulated within a broader context that examines the benefits of legal identification independent of this indicator. It may require agency specific metrics to guide interventions relative to their mandates (see P4).

P4: Promote metrics for assessing the developmental impact of identification systems and their functional fitness

Legal identity is not the only important dimension along which the state of development of the identity ecosystem should be assessed. This is because **apart from legal registers, there are**

Expected Outcome

The portion of this activity related to fitness assessment should have as its outcome answering the question **what characteristics should be there in an ID system to make it performant and responsive to identification needs**. This question was answered for civil registration by UNSD, where the four principles for civil registration are: continuous, compulsory, universal and confidential (and where the four main quality criteria are completeness, accuracy, availability and timeliness. UNICEF considers **continuity, permanence, confidentiality, timeliness and accuracy** as imperative for a birth register to be considered well-functioning. UNICEF supports compulsory birth registration as a matter of policy, if and only if those conditions are met. A similar outcome may be helpful relative to identification systems.

administrative registers (that may or may not be linked to the legal one) that could be very valuable in population management and for the provisioning of service, and hence could correlate with development indicators. For example, India's *Aadhaar* program is rapidly achieving universal coverage of the adult population with over 950 million individuals biometrically enrolled and de-duplicated. At this stage in time it is a purely administrative database that does not confer rights.¹⁹ It is essential for enumerating people, giving them a unique identity number, and for fixing their identity for life. It can be used as a foundation for other registers which confer legal rights, such as the voter register. Many would agree that *Aadhaar* is a game changer in identity management in India and that should be reflected in the **correct metrics that UN agencies may rely upon to assess the value of identity systems they may be supporting**.

In addition to utility value there is a need to evaluate these systems for their fitness, which is sometimes linked but is independent of their utility. This is a multidimensional inquiry that involves assessing if these systems conform to proven best practices. The World Bank Group has developed an Identity Management System Assessment (IMSA) tool, which could be a useful starting point. The tool has been used in over a dozen World Bank missions assessing identity systems and identifying potential projects for engagement in developing countries around the world.

¹⁹ *Aadhaar* is also not formally linked to civil registration, and is not updated (no records are removed when a person dies), hence, it is really not a register but a stand-alone database (albeit enormous).

P5: Develop a conceptual framework for identity management based on a fair implementation of a rights-based approach to ID policy²⁰

This is a multidimensional action. It includes understanding the legal as well as operational framework required to allow the duty bearers to meet their obligations of **empowering the entire population of rights holders without bias or discrimination**. This cannot be done without addressing the issue of access to ID systems, either through the perspective of affordability or accessibility of enrollment procedures.

An identity system that obligates people to pay a significant fee to enroll in the population register and obtain an ID card, may hinder participation of the vulnerable and the poor. Similarly, an ID system that privileges the enrollment of certain groups over others based on geography, political affiliation, religion or income groups is unfair.

Unfortunately, many governments approach the development of ID systems **not as an obligation towards the people but as a service that they charge for**. In some cases, operational decisions affecting fees or placement of enrollment centres are made with an economic or political lens.

As a consequence, such systems should be viewed as violating the rights of certain segments of the population. UN agencies should be sensitive in their policy about the nature of their engagements absent the assurances that these systems will be deployed fairly. **Fair deployment of identity systems should be a policy priority**.

Subsidy of ID

Measures for subsidizing the ID card may need to be put in place for the national ID system to remain consistent with a rights-based approach to identity management. One important dimension of intervention could be the advocacy, by the UN, on the need to ensure access to the vulnerable and poor, or even a direct assistance for them to acquire their legal proof of identity. For example, a social protection program could include, as an integral element, assistance to enable economically disadvantaged families acquire national IDs.

P6: Standardize personal data protection policy throughout the UN system

The policy should cover data collected by UN agencies as well as data collected by member states or partners under the support of UN agencies. At the moment there are only two data protection policies in effect, at UNHCR and IOM. The two were developed independently and hence are not

²⁰ The coming revision of the CRVS management handbook by UNSD plans on explicitly including the interlinkages with ID systems, and is to be welcomed.

harmonized. The rest of the agencies operate under the confidentiality clauses found in the guidelines and handbooks on CRVS of the UNSD. We believe this is a high operational priority, considering that the appetite for data within the UN system will only continue to grow. The policy should be based on internationally accepted data protection principles.

Core elements of that policy should be binding and should provide for no exploitable loopholes, which are often encountered in multi-stakeholder privacy policies that are the result of significant political compromise.²¹ The policy should be accompanied by practical guidelines, ‘dos and don’ts’ and checklists to assist operational UN staff take reasonable and necessary precautions when handling personal data that UN agencies collect or when participating in supporting national identification projects.²² All UN agencies and other data collectors should adhere to the Fundamental Principles of Official Statistics (<http://unstats.un.org/unsd/dnss/gp/fundprinciples.aspx>). The Division for public administration of DESA (DPADM) should have guidelines/international standards on this, as they cover e-government as part of their programme of work.

P7: Build a comprehensive risk model for ID systems and develop recommendations for safeguards or protection principles

As was expressed repeatedly during the interviews, ID systems raise concerns of several UN agencies. These concerns stem from negative past experiences with such systems and are related to their **inherent information, economic, and social and political risks**. The UN needs to develop and maintain a detailed risk model and metrics related to identity systems and use it to formulate principles and guidelines for safeguards for mitigating them, short of shying away from participating in the development of these systems for fear that they would be misused.

Safeguards could include recommendations for **system architecture or design (risk mitigation by design), data limitations, strong legal frameworks, transparent practices, and clear institutional frameworks**, to ensure that these systems do not violate human or legal rights of the population that they are supposed to serve.

²¹ These loopholes exist in current agency level privacy policies; they can also be seen in national privacy laws that invariably allow for broad exceptions for national security.

²² See the following references for a discussion of these issues, United Nations Economic Commission for Europe (UNECE) and Conference of European Statisticians (2007). “Managing Statistical Confidentiality and Microdata Access: Principles and Guidelines of Good Practice”.

<http://www.unece.org/stats/publications/Managing.statistical.confidentiality.and.microdata.access.pdf>

UNECE (2012). Using Administrative and Secondary Sources for Official Statistics: A Handbook of Principles and Practices. <http://www.unece.org/index.php?id=28898>

UNECE (2009). Principles and Guidelines on Confidentiality Aspects of Data Integration Undertaken for Statistical or Related Research Purposes (December 2009). <http://www.unece.org/index.php?id=17609>

UNECE (2007). Register-based Statistics in the Nordic Countries - Review of Best Practices with Focus on Population and Social Statistics (December 2007). <http://www.unece.org/index.php?id=17470>

UNSD (1969). Methodology and Evaluation of Population Registers and Similar Systems.

http://unstats.un.org/unsd/publication/SeriesF/Seriesf_15e.pdf

The UN principles on risk-mitigation of ID programmes could be used to stimulate dialogue with partner countries around national policies in order to assure the UN that they are supporting responsible implementations of sensitive information systems with high potential for abuse.

Examples of ID System Risks

- Exclusion as a result of bad policy or implementation
- Technological Exclusion: resulting from inability to enroll biometrics (e.g. manual workers that cannot provide fingerprints, blind people that cannot provide iris)
- Discriminatory access depending on group
- Disaggregation of data
- Persecution or oppression of minority groups
- Data surveillance and enhanced control by authorities
- Usurpation of identity
- Theft of biometric template (non-revocable templates)
- External attacks on identity data repositories (wholesale theft such as that which recently occurred in the Republic of Korea)
- Invasion of privacy
- 'Function creep'
- ID audit trails (footprint of actions accumulating into databases that can be exploited)
- Targeted marketing through data analytics
- Misidentification through biometric false matches.

Participation of the human rights community, UN Women, and other agencies representing special concerns is a must in this process.

P8: Conduct impact studies of ID systems on women and use that knowledge to refine ID systems policy to ensure it is pro-women

Women are most likely to be the largest group that gets impacted by the introduction of identity systems in any society. Traditionally women are economically and socially disadvantaged as a consequence of cultural norms or outdated government policies. ID systems offer an opportunity for revisiting the empowerment framework to make sure it is more equitable, but these types of reforms need to be guided by concrete understanding of impact – both positive and negative – of these systems on women. With the exception of anecdotal information, we are not aware of systematic studies that have addressed this issue. This activity is related to the risk model of ID systems, and can be formulated as a work stream to **better understand how these risks impact women**. The outcome of this analysis could then be used to inform a set of pro-women ID policy actions (see box).

Examples of Pro-women ID Policy Actions

- Ensure that enrollment centers are accessible to women, by having enough of them so that women do not have to travel significant distances. Or that the enrollment campaigns include the use of ambulatory or mobile registration. A study that measures women participation in ID systems as a function of the number and accessibility of enrollment sites in programmes around the world today is required to inform this action.
- Work through advocacy to mitigate the impact of social norms that present obstacles to women registration.
- Work to eliminate laws for civil registration that have negative impact on women participation (e.g. the need to declare the name of the father before a child is registered, or the need to present a marriage certificate)
- Ensure that ID systems are accompanied by pro-women education and sensitization campaigns that explain to women the procedures and the technologies involved and their rights to registration.

P9: Develop a clear policy regarding unacceptable data in ID registers

Modern ID systems are driven by data which they consume during enrollment and accumulate into population registers, or they generate when ID credentials are asserted and they accumulate in digital audit trails. In addition to guidelines on safeguards and data protection in general, there needs to be an explicit policy developed regarding the type of data that should not be allowed to accumulate in registers or audit trails. Simply put, **the best safeguard against misuse of certain sensitive data is not to permit its generation or collection in the first place.**

This is related to the concern that emerged in connection with data disaggregation for purposes of measuring progress on human rights. As stated in Section II, if identity registers increasingly become the source for data requested by the Human Rights based approach, there is a risk that **this may lead to the expansion of the informational scope of registers where governments could justify**

Example of Policy on Sensitive Data

In certain political contexts, foundational identity registers should be discouraged from storing certain types of data such as:

- **Data related to race, ethnicity, religion, sexual orientation, social origin, beliefs, group memberships, physical or mental disability, health status, etc.**

UN agencies should be assured that ID programmes they are supporting **are not capturing personalized data that could harm.**

the collection, storage and personalization of sensitive data, an outcome that should be avoided.

While data fields such as race, ethnicity and religion can be of genuine interest for policy formulation policies and protection of rights, caution should be exercised by the UN and other international partners, in making universal recommendations on the collection of these data. Anonymizing these data, where possible and where they are collected, for example, may be one way to limit possible negative effects of their collection.

P10: Evaluate investments in identity systems at the appropriate granular level

Identification systems involve the integration of multiple components (or subsystems) for their end-to-end operations. Generally speaking, such systems could be broken into **four major elements: the field enrollment system, the back-end identity register, the ID card and the authentication mechanisms at points of service.** The relative value of each component depends on the actual context of the country and its income level. This means UN agencies supporting identity system development **need to pay attention not just to the total cost but to how the investment is broken down into these components and whether the breakdown is commensurate with the actual context of the country.** The investment in each one of the four components scales differently with the population (e.g. cost of cards is linearly proportional to the population; the cost of field enrollment is related to population density distribution and not directly the population, etc.) Investing in a good, secure and thorough identity register may, in the long run, be better than spending significant amount of money on smart ID cards, certificates or other credentials. India is a case in point, where the Aadhaar program²³ focused its investment entirely on the development of the register. This issue is most relevant for UNDP at this stage, given their involvement in the development of voter and national ID systems that issue what could be expensive ID cards.

P11: Advocate sustainable systems as opposed to one-off campaigns or solutions

This is also of particular relevance to UNDP which usually has **electoral systems** as a point of entry. The identity systems affiliated with these **are often 'siloes' and lack continuity.** They result from donor funding concentrated just ahead of the elections and they require execution (registration, voter card issuance, etc.) over a very short period of time, which in general limits long term planning. This is aggravated by the **absence of institutional continuity** as electoral management bodies are often replaced for each election cycle.

This state of affairs leads to significant short cuts **instead of well-planned sustainable systems that record and manage identity continually and permanently like the CRVS systems** advocated by UNSD and UNICEF. This is a very important issue as it relates to lost opportunities, where investments are made for point solutions for the purpose of one election and are then replaced with another system in the next election. A better alternative could be to base the electoral register on a well-developed permanent foundational ID register. But here again, this is not without political challenges. Overcoming these challenges requires the UN to help countries adopt legal and institutional reform that would allow voter lists to be derived from national id registers that are

²³ More information about the program including case studies can be found on the Unique Identity Authority of India official website <https://uidai.gov.in/>

trustworthy and managed independently from any manipulation by power or political parties. Empowering an independent National Identity Agency or Authority, with transparent practices, and protected by strong rule of law from interference of ruling parties, is a prerequisite to institutionalizing foundational identity in a country.

Examples of Lost Opportunities in ID Investments

- **The Democratic Republic of Congo:** spent about \$300 million in the development of the voter register and cards over two elections (2006, 2011) (See World Bank Country Report, 2016). The country is about to make another significant investment on this same voter register for the elections initially scheduled, as of now, for 2016. In other words, the country, with significant donor backing, has invested in transient solutions instead of investing in a permanent ID system that could support elections and every other identification need. The end result is that the DRC continues to face severe population management problems because of the absence of a foundational identity system.
- **Indonesia:** had built an ID system of international standards of sophistication (invested over \$700 million and biometrically enrolled 150 million people in the e-KTP programme by 2012), yet there was no agreement to use this ID system as a basis for the electoral registration for the presidential elections of 2014. The reason was that the institutional arrangements did not inspire confidence that there was no manipulation of the register since the directorate that controlled the ID system was not independent but reported to the Ministry of Home Affairs, controlled, at the time, by the ruling party.

P12: Promote awareness about the importance of linkage to CRVS as well as systematic death registration to ID system integrity

This continues to be an area of challenge that could benefit from UN agency intervention by privileging investments in projects that attempt to create integrated identity management systems where identity registers are linked to the CRVS. **Why this is a good idea to do is well documented²⁴ and it relates to the integrity of the ID system. What is challenging is how to achieve it.** UN agencies could consider supporting activities to transfer knowledge and experiences (especially South-South) and document best practices.

While linkage to birth registration is primordial, **linkage to a well-functioning death registration information system should not be ignored**, as it is one of the major sources of identity fraud that could undermine the trust in these systems. Identity fraud of this type can impact on the integrity of elections (ghost voters), increase leakages (ghost beneficiaries and civil servants) and creates victims as a result of theft of the identity of departed relatives. As to the form of linkage we see three links possible:

- i) a link from birth and death register to a national identity register in order to improve robustness;
- ii) a link from a national identity register to a birth register in order to reinforce it, correct and complete missing data through elements collected during ID enrollment, and;
- iii) a link from national population or identity registers (or a national ID card database, where existing) to information systems that generate statistics. This later link has implications to changes in the role of census in countries, where a national population register takes on the responsibility for data generation.

²⁴ See for example World Bank Digital Identity Toolkit for Africa, 2014; SIA Civil Registry Consolidation Through Digital Identity Management, 2015.

Example of a holistic ID System Reform

Reforming the identity ecosystem in a country needs to take into account the current context and recognize that one size does not fit all. While integration is a good policy, it means different things in different contexts. For example, in a country where the birth register is paper-based and is incomplete going back in time, an integration policy could include:

- Putting in place a robust civil register for new births and deaths. Relatively inexpensive IT systems would be required to ensure electronic registration of newly borns and notifications for death.
- Assigning a unique ID (UIN) through the electronic civil register.
- Digitizing birth records going back ONLY to where the paper records are reliable. If the paper records are not reliable or huge gaps exist, consider abandoning this step. It could cost as high as \$1 per record to do it right (double entry).
- Abandoning 'catch up,' through artificial insertions of adults into the civil register (late registration of backlog). In most cases, this is hugely costly as it involves the judicial system. In DRC it costs over \$30 to insert an individual. In Cote d'Ivoire, development partners paid \$15 per person in recent years but the efforts were abandoned after insertion of only approximately 700,000 people.
- Focusing on capturing adults via a biometric ID system, involving the issuance of a UIN using the same logic as for the civil register. Make birth registration a requirement for entry into the ID system starting with a certain age group and use the same number. Integration is assured through the UIN. Reported age should be validated as thoroughly as possible using all available sources of information, including witnesses.
- Adding children between birth and adulthood through one of three mechanisms:
 - School registers – schools are powerful institutions for vetting identity and providing uniqueness (keeping in mind that children from mobile/nomadic and other marginalized groups might not be included through this approach)
 - Health facility registers (e.g., DHIS2)
 - Household census, where children are declared and attached to their parent UIN until they are assigned their own when receiving a national ID.

P13: Promote ID solution strategies anchored on standards-based or open non-proprietary architectures

This addresses several concerns that were apparent during the interviews, including:

- Worries about technology and vendor agenda controlling investments in ID programmes instead of a deeper understanding of country needs and policy;
- The need to avoid technology and vendor lock-in;
- The desirability of investing in re-usable modules (e.g. voter registration kits used for general ID enrollment).

All of these issues could be mitigated through constraints on solutions architecture and the right policies to promote in the identity marketplace. A solution anchored on standards-based open

architecture can support good outcomes, including inter-operability and scalability, and protects against obsolescence and lock-in. As a matter of policy these systems should be verifiably “vendor” and “technology” neutral by design. The UN could play an important role by informing

Promoting Open Competition in the Identity Marketplace

The ultimate goal should be to promote the emergence of a commercial identity marketplace, which allows many vendors, products, solutions, and technologies to continually compete on innovations, features, performance and price. Identity systems are important national assets that need to be served by healthy and robust marketplaces (both local and global) that offer choice, ones that are not dominated by a single or few vendors. A prudent technology strategy should be a priority for any country that sees identity as an infrastructure to be protected through informed regulations. The UN can play an important role in educating in this regard beyond the generic procurement regulations that attempt to ensure fair and transparent investments, by advocating the right architectures.

its partner countries and its procurement support procedures of the long term dangers of wrong solution architectures. In addition, commercial providers also need to be educated, for example on the contents of the *Principles and Recommendations for Vital Statistics Systems* and the impact it has on the specifications of the IT solutions.

P14: Pay attention to institutional frameworks, and business models from the perspective of sustainability

Institutional arrangements are proving to be a critical factor impacting the success of identity programmes, and the UN needs to pay attention to the range of options available as they advise partner countries. Identity institutions that are not independent could face obstacles in the acceptance of the ID for some applications such as voter lists, unless mitigated by strong legislation (example of Indonesia). Totally independent institutions may face financial challenges early on as they scale their operations towards self-sufficiency. In this case the concept of the government being a duty bearer may be compromised by the need of these agencies to derive revenue to cover their operations. Either way, institutional arrangements are challenges and require careful understanding of the implications of their different choices.

Examining institutional arrangements in identity authorities that have been in sustainable operation for a while has a lot of value in informing this dialogue. We recommend examining Pakistan’s NADRA, Rwanda’s NIDA, Belgium’s FEDICT, Nigeria’s NIMC, Ghana’s NIA, and the Unique Identity Authority of India for lessons learned.

Institutional Arrangements & Sustainability

Although today most foundational programmes are still run under ministry of interior or home affairs, increasingly they are entrusted to a stand-alone organization, such as a *National Identity Authority* (NIDA), either independent of any line ministry, or only loosely affiliated with one. NIDA could report at a cabinet level or to the presidency and is often governed by a board representing the diverse identity stakeholders in the country. It is tasked with implementing a unified national strategy for identification not influenced by any sectorial bias. This arrangement avoids redundancy of investment over the long term, and assures that identification needs are met consistently by design, even though it may have higher startup costs.

An informed NIDA policy, including a pathway for arriving at a universal ID given current assets and context, ultimately should achieve the right equilibrium in the identity ecosystem where supply-side NIDA provides *identification services* that are consumed by the demand-side which includes the public and private sectors. In the long run, revenue generated from these services assures the sustainability of the organization (although revenue generated from the provision of services such as identity cards, even if only for replacement cards, is a complex and sometimes controversial topic and should not be put forward as a general recommendation by the UN or other international bodies).

Other financing arrangements that are often considered pro-sustainability (although not without their own controversies), include Public Private Partnerships. These can have quick start up times but can lead to long-term lock-in, and problems in affordability. They have been, for the most part, used for id systems that are considered a “privilege” (such as driver licenses and passports), where these credentials are sold even on the order of \$100, even in developing countries in Africa to generate revenue for these concessions.

P15: Encourage digital migration as a matter of policy

It should be evident that the value of data is dependent on the ability to exploit it to derive actionable intelligence. Today there is a recognition that digital information is much more valuable in that regard than paper-based repositories of knowledge. In addition, the digital medium has been recognized as an important driver of development²⁵ that could improve the efficiency of service delivery through the rubric of e-Government.

While increasingly more information is born digital today, there are still legacy systems and practices that continue to be paper-based. As such **digitalization of CRVS, as well as legacy ID system registers, should be looked upon favorably** and assessed on a case-by-case basis as a strategy for transition into digital identity. Luckily the Africa Programme on improvement of Civil Registration and Vital Statistics (APAI-CRVS) has published a *CRVS Digitisation Guide: A Step-by-Step Guide to Digitising Civil Registration and Vital Statistics Processes in Low Resource Settings* which

²⁵ See World Bank World Development Report 2016: Digital Dividends.

can be retrieved from <http://www.crvs-dgb.org/en/>. This is a useful reference that can assist in the digital migration planning of registers.

Investments in Non-digital programmes still happening

Despite the general recognition of value of digital there are still projects funded by donors and UN agencies that continue to develop paper-based registers and hence continue to add to the challenge of digital transformation. These should be discouraged as part of a policy that attributes more value on the development of computerized identity registers.

It is important to emphasize that while we see digital transformation as a key initiative, **this should not be interpreted as advocating the total elimination of physical credentials and certificates. Those continue to be very important as evidence for registration kept in the hands of the population and they can protect against manipulations by the state, which under certain circumstances would be unchecked in its ability to alter or delete a person's identity, due to the legal primacy of digital systems over paper systems.**²⁶

P16: Build domain knowledge to support evidence-based decisions related to identity system investments

While there is a significant body of knowledge that exists today related to identity system practices (see the box on references below), there is still a significant gap in domain knowledge. This gap can be characterized in two types:

- Gaps in operational knowledge and experience on **HOW** to solve identification problems in given context. This has to go beyond statements of **WHAT** needs to be done.
- Gaps in evidence on the impact of ID systems that could inform the investments and the priorities. Examples of those gaps are given in box below.

UN agencies could consider supporting studies to fill some of the gaps identified here.

Gaps in Documentation required to inform identity policy

- Evidence of impact of robust identification systems on development.
- Impact of ID system implementation and policy on women.
- Impact of ID systems on human rights.
- Cost and performance benchmarks that can guide procurement planning and help ensure transparency and good governance by discouraging schemes to pass bribes through ID costs.
- Comparative study on experience with institutional arrangements for identity authorities.

²⁶ Physical ID documents are also still required for international travel, visa requests, security checks, validation of ID for various administrative purposes, and so on.

Reference Library

In informing the policy discussion, there is a number of relevant general guides produced by various expert groups within organizations concerned with identity matters. These are listed below and can be retrieved online through a web search.

- **UNSD** *Handbook on Civil Registration and Vital Statistics Systems* in 7 volumes
- **World Bank** *Digital Identity Toolkit: A Guide for Stakeholders in Africa*
- **ID4Africa** *Digital Identity: The Essential Guide*
- **UNICEF** *A Passport to Protection: A Guide to Birth Registration Programming*
- **Inter-American Development Bank:** *Dictionary for Civil Registration and Identification*
- **APAI** *CRVS Digitisation Guide*
- **SIA** *Civil Registry Consolidation Through Digital Identity Management*

Appendix: Individuals Interviewed

We wish to thank all of the individuals listed below for their generous contributions to this study. Their comments, insight and input were very valuable in preparing this document. Any defects in this report remain the responsibility of the author.

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