



HARNESSING THE POWER: CRVS SYSTEMS FOR 2030 GLOBAL AGENDAS

Conference Outcomes Report

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INTRODUCTION

This report summarizes key findings, outcomes and recommendations from the global conference on innovations in Civil Registration and Vital Statistics (CRVS) systems. Co-organized by the [Centre of Excellence for CRVS Systems](#), the [United Nations Children Fund](#) (UNICEF) and the [World Health Organization](#) (WHO), the conference was held February 27-28, 2018 in Ottawa, Canada, under the theme "*Harnessing the power: CRVS Systems for 2030 global agendas.*" It convened over 140 experts and practitioners from UN agencies, academia, civil society organizations, the private sector and low and middle income countries for panel sessions, discussions and innovation labs, with two main objectives:

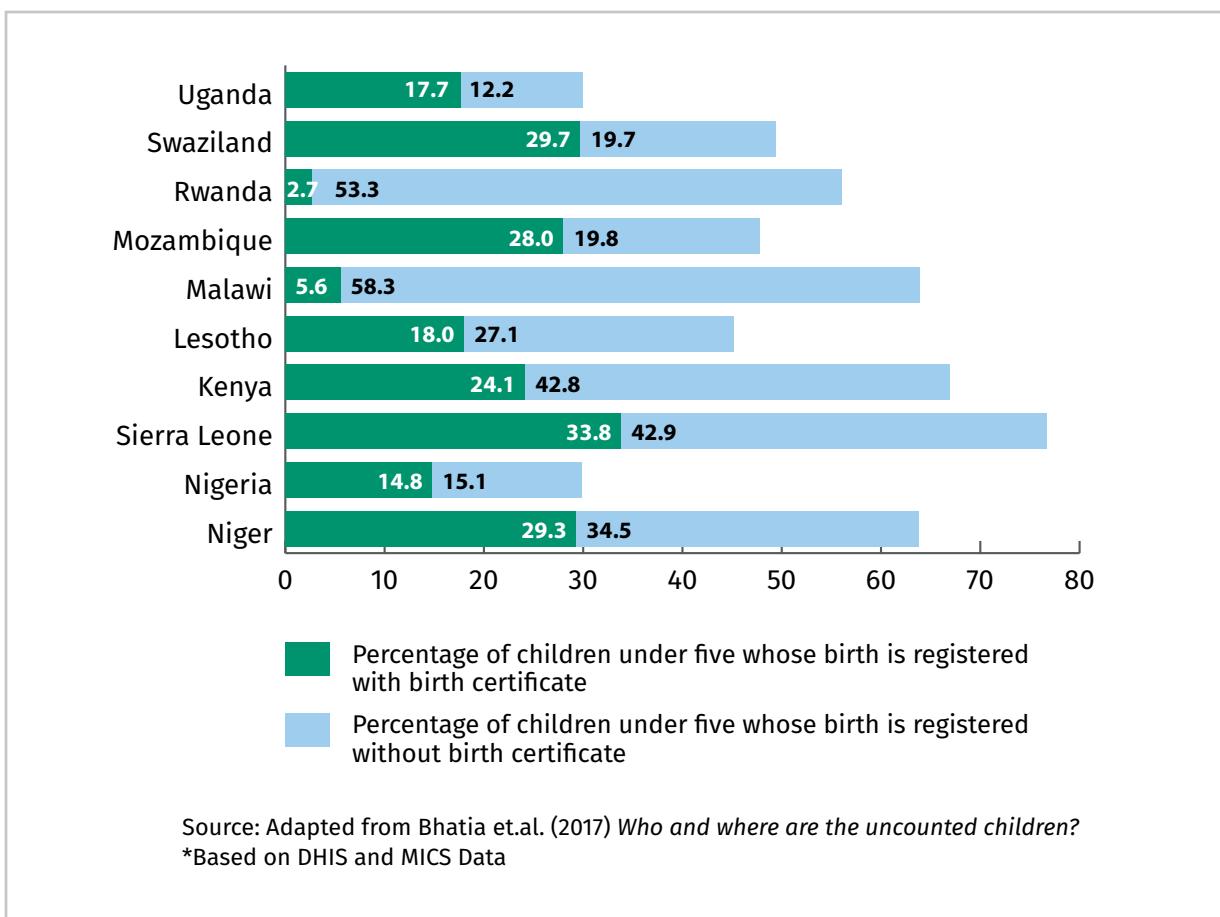
1. To generate current state knowledge by exploring the present-day status and use of innovation in CRVS systems in developed and developing economies, providing a platform for experts to present their innovative and constructive ideas at international level.
2. To prioritize future state research and innovation needs for development into a Global 3 to 5-year workplan, including necessary partnerships and capacity building approaches.

In the context of long term development, the Sustainable Development Goals (SDG) agenda recognizes that innovative and sustainable CRVS systems, integrated with health and national identity (ID) systems, are powerful drivers for more inclusive economies and a broad range of future development benefits, producing critical measurement data for many population-based indicators and targets. For example, SDG 16.9 refers specifically to providing legal identity for all, as measured by the indicator 16.9.1 *Proportion of children under 5 years of age whose births have been registered with a civil authority, by age*, and, across SDG 3, vital statistics are needed for monitoring key mortality targets including reducing maternal, neonatal and child deaths. Vital statistics can also be used to measure progress in other areas, including access to education, achieving gender equality and reducing inequalities.

Moreover, in conjunction with other systems, CRVS systems create a foundation for country administration, building the backbone of inclusive development through improved citizen participation and access to services such as healthcare. The interoperability between CRVS systems and other national data systems (such as health information, social welfare and identity management), can deliver a stronger foundation for inclusive development and social protection. At an individual level, civil status registration is essential for people to be able to realize their rights and assume their obligations.



Yet, only about 72% of the world's population has a birth certificate, and around **half of all deaths globally** are not properly documented. Furthermore, around **1 billion people** in the world cannot prove their legal identity, the vast majority are children who were never registered at birth or who did not receive a birth certificate.¹ The problem is particularly acute in developing countries, where most deaths are not recorded, and where there are greater numbers of citizens with no birth certificates, resulting in undocumented persons unable to exercise rights and access critical social services. In these countries, significant and sustained improvements in underpinning systems must be made to ensure concrete gains.



A paper produced for the conference – **Current State of CRVS: An Overview** – highlighted progress and the momentum in CRVS systems strengthening across the 2012-2017 period. The paper showed that CRVS systems are, in fact, a preferred source of data for many of the SDG indicators, provide legal identity for individuals, and deliver vital statistics for measuring sustained progress across many differing areas.

¹ Alan Gelb and Anna Diofasi Metz. 2018. *Identification Revolution: Can Digital ID be Harnessed for Development?*

In this context, it is critical to find innovative ways to accelerate the improvement of CRVS systems in low and middle income countries. Breakthrough innovations are needed to remove systemic failures and gaps, and to create a sustainable permanent system able to play a significant role in the economy and governance of the country. Flagship initiatives, innovations at scale, knowledge documentation and circulation, as well as research around emerging topics are critical if we are to achieve the SDGs by 2030. Significant support to governments and partners in low and middle income countries is also key to generating and fostering innovation.

Rather than just focusing narrowly on technological innovations, this conference highlighted the importance of system-wide methodological innovations to complement and support technological advancement. Innovative ways of linking CRVS to social protection and ID systems, new human-centred design approaches to increase demand and use of services, and innovative methods of registering vital events in conflict and emergency settings, are just as vital to building robust CRVS systems as technological changes. It is important to think creatively about fresh, new ways of strengthening CRVS systems holistically and making them work for all, especially for the most vulnerable.

This conference thus broadened the definition of innovation – technological and methodological – within the global CRVS community of practice, and catalysed conversations about its importance to building strong systems that can help countries both deliver on and monitor progress towards the SDGs. Strong, inclusive, collaborative approaches are crucial to sustaining the momentum and moving this agenda forward. The conference looked at creative ways of revisiting the program and improving its efficiency, as well as disruptive technologies that are both cost effective and can be scaled up to achieve significant improvement of CRVS systems. Hence it was significant that the conference also inspired further commitments to collaboration and partnership, with UNICEF and WHO announcing a new health partnership to strengthen CRVS systems.

This conference outcomes report is presented in two sections, with the first section outlining key discussions, country examples and findings from the nine panel sessions and six innovation labs that were held during the conference. The second section of the report details commitments made related to this, including the conference statement, the joint statement issued by UNICEF and WHO regarding the above mentioned health partnership agreement, and the main recommendations for action following the conference.



SECTION 1

Panel Sessions & Innovation Labs

THE PANEL SESSIONS

To enable lateral exchange and to harness the wealth of experience and specialist knowledge of its audience, the conference began with a series of panel sessions on the first day focusing on themes identified as critical in the realization of an effective Global CRVS Agenda. These sessions were designed to encourage participants to engage with key elements within the broader agenda in a more concentrated way. A brief summary of key discussions, recommendations and actions from each of the nine panels is included in the pages that follow.



PANEL SESSION 1: INCLUSIVE DEVELOPMENT

CRVS systems, in conjunction with other systems, create a foundation for country administration, building the backbone of inclusive development through improved citizen participation and access to government and services; supporting social protection, bridging the gap for the most vulnerable; creating opportunities for all segments of the population; and distributing the dividends of increased prosperity fairly across society.²

In this session, four country case studies were presented that identified stories of success and challenges. Through discussion, it became evident that the integration of CRVS and ID systems is fundamental to the concept of inclusive development. It was also noted that there is a risk of excluding the poor and increasing the digital divide if innovation does not keep pace. However, effective integration is dependent upon reliable and resilient underlying information systems.

Success stories

Several initiatives linked CRVS system strengthening to demand-side incentives:

- In Thailand, the integration of ID and household registration supported an increase in universal health coverage, with health insurance rising from 73% to 98%.
- A systematic review conducted by UNICEF in South Africa demonstrated that birth certification improved access to cash transfers, from 21% to 84%.
- A multi-pronged approach proved successful in Bangladesh, Brazil, India and Peru, allowing these countries to simultaneously address accessibility and demand for improving birth and death registration.

² OECD 2017 http://www.oecd.org/inclusive-growth/Policy_Brief_Time_to_Act.pdf

“Digital ID needs to be created at birth”

– Jonathan Marskell, World Bank

Challenges

While progress has continued in Africa since 2010, gaps remain.

- In Senegal, for example, despite legal frameworks, registration is affected by religious and cultural influences:
 - There is a high level of regional disparity, underpinned by distance, with economic socio-cultural factors playing a major role in variations in birth registration.
 - Registration is voluntary, and decentralization causes some coordination problems between local and central levels.
- In South Sudan, there is very little immediate reward for civil registration. This is due to the ongoing conflict and insecurity, and a poor health system.
- For both Senegal and South Sudan, there remains a need to effectively assess and create incentives at both the supply and demand side. This points to the need for political will as well as targeted approaches within specific cultural contexts.

ACTIONS AND RECOMMENDATIONS

- There is a greater need for **more qualitative research, particularly for exploring social and gender dynamics**. Privacy and data protection risks need to be given high importance.
- It is important to be **more innovative** in continuing to foster partnerships, knowledge sharing and high-level commitment.



PANEL SESSION 2: HUMAN-CENTRED DESIGN

While the focus for recent CRVS activity has been on the improvement of data and data systems, equal attention needs to be placed on generating demand for civil registration to achieve desired outcomes.

This session focused on the barriers and challenges to demand and use of CRVS systems, and the importance of addressing these by improving system design through human-centred approaches. Examples of effective demand-creation strategies include: reducing the public burden of reporting to the government by centralizing collection and linkage of data, and making summary statistics available, interesting and relevant for citizens through mediums such as infographics.

From the supply side, given the structure of registration processes, it is essential to link to formal and informal institutions to improve supply in terms of outreach and coverage:

- Centralization and mechanization of the supply-side of CRVS systems can lead to more exclusion rather than inclusion of vulnerable populations, particularly where infrastructure or technology is inadequate and unreliable.
- Resilient infrastructure that considers the reality of how citizens live, how they behave, and what they experience, is therefore critical. Improvement needs to focus on an inter-sectoral approach, involving data sharing amongst ministries.
- Cutting-edge technology can provide huge benefits when it is used to bring registration processes to the people rather than making people travel to registration centres.

ACTIONS AND RECOMMENDATIONS

- Research into **iterative and adaptive human-centred design approaches**, particularly to vulnerable populations, is required for the ongoing development and improvement of CRVS and other systems.
- It is important to move from the concept of awareness creation to a **participatory approach of partnering with communities** and stakeholder groups in system design, adopting a participatory and 'behaviour change' rather than a passive or top-down approach. Registration and issuance of certificates should be free.
- Careful attention must be paid to **increasing transparency of government whilst improving government accountability** in the use of data and protection of citizens' rights, particularly for vulnerable groups and those likely to be marginalized. An adequate data protection authority can help safeguard demand by maintaining public trust and confidence.
- It is necessary to ensure that **systems are embedded in an equity and human rights framework**, so that they adequately address the needs of vulnerable populations. Demand for civil registration services must be created without infringing on rights, which requires overcoming challenges such as financial barriers and geographical access.
- **Contextual factors should be integrated into design** and considerations, for example, population mobility, social and cultural factors, economic and environmental realities.
- CRVS systems must be **embedded and integrated as a component of enhanced service provision**, with incentives provided rather than penalties. There is a need to harness technology to service human-centred design.
- **An inter-sectoral approach**, involving data sharing amongst ministries is a key strategy for improving efficiency and cost effectiveness.



PANEL SESSION 3: CONFLICT AND EMERGENCY SETTINGS

This session highlighted the challenges countries face registering life events (e.g. births, deaths, marriages, divorces) in emergency situations. Displaced individuals may be unable to prove their legal identity, creating barriers to protection. In addition, lack of identification in emergency situations increases vulnerability to human trafficking and child marriage. Finally, countries receiving displaced people may have weak systems, and require training, equipment, and infrastructure to extend their civil registration systems to incorporate new populations.

Panelists provided practical examples of how to address these challenges using human-centred approaches. For example:

- Health and education are largely supported in emergency situations. The key role of the health sector and services in registering events was underlined, given their continued functioning in emergencies.
- Communities can be mobilized in affected areas, particularly during emergencies and conflicts, as this is where the information lies. There is a need to unpack the short-term versus long-term incentives and disincentives for families to register vital events.
- Experience has shown the effective use of technologies and mobile services to reach mobile populations in some countries.

"Refugee camps are evidence that life goes on, babies are born, people get married and people die. Vital statistics remain very important and help can only be given when we know who people are and try to avoid statelessness and preserve the rights of state for these people." – Dimitri Sanga

In emergency situations, problems emerge on the supply-side as CRVS systems may be weak in many affected countries. However, there is a changing and enabling landscape in various international agendas, such as the 2016 New York Declaration for Refugees and Migrants; the Comprehensive Refugee Response Framework; the 2030 Agenda, SDG 16.9 and "Leaving no one behind"; and Regional CRVS Ministerial Declarations in Africa and Asia and the Pacific. Further:

- States are showing increasing interest and taking increasing responsibilities; and
- There are emerging areas for better coordination between humanitarian partners, with the UNHCR/WBG Joint Data Centre on Forced Displacement announcing systems to enable more sustainable and coordinated responses to forced displacement.

ACTIONS AND RECOMMENDATIONS

- **Operational research** is needed in these areas: how to mobilize communities to improve civil registration during emergencies and conflicts; improving the use of health sector services, including the epidemiologic surveillance system; and improving mobile and technology-enabled registration services for mobile populations such as, for example, the digitization of CRVS systems to enable CRVS coverage for hard to reach areas where refugees often reside.
- Further, humanitarian assistance should **include funding for vital statistics** to capture the ongoing life events of displaced populations.
- **Governments should be provided with support** through capacity building, equipment, and infrastructure design to develop their vital statistics systems.



PANEL SESSION 4: SOCIAL PROTECTION IN THE CONTEXT OF INCLUSIVE DEVELOPMENT

In the context of inclusive development, this session discussed the important role of CRVS systems in supporting social protection, including:

- Bridging the gap for the most vulnerable, with a well-functioning civil registration and unique ID system linked to service delivery, which reduces inequality; and
- Distributing the dividends of increased prosperity fairly across society, with civil registration and social protection linked to nation building.

Good governance is an important element of CRVS systems for social protection. It underpins several of the core benefits of civil registration, including access to services. Criteria for well-functioning CRVS systems include functional and inclusive legal and institutional frameworks, and administrative capacity to support universal registration of vital events.

Civil registration and social protection can be political, especially in terms of gender and diversity. Thus, it is important to consider the country context, including cultural and socio-economic factors. For example, in some countries, polygamous marriages may create complexities in terms of access to services and benefits. Furthermore, it takes time to develop a mature CRVS and social protection system, and technology use without the right institutional design is not good enough.

"Technology needs a strong institutional mechanism"

- Ivan Axt

Country Examples

Chile provides a good model for reducing inequalities, because of two factors: (i) targeting mechanisms, and (ii) identification of beneficiaries. The Chile case shows how a comprehensive identity management system (IDMS) has been critical to inclusive development, including facilitating conditional cash transfers. The IDMS is a seamless integration of CR, ID and issuance of identity tokens, and works as a tool for social protection.

In **Namibia**, a number of innovations, such as the electronic birth notification system (e-birth) introduced in 2017, have increased early birth registration, which is now above 60%. Birth registration positively impacted social protection: the number of children on social grants increased and 200,000 more children became recipients of social protection.

Romania provides a good example of how incentives can contribute to higher uptake of civil registration. Examples include linking death registration to the provision of an allowance for the burial; and linking birth registration to a government allowance for children under the age of 18, a child rearing benefit, and a back to work bonus. Marriage registration is also linked to numerous other benefits.

ACTIONS AND RECOMMENDATIONS

- **Economic systems in developing countries** need to be formalized in ways that improve access to services.
- **It is important to distil learning from country experiences**, including examples of linkages between CRVS systems and the benefits of social protection, and other services such as health, social, education and economic and financial services.



PANEL SESSION 5: THE ROLE OF UNIQUE ID SYSTEMS

Sustainable Development Goal 16.9 ("By 2030, provide legal identity for all, including birth registration") provides an opportunity to link civil registration and civil identity. While the goal is to integrate civil registration and ID systems, perfect integration may not always be possible. This conference session provided a global overview of the basic principles to achieving some level of integration between the two systems.

The session revolved around a recent World Bank study, on how 75 countries assigned ID numbers, and three country case studies (Mauritius, Slovenia, Korea). Approaches to ID number generation ranged from using the date of birth to assigning random numbers. Discussion centered on how a framework could be created for issuing ID numbers at birth – particularly focusing on whether this results in overall cost savings. A study in Slovenia was referenced which stated that it takes four years after setting up a CRVS system to demonstrate return on investment.

Notwithstanding the investment, discussions highlighted that ID systems continue to operate in silos, with distinction between national ID and functional systems such as those for pensions and electoral roles. Participants, however, agreed there were broad ways in which civil registration and ID systems could be linked:

1. Birth registration could be linked directly to ID issuance;
2. Where ID numbers are different, methods could be used to cross-link; and
3. Linking could also be achieved through biometrics.

While there are many ways to generate unique identifiers (numbers), there are also specific challenges related to these, including issues of privacy. Random number generation has the potential to alleviate many of these problems.

ACTIONS AND RECOMMENDATIONS

- **Developing guidelines on integration of ID and civil registration systems** is a priority action. This guidance is best developed with standards for civil registration. In terms of guidelines and standards, it was noted that the World Bank [e-learning course on CRVS systems](#) has one module on integration.
- **Guidance on Electronic Data Protection and Privacy.** There are some serious issues related to protecting citizens personal information. As ID numbers are becoming supra national (for example, in the EU) there is a need for guidance on design of data protection, privacy and governance protocols, including for multi-sectoral systems such as ID and civil registration systems.



PANEL SESSION 6: LEGAL FRAMEWORKS AND PROTECTION OF IDENTITIES

This session agreed that a holistic approach is required in developing the legal frameworks for the three core functions of civil registration, vital statistics and identity management. A handbook on CRVS legal frameworks is being revised and will soon be available for reference and review. In addition, a tool has been developed by the Bloomberg Philanthropies Data for Health initiative, which highlights best practices in conducting the legal review process as well as outlining guidance in a modular format for basic CRVS legal review. The toolkit is available at www.CRVSLaws.org.

There was consensus that international standards for identity management across national ID and CRVS systems should be developed as a priority and include both substantive and procedural issues. Data sharing protocols must be incorporated into the legal framework.

There are several disconnects that must be addressed, including the disproportionate focus on birth as opposed to death registration. This can be attributed to the fact that death registration, unlike birth registration, is not enshrined in international human rights laws. The implication of this is key, particularly for women and other vulnerable groups in disaster and post-conflict settings. There is a need to consider appropriate means of incentivising death registration. These issues cannot be solved just by applying technical fixes.

ACTIONS AND RECOMMENDATIONS

Priority areas across Identity Management Systems:

- It is crucial to establish security systems for identity verification, as well as ensure the establishment of data protection authorities to safeguard transparency, public trust and confidence in CRVS systems. This also facilitates sustainability and further advancement.
- It is important that the link between CRVS legal frameworks and international human rights laws is made explicit. The legal framework must go beyond the national level and be explicitly linked to human rights protections, as enshrined in international law.

A **full legal review** is a fundamental starting point in identifying and eliminating barriers:

- The preparation, review and implementation of legal frameworks should follow inter-sectoral, full spectrum, bottom-up participatory approaches that involve communities, civil society and other stakeholders. For example, major gaps still exist in several high-income country CRVS systems (e.g. for Aboriginal populations in Canada and Australia). If these are not reviewed, they may perpetuate existing intergenerational injustices and the invisibility of some vulnerable populations.
- Conducting a legal review could lead to some quick wins (e.g. outlining a process for effective inter-sectoral or inter-ministerial exchange and improving ease of data collection and coordination in service delivery).
- In addition, a review enables the assessment of 'disconnects' that must be highlighted and resolved.



PANEL SESSION 7: HEALTH IN THE CONTEXT OF INCLUSIVE DEVELOPMENT

Reliable, timely, and relevant information plays an essential role in improving the health of populations. Good or better health outcomes are influenced by informed health policies and practices, and delivered by a health system that makes the most of resources by maximizing efficiency and promoting greater equality. Well-functioning CRVS systems have direct benefits for individuals and for policy-making processes that use vital statistics, but also contribute to improved population health outcomes.

Despite the utility of CRVS systems for guiding health policy decisions, informing health research priorities, and for monitoring progress on specific disease and injury control strategies, these systems remain under-resourced and weak in many low- and middle-income countries.

This session highlighted experiences from countries supported by the [Global Financing Facility](#) (GFF) to showcase examples of how the health sector can contribute to improving CRVS systems. These included Thailand's experience in linking civil registration with universal health coverage; Tanzania's decentralized approach to civil registration using health facilities; and Mozambique and Sierra Leone's experiences through the Countrywide Mortality Surveillance for Action (COMSA) initiative, funded by the Bill and Melinda Gates Foundation.

Mozambique and Sierra Leone: Countrywide Mortality Surveillance for Action

The focus for this initiative is on mortality data and cause of death using minimally invasive tissue sampling (MITS) and verbal autopsies on a population sample. Community surveillance agents are helping to identify and record pregnancies, outcomes and deaths and then connect with those handling the MITS and verbal autopsies.

The initiative includes other data and integration with other existing data systems. It provides a platform to raise awareness on the importance of registering and to facilitate linkages with the civil registration authority. It also trains health providers (doctors and nurses) to better code causes of death using international standards (WHO ICD-10). Data collected will be fed into dashboards for governments and be publicly visible for use.

The initiative, funded by the Bill and Melinda Gates Foundation, is aligned with country plans and strategies as well as their existing capacities. It is coordinated with key local stakeholders to ensure its sustainability.

ACTIONS AND RECOMMENDATIONS

- **Multi-sectoral partnerships to strengthen CRVS systems are key.** There is a need for health partners to collaborate with various stakeholders and sectors. CRVS systems can only be strengthened if all work together.
- **Guidance on new processes is important.** Data for health planning and development is a shared responsibility beyond the health sector. Sample registration systems cannot come at the expense of CRVS systems. They are a good beginning but not a long-term solution. There may be ways to integrate the two which have not yet been explored.



PANEL SESSION 8: CONTEMPORARY EXAMPLES IN IMPROVING CRVS SYSTEMS

This session highlighted several important aspects of CRVS system improvements, including the critical significance of considering innovation from both methodological and technological perspectives; the wide range of innovations from complex to simple; and the benefits and costs of innovation.

A range of experiences from various countries and UN system agencies in implementing or using a vital statistics system were presented, including experiences around:

- Incomplete systems, for example in areas of Sub-Saharan Africa and Southeast Asia, where there is little information on the quality of vital statistics, and therefore high reliance on non-CRVS sources to produce estimates;
- Widely varying approaches which have been used to build CRVS systems – from fully automated complex systems (e.g. Norway and Romania) to very simple methods in conflict areas which aim to collect necessary data to understand population shifts (e.g. Afghanistan); and
- Use of technological innovations (e.g. e-platforms) and non-technological approaches such as new methodologies and operations in the field.

“Countries with a high mortality burden also have the weakest death registration systems.”

– Romesh Silva

Establishing a sample registration site pilot in a conflict zone: Badakhshan, Afghanistan 2013-2018

In Afghanistan, there are efforts to understand vital statistics without a fully functioning civil registration system in place. Estimation of vital statistics is dependent on less reliable mechanisms such as facility-based statistics, national and subnational surveys and national estimates based on statistical models.

One project is to determine more accurate estimation of maternal and newborn outcomes in a single province. The approach includes geo-mapping of locations, identification of all health care facilities and providers providing maternal and child health services; conducting household surveys where the security situation permitted; and active surveillance, with each village visited at least once a month.

This project has been in operation for four years. Key findings to date indicate that delays in registration, poor pregnancy outcomes and newborn survival are all closely linked with both security situations and weather-related delays.

ACTIONS AND RECOMMENDATIONS

Methodological guidance is needed to improve completeness estimates and demographic data quality assessment of civil registration data. This can be done by:

- Strengthening civil registration data assessment through the 2020 round of population censuses:
 - Combining census data with civil registration data to foster full use of the census data framework of national statistics systems;
 - Incorporating data use as a focus of UNFPA census support; and
 - Viewing data dissemination as the link between data availability and data use for policymaking.
- Using other sources to assess subnational variation in civil registration completeness, and promoting integration of population data systems.



PANEL SESSION 9: DIGITAL INNOVATIONS AND SCALING

This session highlighted opportunities to build on low technology environments in ways not previously considered while facilitating dialogue around new approaches which are technology-enabled. Case studies were used to illustrate new technologies being used to bring identity and economic opportunity to the poorest and most vulnerable communities. It was agreed that digitization is not optional. However, it was also noted that:

- Where CRVS systems are weak, digitization is an occasion for overall system improvement, and should not just be the digitization of a flawed system;
- Digitization needs to be fit for purpose. In some instances, paper-based systems may be more appropriate in the early stages of development; and
- It is important to mitigate possible risks, such as data security.

Emerging technology makes it possible to simultaneously facilitate interoperability, increase privacy and improve data security. The model of digital identity allows various "entry points" to build a path to broad coverage and scale. Opportunities exist to ensure that good technology work does not remain only in developed countries; and that technology development does not increase the 'digital divide'.

DHIS2 in Tajikistan

DHIS2 was used to automate the CRVS system started as part of their Health Management Information System 2012 plan and was scaled up to national level. Since DHIS2 is open source, it is sustainable, scalable and adaptive. Research was undertaken into the design, implementation and incentives used, to inform improvements of the CRVS system. Different types of concerns were identified, including issues around policy, capacity data and ICT capacity.

"We cannot talk about identity without talking about what Identity confers"

– Jane Thomason

Blockchain in Papua New Guinea

A proof of concept recently developed in Papua New Guinea uses Blockchain to improve access to financial services. This project connected biometric markers to blockchain creating unique IDs which enabled registered citizens to send and receive digital cash, and trade in solar energy from a remote location. Crucial to its design was the low level of technological resources necessary: no internet or electricity were needed, only 2G mobile phones.

Data Sharing for Mobile Populations: The Pacific Civil Registrars Network (PCRN)

The PCRN was established in 2014 in response to the need for coordinated action to address issues of mobile populations. For example, people born on the Cook Islands often die in other countries and with death certificates administered elsewhere and not sent back. In 2016, New Zealand and the Cook Islands formally agreed to share data of births, deaths, marriages and relationships, to improve identification and registration records, and for statistical analysis and/or genealogical reasons.

ACTIONS AND RECOMMENDATIONS

Research into shifting identity paradigms is necessary. There is a need to keep abreast of changes in identity management and data and consider where the agency of the individual starts and ends. This pertains to the role of the state and also the role of those who may not possess the agency to act for themselves when it comes to different aspects of their identity.

Operational research into regulatory sandboxes is recommended to ensure that technologies are tested to guarantee that existing legislation and regulations are sufficient to respond to changes in identity management. Some countries, such as Canada, have regulatory sandboxes which enable testing of how certain technologies can work with specific legislative and regulatory structures.





THE INNOVATION LABS

New and innovative approaches, including modern technologies and tested approaches, hold enormous and exciting promise for improving CRVS systems and reaching the hardest to reach. There is consensus that progress must be accelerated to ensure we make the best investments now, for the future. The [Global CRVS Scaling Up Plan Investment Plan](#), and other global and regional investments are focused on this accelerated progress.

In order to harness the expertise of participants, the conference featured a series of interactive, discussion-driven sessions. Through the use of case studies, these workshop sessions allowed experts and country representatives to explore new and emerging approaches and technologies, and consider how these could be applied in countries seeking to strengthen their CRVS systems. The innovation labs were designed to produce actionable recommendations on new approaches to further develop and include in a global work-plan. A brief summary of key discussions, recommendations and actions from each of the six labs is included in the pages that follow.



INNOVATION LAB: TRANSFORMING CRVS SYSTEMS – BUSINESS PROCESS IMPROVEMENT

Purpose: To explore the role of CRVS business process improvement (BPI) to manage complexity of CRVS systems; to reduce fragmentation and silos of information flow; and to find solutions for the integration of CRVS operations. Participants examined the fragmentation of national and global efforts to strengthen CRVS systems (working example of Ghana), and the integration of CRVS and identity systems (working example of Tanzania).

BPI is a methodology that could be used by policy makers and managers to capture the complexity of CRVS systems and to provide systemic solutions to problems.

It has proven extremely useful to systematize the analysis of CRVS systems, to capture the intricacy of CRVS processes across multiple ministries and agencies, and to generate a sense of unity among CRVS stakeholders in the country.

Through the use of BPI, and in many cases for the first time, CRVS stakeholders have had a visually accessible end-to-end description of their processes across departments within an organization, and across different organizations (business process maps (BPM)).

During this session participants considered how:

- To effectively raise the in-country capacity to apply BPI methodologies;
- To design an effective BPI/BPM governance within existing CRVS governance structures;
- BPI could be adapted by different countries with different CRVS maturity levels; and
- The global community could support the implementation of BPI to strengthen CRVS system design.

There was consensus around the potential benefit of using BPI as an approach to improve the efficiency and effectiveness of CRVS systems. There was however also acknowledgment of the need to create in-country capacity to support its adoption. This led to the proposal of two BPI/BPM- focused groups for effective governance of BPI initiatives in country. There was also discussion of how to showcase the successful case studies of the BPI approach to CRVS system strengthening.

ACTIONS AND RECOMMENDATIONS

Develop BPI training packages for various stakeholder groups ranging from executives, to CRVS and IT experts.

Create a community of BPI practitioners who know CRVS systems, and who can support CRVS system strengthening in other countries.



INNOVATION LAB: MODERN DATA ANALYTICS

Purpose: To explore opportunities in contemporary data analytics as they apply to modern CRVS systems.

During this session participants considered:

- Approaches for countries to strengthen mortality measurement including cause of death data in the next 5-10 years;
- The role played by newer analytics (e.g. geospatial sciences, artificial intelligence) in the generation and use of mortality statistics;
- The key institutions and partnerships required to advance better mortality measurement;
- Encouraging shared learning across various efforts on mortality statistics; and,
- The role of modeled estimates in improving primary data collection systems.

Data analysis for vital events relies heavily on use of estimates and modelling, with global data incomplete and weak, particularly on causes of death. There is a critical need to improve modern CRVS data systems to produce, as much as possible, real time as well as aggregate data.

Linkage with other systems, such as health systems, and collection techniques are a feature of the current CRVS system strengthening discussion. However, there are fewer discussions focused on the important link between national ID systems and CRVS, and how information from both can be used for mutual benefit.

Yet while the opportunities for better data collection and analysis are exciting, these need to be tempered with concerns about data governance, security, confidentiality and protection.

Incentivization was identified as an effective means of increasing and improving death registration. Discussions revolved around how it could be implemented at the demand level to negate current practices of deliberate misclassification of cause of death due to health program reporting and funding demands, and to encourage countries to move away from model estimates to the use of direct administrative data.

Participants also considered methods for addressing current health system gaps such as using social autopsies and setting up systems to capture more timely data to combat gaps in high income countries. While initial start-up costs may be high, the long-term running costs should be sustainable at the country level.

ACTIONS AND RECOMMENDATIONS

The World Health Organization should act as the custodian for setting standards and guidelines for mortality data.

The Centre of Excellence for CRVS Systems and other organizations can help **facilitate a strong capacity building and learning agenda** to ensure sustainability is built into systems.

There is a need to **harmonize multiple data sources in-country** to generate synthesized and nationally representative pictures.

Recommended methods to increase demand for, and country ownership of, mortality data include:

- GFF and other investment cases;
- Quick generation of proof of success (e.g. national maternal mortality report); and
- Working directly with all consumers of data to align with short, medium and long-term plans/priorities.



INNOVATION LAB: HEALTH AND CRVS OPPORTUNITIES

Purpose: Across systems, including CRVS and health systems, every vital event must be recorded to protect and save lives and for inclusive development. This session explored the potential in health systems to improve birth, death, and cause of death data in CRVS systems.

In a report released by UNICEF, WHO and partners in 2016, *Better Data for Women and Children: Strengthening CRVS Across the Continuum of Care*, several opportunities were noted to improve birth and death recording across the continuum of care, for the benefit of women's and children's health programs, as well as for CRVS systems. These included:

- Pregnancy tracking systems which can record births, as well as maternal and newborn deaths;
- Systems which integrate mortality surveillance methods such as maternal deaths surveillance and response; and
- Electronic immunization registers which could potentially be used to notify a birth where the birth has not been registered.

During this session participants considered:

- Areas across the continuum of care that show the most promise to pursue CRVS system strengthening in the future;
- How pregnancy tracking systems can be used to better integrate health and CRVS systems for the long term;
- Whether electronic immunization registers can be a viable means to notify births and deaths for registration; and
- How health surveillance systems, including maternal death surveillance – can be used to improve recording and registration of maternal, new-born and child deaths.

ACTIONS AND RECOMMENDATIONS

Better research, country examples, guidance and standards are needed on: SMS notification by Community Health Workers (CHW) and midwives; decentralizing community health notification to the lowest level; exploring linkages between immunization cards and proof of birth; and use of pregnancy tracking.

Guidance on health sectors and notification or registration activities can include: colocation of registrars in health sectors; use of mobile health and/or CRVS teams and mobile notification from health reporting; and potential for CHW to be designated as registrars.

Operational research on incentives and disincentives in the health system could include analyses on reducing disincentives (e.g. distance; cost), and increasing incentives (e.g. using baby packs).

Data quality and standards could be improved by articulating use of health information; maternal deaths surveillance and response; perinatal audits to improve reporting; verbal autopsy from CHW to improve reporting; and using community data for social accountability.



INNOVATION LAB: HUMAN-CENTRED DESIGN

Purpose: To explore opportunities in human-centred design, particularly their relevance to increasing demand and utilization of services through community partnerships in modern CRVS systems.

While the focus for recent CRVS activity and momentum has been on improvement of data and systems, equal attention needs to be placed on generating demand. Even with fully functioning CRVS systems, universal coverage will only be possible with universal demand. The barriers and challenges for demand through human-centred interaction with CRVS systems must be understood and addressed by improving the design of CRVS systems.

During this session participants considered:

- How and where human-centred design can be incorporated into CRVS systems;
- How using human-centred design in CRVS systems can improve system responsiveness to demand-side factors; and
- How human-centred design improves the reach of CRVS systems to the most vulnerable.

This session considered areas of 'low hanging fruit', and the modifications necessary within the legal framework. In addition, community partnerships and changing social norms were discussed. It was agreed that unless comprehensive assessments are done, quick wins are not possible; and that active mechanisms are needed to take the system to the people.

ACTIONS AND RECOMMENDATIONS

Design a customized comprehensive assessment that is more human centric through engagement with community and religious leaders and civil registration authorities. Analyze these assessments and carry out community consultations to share findings and discuss potential next steps.

Design a series of field trials to test the effect of different interventions (singularly or as a package).

Conduct community consultations with (religious) leaders and local authorities to communicate the results of the field trials and interpret them in a consultative manner, and discuss next steps in collaboration with the community.

Model institutional and legal frameworks to be more human centric.

Prioritize qualitative and quantitative research on demand creation and evidence based behavioural change programs.



INNOVATION LAB: BLOCKCHAIN TECHNOLOGIES FOR IDENTITY-RELATED SYSTEMS

Purpose: To explore the experience and possibilities of blockchain for CRVS and associated systems, and agree if relevant for inclusion in a global workplan.

There are five basic principles underlying blockchain technology:

1. **Distributed Database:** Each party on a blockchain has access to the entire database and its complete history. Every party can verify the records of its transaction partners directly, without an intermediary.
2. **Peer-to-Peer Transmission:** Communication occurs directly between peers instead of through a central node. Each node stores and forwards information to all other nodes.
3. **Transparency with Pseudonymity:** Every transaction and its associated value are visible to anyone with access to the system.
4. **Irreversibility of Records:** Once a transaction is entered in the database, the records cannot be altered, because they're linked to every transaction record that came before them (hence the term "chain").
5. **Computational Logic:** The digital nature of the ledger means that blockchain transactions can be tied to computational logic and, in essence, programmed.

"We should learn first before dismissing"

– Montasser Kamal

Blockchain is a new technology in its developmental stages. It is a decentralized ledger, fast, secure, time stamped and immutable. Its decentralized nature, and the use of smart contracts, may assist decentralized civil registration systems which struggle to centralize information and reflects some of the principles of civil registration in terms of validation of identity information. There is however very limited understanding of blockchain among governments and many international organizations. The key question for this session was: for CRVS systems, can a distributed ledger approach potentially improve notification of births and deaths, leading to improvements in registration?

Participants considered the uses of public and private blockchains and how the technology offered solutions in low infrastructure environments. Many potential use cases were identified, including identity, supply chain, registries, financial inclusion and remittances. To achieve successful implementation and scale up however, participants agreed that there would need to be a shift in thinking that accepts the concept of decentralization. To enable this shift, dialogues need to be established between the tech community and the international development community to further explore its application in-country. Involvement from the international development community will ensure the evolving technology is designed to solve real problems. Small investments in proofs of concept may yield big results.

ACTIONS AND RECOMMENDATIONS

Produce a white paper on blockchain, CRVS and Digital Identity, including consideration of legal and regulatory issues that countries will face.

Facilitate regulatory sandboxes so countries can have technical demonstrations and co-design opportunities in a safe environment.

Develop a register of blockchain and identity projects in developing countries to keep abreast of technology developments affecting civil registration and ID systems.

Facilitate learning exchange around legal and regulatory challenges – enabling countries with experience of blockchain to share knowledge with others.



INNOVATION LAB: OPEN SYSTEMS – DIGITAL CRVS AS A GLOBAL GOOD

Purpose: To explore the applicability of OpenCRVS across a range of country contexts, including the capture of additional product features and the identification of potential sustainability models.

OpenCRVS is a standards-based and freely available CRVS solution that is being developed with a user-centric design philosophy, putting the needs of citizens and registrars first.

The system has no license costs and no ties to specific software vendors and is easy to configure to meet country specific needs. It provides a simple and accessible registration process for citizens. It embeds UN standards and reporting and includes a data-driven performance management dashboard for management. The system is interoperable with health systems for increased event notifications and includes best-practice security for data protection and confidentiality.

The first OpenCRVS prototype is now available and has been demonstrated at recent meetings of the Regional Steering Group for CRVS in Asia Pacific (Bangkok, Oct. 2017) and at the Conference of African Ministers Responsible for CRVS (Nouakchott, Dec. 2017).

During this session participants considered:

- The additional research required before the core product and configuration requirements can be defined;
- The country contexts which provide ideal environments for testing OpenCRVS implementation flexibility; and
- Business models that could allow OpenCRVS to function as a sustainable global good.

OpenCRVS is being developed using an agile development methodology – early prototypes are used to gather feedback to ensure that the final product can be integrated within existing CRVS ecosystems. This session therefore provided an ideal opportunity to influence the next wave of product features.

Participants discussed practical aspects of the software. It was the software's user-centric approach which gained the most attention, with discussions revolving around its ability to gather and respond to user insights. Ideas emerged around how interaction with CRVS systems could be enhanced through improved user-experience. A number of participants expressed interest in testing out the interoperability of the software with their existing systems in country. A key consideration however is the critical need for adequate data protection. This was acknowledged and placed at the centre of the design strategy, providing users the ability to customize which data was available to governments.

ACTIONS AND RECOMMENDATIONS

Practical guidance on human-centred design for CRVS systems should be developed by appropriate actors (e.g. add as an additional step in the CRVS digitization guidebook).

There is a clear need to **develop interoperability standards**, particularly with health and national ID to facilitate consistent data sharing between these systems.

A **technical advisory group** is needed to support the development of OpenCRVS as a global good.





SECTION 2

Commitments and Next Steps

CONFERENCE STATEMENT

27-28 February 2018

This statement was prepared by the Centre of Excellence for CRVS Systems, World Health Organization, and United Nations Children's Fund as co-organizers of the conference *Harnessing the Power: CRVS Systems for 2030 Global Agendas* which took place February 27-28, 2018 in Ottawa, Canada.

The conference brought together over 140 participants from a wide range of sectors: civil registration, vital statistics, identity management, government, national and international development and academia. All continents were represented within a cohort that comprised actors and practitioners from both international and regional organizations.

Conference participants endorsed the following messages and action points:

Functioning CRVS systems enable people and governments to face modern challenges.

Civil registration is defined as the universal, continuous, permanent, mandatory and confidential registration of vital events, such as births, deaths, marriages, divorces and adoptions; and it is recognised as one of the most critical tools for ensuring the exercise of basic human rights. It also produces legal documentation, such as a birth certificate, that provides legal identity, facilitates access to government and public services, empowers individuals, and enables civic, social and economic participation.

One of the major postulates of the 2030 Sustainable Development Agenda – 'Leave no-one behind' – cannot be achieved without fully functioning civil registration systems.

Civil registration is indispensable for producing comprehensive, regular, accurate and reliable vital statistics; the critical foundation needed for assessing the human capital of each nation. There is no viable substitute for vital statistics, they are fundamental in monitoring the implementation of the 2030 Sustainable Development Agenda.

Civil registration and vital statistics (CRVS) systems, in conjunction with other systems, form the backbone of inclusive development: improving citizen participation and access to government services, including health; promoting social protection, bridging the gap for the most vulnerable; and creating opportunities for all segments of the population, enabling people to realize their rights. Innovative and sustainable CRVS systems, integrated with health and national ID systems, should be powerful drivers for more inclusive economies and a broad range of future development benefits, producing critical measurement data for many populations.

Civil registration empowers individuals through the provision of identity. In a modern world, identity provides the basis for civic, social and economic participation- enabling individuals to access banking and finance, for example. Women benefit from civil registration systems which grant identity as this is the basis for broader social, and economic participation, including access to key services such as health.

Yet current systems remain weak:

- Almost half of the world's countries lack universal civil registration; and many are not equipped with the tools to produce comprehensive small area vital statistics.
- In the 21st century, we still do not know how many mothers die globally, nor how many children are born. Less than 50 countries produce high-quality cause of death data, with the largest data deficits and capacity gaps evident in Africa and Asia. This has major implications for public health decision-making and outbreak management.
- The Global Identity Gap highlights that more than 1 billion people are invisible. As global displacement continues to increase, weak CRVS systems cannot ensure legal identity through registration. The full potential of CRVS systems is necessary to mitigate the negative impacts of massive internal and international movements of population, as in cases of natural and man-made disasters.

The conference highlighted many examples of innovation in CRVS:

- Innovation in country systems was often closely associated with technology. It was technology that drove the improvement of civil registration – using harmonized platforms to extend the civil registration network to reach even the most marginalised and those hard to reach. Combining technology with innovative approaches to improve registration rates, through schools and health networks, for example, and raising registration awareness in communities, has yielded significant positive results.
- Innovation comes in many different shapes. Setting up strong regional programmes is an innovative approach that increases the capacity of countries to establish and run universal civil registration and vital statistics systems.

For CRVS systems to realise their potential under the Sustainable Development Goals (SDGs), they must be strengthened to support, and be supported by, other data, as well as information and identity systems, including ID and health. Only then can they deliver benefits in terms of identity, rights and inclusive development. The key determinants of health as expressed in the SDGs, particularly those for women and children, cannot be addressed without appropriate systems for registration, data, and measurement. CRVS system strengthening needs to be integrated and holistic. Registration of different vital events are interdependent and, when coordinated with the strengthening of population data systems (including CRVS systems, population censuses, National ID systems, health sector and health information systems), can be mutually-reinforcing.

Regional and global partners and programs have played a remarkable role in building momentum behind CRVS system development. Regional partners have raised awareness, set regional goals and targets, fostered country-to-country exchange and mutual learning, built high-level political commitment, and continue to provide a platform through which country stakeholders, development partners, and technical experts can share experiences, develop and document good practices, and propose innovative approaches to tackle CRVS challenges.

New and innovative approaches – defined for this conference as new and improved approaches for systems, organizations and processes, including modern technologies – hold enormous and exciting promise for improving CRVS systems and reaching the hard to reach. There is consensus that progress must be accelerated to ensure we make the best investments now, for the future. The [Global Scaling Up Investment Plan](#) and global and regional investments are focused on this accelerated progress.

Countries that presented at this conference are leading the way in demonstrating that rapid improvement in CRVS systems is possible, challenging conventional wisdom that good CRVS systems are many decades away.

This conference explored, with global and country experts, the status and use of innovation in CRVS systems, within developed and developing economies, to prioritize 'future state' research and innovation needs in the context of social protection, health and inclusive economies. It identified opportunities to realize the full potential of CRVS and related systems, including modern data analytics and identity management systems, and proposed how system transformation can be achieved, across CRVS and related systems, using a human rights approach and human centred design.

As an outcome of this conference, we call upon the members of the Global CRVS Group³ to facilitate, in collaboration with other stakeholders, the exploration of these opportunities for accelerating progress, to ensure that countries have access to sound technical approaches that will advance CRVS systems by:

- **Developing a global plan for CRVS system strengthening through innovation and technology.** The Centre of Excellence for CRVS Systems will help to coordinate this plan in collaboration with a broad range of stakeholders and with a forward-looking view to systems which must perform strongly to achieve SDGs in the 21st century. Principles for the plan will include:
 - Country ownership and leadership in innovations for CRVS development;
 - Getting the fundamentals right, with innovations contributing to the fundamental need;
 - A primary commitment to building or strengthening local capacity; and
 - A commitment to scalable and sustainable solutions using innovative processes and technologies.

³ Global CRVS Group <https://unstats.un.org/unsd/demographic/crvs/globalcrvs.html>

- Ensuring that the collaborative approach to the innovations workplan extends from inception to implementation and evaluation, and focuses on the following:

I. Promoting regional and global collaboration and partnership to:

- Strengthen the institutional and administrative capacity of CR and VS agencies as a prerequisite for achieving the SDGs and for promoting gender-based design, and the use of technology and implementation of technological solutions.
- Map regional initiatives and country innovation and technology experience, challenges and opportunities;
- Lead conceptual development in new areas of innovation which are important to future CRVS system development;
- Nurture innovation from idea to implementation using regional and global strengths;
- Develop partnerships and business models to support innovation development, testing and implementation.

II. Ensuring that new approaches are designed with country and regional-level capacity building measures incorporated to ensure long term sustainability.

III. Fostering a vibrant global community of practice, developing knowledge management mechanisms and platforms to disseminate lessons learned and promote good practices for innovations.

We also call upon donors to strengthen coordination to ensure individual and joint donor initiatives are informed by cutting edge information on the best available innovation and technology approaches.

Finally, conferences of this kind provide an indispensable opportunity to harness the knowledge and experiences of leading practitioners and experts within CRVS and its related fields. They provide an outstanding environment for learning exchange and for the profiling and consideration of the most successful solutions, research, analysis and future development. The co-organizers are thus most appreciated and are earnestly encouraged to establish the regular practice of such gatherings.

MAIN RECOMMENDATIONS FOR ACTION

The below summary table organizes all the main recommendations from the panel sessions and innovation labs by theme and area of action:

THEMES AND ACTIONS	
Guidance and Standards	Develop guidelines on integration of national identity and civil registration systems to facilitate social protection and more inclusive development.
Develop guidelines on the design of data protection and privacy for governance, including for multi-sectoral systems such as ID and civil registration systems.	Develop international standards for identity management across national ID and CRVS systems that include both substantive and procedural issues.
Improve completeness estimates and demographic data quality assessment of civil registration data, by strengthening civil registration data assessment, through the 2020 round of population censuses, and using other sources to assess subnational variation in civil registration completeness.	In conflicts and emergencies, humanitarian assistance should include funding for vital statistics to capture the ongoing life events of displaced communities.
Guidance on Health, Data and Methodology: <ul style="list-style-type: none">Promote approaches that harmonize multiple data sources within a country to generate a synthesized and nationally representative picture.Increase demand for, and country ownership of, mortality data through the GFF and other investment cases; quickly generating proof of success (e.g. national maternal mortality report); and working directly with all consumers of data to align with short, medium and long-term plans and priorities.The WHO should act as the custodian for setting standards and guidelines for mortality data.Improve data quality and standards by articulating best practice in: the use of health information, maternal deaths surveillance and response, and perinatal audits to improve reporting; verbal autopsy from community health workers to improve reporting; and use of community data for social accountability.	Encourage approaches that formulate economic systems in developing countries in ways that improve access to services.

THEMES AND ACTIONS

Guidance and Standards (continued)	<p>A full legal review is a fundamental starting point in identifying and eliminating barriers.</p> <ul style="list-style-type: none"> The preparation, review and implementation of legal frameworks should allow inter-sectoral, full spectrum, bottom-up participatory approaches that involve communities, civil society and other stakeholders. Countries who ratified international conventions on civil registration should amend the national legislations accordingly. When it comes to birth registration, legal frameworks need to ensure that the State fulfills the role of guaranteeing the right to identity for all. <p>Develop practical guidance on human-centred design for CRVS systems by appropriate actors (e.g. add as an additional step in the CRVS digitization guidebook).</p> <p>Develop guidance on health sectors and notification / registration activities to include: colocation of registrars in health sectors; use of mobile health / CRVS teams and mobile notification from health reporting; and potential for community health workers to be designated as registrars.</p> <p>Develop interoperability standards, particularly with health and national ID systems to facilitate consistent data sharing between these systems.</p>
Research	<p>Inclusive Development</p> <p>Conduct more qualitative research, particularly exploring social and gender dynamics. Privacy and data protection risks need to be given high importance.</p> <p>Human-Centred Design</p> <p>Conduct research into iterative and adaptive human-centred design approaches, particularly to vulnerable populations, to inform the ongoing development and improvement of CRVS and other systems. Research is needed for design improvement to:</p> <ul style="list-style-type: none"> Model institutional and legal frameworks to be more human centric; Show how to include community consultations in the design of the system; Consider the demand side and design evidence based behavioural change programs; Design a customized comprehensive assessment that is more human centric through engagement of community and religious leaders. Analyze these assessments and carry out community consultations to share findings and discuss potential next steps; and Design and conduct a series of field trials to test the effect of different interventions (singularly or as a package). Communicate and interpret results in a consultative manner with the community.

THEMES AND ACTIONS

Research (continued)	Emergencies and Conflict Conduct operational research into how to: mobilize communities to improve civil registration during emergencies and conflicts; improve the use of health sector services, including the epidemiologic surveillance system; and improve mobile and technology-enabled registration services for mobile populations.
	Social Protection Conduct implementation research, including distilling examples from country experiences, regarding linkages between CRVS systems and social protection, as well as other services such as health, social services, education and economic and financial. This also includes research on how to bring informal practices into formal civil registration systems.
	Digital Identity Conduct research into shifting identity paradigms – for example, the increased focus on a person's ability to manage their own identity and access to information. There is a need to keep abreast of this change and consider the boundaries of where the agency of the individual starts and ends.
	Operational research into regulatory sandboxes Conduct research on regulatory sandboxes and testing of how technologies can work with certain legislative and regulatory structures. It is important to ensure that technologies are tested for sufficient legislation and regulation to respond to changes in how identity is managed.
	Health Enhance research, country examples, guidance and standards regarding: SMS notification by Community Health Workers (CHW) or midwives; decentralizing community health notification to the lowest level; exploring linkages between immunization card and a proof of birth; and use of pregnancy tracking. Conduct operational research on incentives and disincentives in the health system, including reducing disincentives such as distance, cost, and increasing incentives (e.g. using baby packs).
	New Technologies and Open Systems Produce a white paper on blockchain, CRVS and Digital Identity, including consideration of legal and regulatory issues that countries will face – sharing and learning from countries that are more experienced in this area (e.g. Singapore, Dubai, Estonia, Mauritius, Canada).

THEMES AND ACTIONS

Partnership	<ul style="list-style-type: none"> Identify more innovative ways to working with new partners. Continue to foster partnerships, knowledge sharing and high-level commitment. Take an inter-sectoral approach to improving efficiency and cost effectiveness as CRVS systems can be strengthened only if all work together. Create a Global Technical Advisory group to support the development of OpenCRVS as a global good.
Capacity Building and Learning Exchange	<p>The Global CRVS Group, working with partners and other organizations, needs to facilitate:</p> <ul style="list-style-type: none"> A strong capacity building and learning agenda to ensure sustainability is built into CRVS systems; Learning exchange around legal and regulatory challenges – enabling experienced countries to share knowledge with others; and Regulatory sandboxes so countries can have technical demonstrations and co-design opportunities in a safe environment.
Conflict and Emergency Settings	<ul style="list-style-type: none"> Governments should be provided with support through capacity building, equipment, and infrastructure design to develop vital statistics systems.
Business Process Improvement (BPI)	<ul style="list-style-type: none"> Develop BPI training packages tailored to various stakeholder groups ranging from executives to CRVS and IT experts. Create a community of BPI practitioners who know CRVS systems, and who can support CRVS system strengthening in other countries.

The Future for Women and Children: UNICEF and WHO Joint Statement on Strengthening Civil Registration and Vital Statistics (CRVS)

February 2018

Background

Civil registration and vital statistics (CRVS) systems serve as the means through which fundamental human rights can be realized.

CRVS is critical for women and children. The Global Strategy for Women's, Children's and Adolescents Health 2016-2030 calls for expansion of civil registration and vital statistics systems to increase access to services and entitlements; in order for women and children to realize their rights to proper health care, education and basic social benefits, including housing and social protection.



CRVS systems are also critical to the 2030 development goals across the life-course, with 15 of the 17 Sustainable Development Goals using indicators which require high quality CRVS data. For countries, a fully functioning CRVS system also generates important information which is a prerequisite to socioeconomic planning and informed decision-making, enabling governments to monitor key demographic and health indicators, including infant, child and maternal, and adult mortality, and target resources and interventions by geography and population group.

In short, CRVS systems are critical to future development.

The health sector is crucial in securing long term improvements to CRVS systems.

Disparities in maternal, newborn, child and adolescent health represent a major barrier to sustained progress towards every woman and child's right to survive and thrive. Data about who is being left behind and how programs are reaching or failing to reach those in greatest need is a key principle of equitable development. The improved coverage of health systems and programs for all populations will support addressing equity concerns in access to health care services.

Innovative approaches and technologies applied as part of health programs, including digital tools and analytics, have the potential to rapidly scale up the notification, registration and certification of births and deaths and to improve the availability and quality of vital statistics. Health systems therefore offer the potential to leverage programs, services and interventions such as immunization and maternal/newborn health care for the notification and registration of births and deaths, as well as improve general registration and cause of death ascertainment.

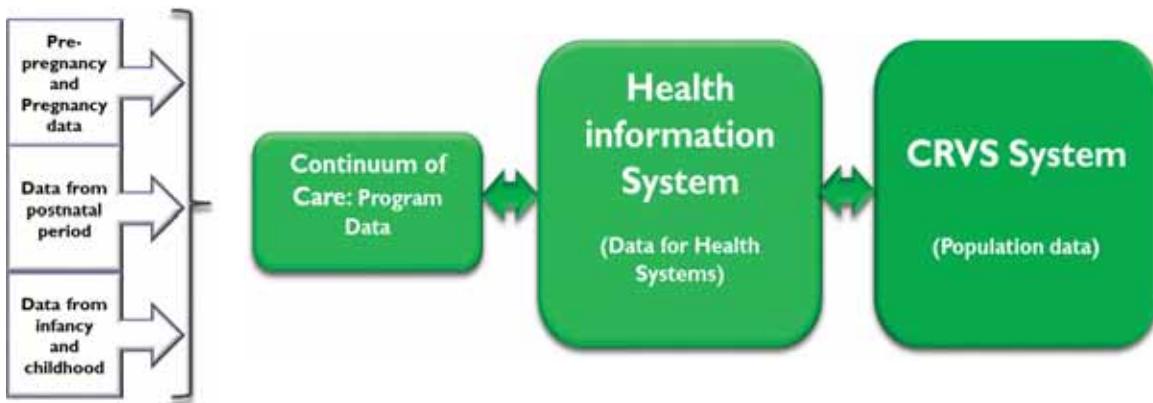
Our Statement:

In line with our commitment to the Sustainable Development Goals and vulnerable populations, especially women and children, UNICEF and WHO will work together with governments and partners to strengthen Civil Registration and Vital statistics (CRVS) systems.



To achieve this, UNICEF and WHO will:

- 1. Lead with joint strength:** We will build on our respective strengths to support countries to develop and implement evidence-based strategies that address the health and development needs of women and children, especially during the crucial times of pregnancy, births, and childhood, and that contribute to scaling up CRVS systems;
- 2. Collaborate for innovation:** We will collaborate in the introduction and assessment of innovative approaches, including new tools and technologies, and support linkages between CRVS and interventions for women and children and all populations across the continuum of care;
- 3. Advocate for equity:** We will advocate to countries, development partners, donors and civil society the critical role of CRVS systems in addressing the health and development needs of vulnerable and marginalized populations.



And will take action in:

- Sharing expertise:** We will share information, data and technical expertise to maximize efficiency of resources and generate synergies and cost savings from well designed, integrated programmes and guidance;
- Reaching Out:** We will work together along with our health and multisectoral partners to strengthen information systems, including CRVS, so that no one is left behind or uncounted;
- Learning:** We will learn from experiences in countries to enhance coordination and linkages between health programmes and CRVS systems;
- Mobilising:** We will jointly mobilise human, technical and financial resources to support CRVS systems strengthening as part of actions to reach every woman and every child with key life-saving interventions;
- Linking:** We will work together to ensure our work around Maternal Death Surveillance and response (MDSR) including perinatal deaths, Multiple Indicator Cluster Surveys, pregnancy registries, immunization registries, health management information systems, registration and verbal autopsy, etc. be increasingly linked to CRVS systems through interoperable data management systems.

We invite other health partners to share this commitment

ANNEX A: CONFERENCE AGENDA

DAY 1 CONFERENCE

OPENING PLENARY: 09:00 – 11:00

WELCOME ADDRESS: THE GLOBAL SIGNIFICANCE OF CRVS SYSTEMS

- **Christopher MacLennan**, Assistant Deputy Minister, Global Affairs Canada (GAC)
- **Jean Lebel**, President, International Development Research Centre (IDRC)

PANEL DISCUSSION: CRVS SYSTEMS TO ACHIEVE THE 2030 AGENDA

Moderator: Peter Taylor, Director, Inclusive Economies, IDRC

- **John Grove**, Director, Department of Information, Evidence and Research, World Health Organization
- **Anil Arora**, Chief Statistician, Statistics Canada
- **Haishan Fu**, Director, Development Data Group, World Bank Group
- **Srdjan Mrkić**, Chief, Demographic Statistics Section, United Nations Statistics Division
- **Alexandre-Marie Yomo**, Director, National Civil Status Registration Office (BUNEC), Cameroon
- **Jaime Bulande Guta**, National Director of Registry and Notary, Directorate of Civil Registration and Notaries, Mozambique

11h00-11h15: Coffee/tea break



PANEL SESSIONS: 11:15 – 13:00

PANEL SESSION 1	PANEL SESSION 2	PANEL SESSION 3
<p>Inclusive Development (World Bank with the Centre of Excellence (CoE))</p> <p>Moderator: Oliver Chinganya, Director, African Centre for Statistics, UNECA</p> <p>Jonathan Marskell, Operations Officer, ID4D program, World Bank Group: <i>Civil registration and identification for improved access to services</i></p> <p>Amitabh Suthar, Epidemiologist, CDC's Center for Global Health: <i>Report on systematic review of policies to universal birth and death registration</i></p> <p>Laetitia Bazzi, Chief, Child Protection, UNICEF Senegal: <i>Linking communities to civil registration services</i></p> <p>Kristen Wenz, Child Protection Specialist & Global Civil Registration and Legal Identity Technical Lead, UNICEF HQ: <i>Incentives for Improving Birth Registration Coverage Rates</i></p> <p>Rikke Munk Hansen, Chief Economic and Environment Statistics, UNESCAP: <i>The Asian and Pacific CRVS Decade (2015-2024) – an anchor for inclusive development</i></p>	<p>Human Centred Design (including demand creation) (UNICEF HQ with CoE)</p> <p>Moderator: Raj Mitra – Independent Consultant</p> <p>Vibeke Nielsen, Senior Adviser, Division of Development Cooperation, Statistics Norway : <i>Personal IDs for easy interaction – the case of Norway</i></p> <p>Gloria Mathenge, Social Statistician, Pacific Community (SPC) – <i>Human centric design: lessons learnt from the Pacific</i></p> <p>Bhaskar Mishra, Child Protection Specialist, UNICEF-Tanzania – <i>Human centered design: an example from Tanzania</i></p> <p>Ashfaqul Amin Mukut, Deputy Secretary Cabinet Division, Government of Bangladesh: <i>Putting People at the Core: CRVS and Beyond (CRVS+...)</i></p>	<p>CRVS Innovations in Conflict and Emergency Settings (French Speaking) (UNICEF WCARO with CoE)</p> <p>Moderator: Mirkka Mattila, Regional Child Protection Specialist, UNICEF WCARO</p> <p>Marwan Khawaja, Chief, Demographic and Social Statistics Section, UNESCWA: <i>Advancing CRVS in the service of Syrian refugees</i></p> <p>Dimitri Sanga, Director, Regional Office for West Africa, UNECA: <i>CRVS in conflict and emergencies – an example from West Africa</i></p> <p>Nicholas Oakeshott, Senior Identity Management Officer, UNHCR : <i>CRVS and forced displacement: current challenges and possible solutions</i></p> <p>Fodé Oumar Touré, Head, Division of Population Services and Statistics, Guinea: <i>Ebola Crisis</i></p>

PANEL SESSIONS: 14:00 – 15:30

PANEL SESSION 4	PANEL SESSION 5	PANEL SESSION 6
<p>Social protection in the context of Inclusive development (CoE and UNICEF)</p> <p>Moderator: Mia Harbitz, Independent Consultant, Identity Management</p> <p>Andrei Gheorghe, Legal counsellor, Ministry of Justice, Romania: <i>Civil registration documents at the core of the social protection system</i></p> <p>Ivan Arcos Axt, Policy Advisor to the Ministry General Secretary of the Presidency, Chile</p> <p>Anette Bayer Forsingdal, Director, National Population Register, Identification and Production, Ministry of Home Affairs and Immigration, Namibia: <i>Links between legal identity and accessing social services (including progress towards birth registration and quality vital statistics in Namibia)</i></p> <p>Arjan de Haan, Program Leader, Employment and Growth program, IDRC: <i>Civil registration and economic empowerment: necessity, promises, challenges</i></p>	<p>The role of unique Identification systems (World Bank)</p> <p>Moderator: Samuel Mills, Senior Health Specialist, World Bank</p> <p>Sanjay Dharwadker, Head of Global ID Consultancy, WCC Consulting EMEA: <i>Approaches that countries have employed to generate and assign unique identification number</i></p> <p>Nasser Jeeanody, Chief Health Statistician at the Ministry of Health, Mauritius: <i>Use of unique identification number for universal death registration and certification cause of death</i></p> <p>Minah Kang, Professor, Department of Public Administration, Ewha Woman's University, Korea: <i>Unique identification number for achieving universal health coverage in Korea</i></p> <p>Martina Zorko-Kodelja, Consultant, Information Centre, Health Insurance Institute of Slovenia: <i>Unique identification number for achieving universal health coverage in Slovenia</i></p>	<p>Legal Framework and Protection of Identities (CoE)</p> <p>Moderator: Jacqueline Bhabha, Professor, Practice of Health and Human Rights, Harvard T.H. Chan School of Public Health & Director of Research, Harvard FXB Center for Health and Human Rights</p> <p>Srdjan Mrkić, Chief, Demographic Statistics Section, UNSD: <i>UN legal framework for civil registration, vital statistics and identity management</i></p> <p>Philip Setel, VP and Director, Civil Registration/Vital Statistics Program, Vital Strategies: <i>Lessons learnt from developing and implementing a legal framework tool</i></p> <p>Claire Brolan, Postdoctoral Fellow, Dalla Lana School of Public Health, University of Toronto: <i>Emergency settings and routine death registration – a matter of law and life</i></p> <p>Zoran Đoković, Adviser on Migration, Freedom of Movement and Human Contacts, OSCE-ODIHR: <i>Legal identity as an enabler of freedom of movement and legal frameworks for identity data processing</i></p>

15:30-15:45: Coffee/tea Break

PANEL SESSIONS: 15:45 – 17:15

PANEL SESSION 7	PANEL SESSION 8	PANEL SESSION 9
<p>Health in the context of inclusive development (WHO with CoE and UNICEF)</p> <p>Moderator: Anshu Banerjee, Director (Global Coordination), Office of the Assistant Director-General in Family, Women's and Children's Health, WHO</p> <p>Debra Jackson, Senior Health Specialist, UNICEF</p> <p>Maletela Tuqane-Nkhasi, Senior Health Specialist – CRVS, GFF, World Bank: <i>Strengthening CRVS Systems through the RMNCAH-N agenda: Lessons from the GFF</i></p> <p>Boonchai Kijasanayotin, Manager, Thai Health Information Standards Development Center (THIS), Health Systems Research Institute (HSRI), Ministry of Public Health, Thailand: <i>Health insurance and birth registration</i></p> <p>Bhaskar Mishra, Child Protection Specialist, UNICEF Tanzania – Bridging the Gap: <i>Linking CRVS to Health Facilities</i></p> <p>Kathryn Banke, Program Officer, BMGF: <i>Countrywide Mortality Surveillance for Action (COMSA): examples from the field</i></p> <p>Sana Naffa, Senior Program Officer, CoE, IDRC: <i>CRVS as a social determinant of health</i></p>	<p>Contemporary examples in improving CRVS systems (UNSD and UNFPA)</p> <p>Moderator and panelist: Srdjan Mrkić, Chief, Demographic Statistics Section, UNSD: <i>Introduction to a contemporary holistic approach to civil registration, vital statistics and ID management</i></p> <p>Ani Mkhitaryan, Head, Office of the Civil Status Acts Registration Agency, Ministry of Justice, Republic of Armenia: <i>Innovating fast in CRVS</i></p> <p>Romesh Silva, Technical Specialist, Health and Social Inequalities, UNFPA</p> <p>Josie B. Perez, Assistant Secretary, Deputy National Statistician, Censuses and Technical Coordination Office, Philippine Statistics Authority (PSA), The Philippines</p> <p>Parvez Nayani, Director, Academic Projects Afghanistan, Aga Khan University (AKU-PA)</p>	<p>Digital Innovations and Scaling (CoE)</p> <p>Moderator: Martin Bratschi, Deputy Director, Technical Implementation for CRVS Improvement Program, Vital Strategies</p> <p>Murodillo Latifov, Independent Management Consultant, Information and Communication Technologies, Tajikistan: <i>Experience of integrating DHIS 2 with CRVS</i></p> <p>Jane Thomason, CEO, Abt Australia : <i>The challenge of testing and scaling new approaches to identification for empowerment in Papua New Guinea and Indonesia</i></p> <p>Claudine Henry-Anguna, High Court Registrar & Acting Justice Secretary, Cook Islands: <i>Cross-border data sharing – an experience from the Pacific Islands</i></p> <p>Dakota Gruener, Executive Director, ID2020: <i>Interoperability and inclusive routes to scale</i></p>

17:15 – 17:45

DAY 1 CLOSING PLENARY

- Reflections

18h00 – 19h00

COCKTAIL RECEPTION

- Welcome remarks by Joanne Charette, Vice-President, Corporate Strategy and Communications, IDRC

DAY 2 CONFERENCE

DAY 2 OPENING PLENARY: 9:00 – 10:30

Panel session: Gender and emergencies

Moderator: Dimitri Sanga, Director, Sub-regional office for West Africa, UNECA

- **Cornelius Williams**, Associate Director & Global Chief of Child Protection, Programme Division, UNICEF
- **Shaida Badiee**, Managing Director, Open Data Watch
- **Rikke Munk Hansen**, Chief, Economic and Environment Statistics Section, UNESCAP
- **Oliver Chinganya**, Director, African Centre for Statistics, UNECA
- **Josie B. Perez**, Assistant Secretary, Deputy National Statistician, Censuses and Technical Coordination Office, Philippine Statistics Authority (PSA), The Philippines
- **Jean-Louis Ville**, Head of Unit, Gender Equality, Human Rights and Democratic Governance, DEVCO, European Commission
- **Anir Chowdhury**, Policy Advisor, a2i Programme, Prime Minister's Office, Government of Bangladesh

10:30-10:45: Coffee/tea Break

INNOVATION LABS: 10:45 – 12:15

<p>INNOVATION LAB 1</p> <p>Transforming CRVS Systems: Business process improvement to manage complexity</p> <p>Facilitator: Daniel Cobos Munoz, Research Fellow, Health Systems and Policy Research Group, Swiss Tropical Health Institute</p> <p>Elias Mturi, Professor, Dar el Salaam University, Tanzania</p>	<p>INNOVATION LAB 2</p> <p>Modern Data Analytics</p> <p>Facilitator: Prabhat Jha, Professor, Global Health and Epidemiology, University of Toronto and Canada Research Chair at the Dalla Lana School of Public Health, University of Toronto, Canada</p> <p>Mireille Gomes, Associate Director, Strategy and Innovation, Centre for Global Health Research, St. Michael's Hospital and University of Toronto, Canada</p>	<p>INNOVATION LAB 3</p> <p>Health and CRVS</p> <p>Facilitator: Anshu Banerjee, Director (Global Coordination), Office of the Assistant Director-General in Family, Women's and Children's Health, WHO</p> <p>Theresa Diaz, Coordinator MCA/EME, WHO</p>
<p>INNOVATION LAB 4 (in FR/EN)</p> <p>Human centred design: Increased demand and utilization of services through community partnerships</p> <p>Facilitator: Irina Dincu, Senior Programme Specialist, Centre of Excellence for CRVS Systems, IDRC</p> <p>Kristen Wenz, Child Protection Specialist & Global Civil Registration and Legal Identity Technical Lead, UNICEF HQ</p>	<p>INNOVATION LAB 5</p> <p>New Technologies: Blockchain and Distributed Ledgers – implications for CRVS and ID</p> <p>Facilitator: Jane Thomason, CEO, Abt Australia</p> <p>Kyle Kemper, Executive Director, Canada Blockchain Association</p>	<p>INNOVATION LAB 6 (in English)</p> <p>Open Systems: Digital CRVS as a global good</p> <p>Facilitator: Edward Duffus, Head of Innovations, Plan International HQ</p> <p>Annina Wersun, Digital Birth Registration Projects Manager, Plan International</p> <p>Christopher Seebregts, CEO, Jembi Health Systems NPC</p>

12:15-13:30: Lunch

INNOVATION LABS: 13H30 – 15H15

<p>INNOVATION LAB 7</p> <p>Transforming CRVS Systems: Business process improvement to manage complexity</p> <p>Facilitator: Daniel Cobos Munoz, Research Fellow, Health Systems and Policy Research Group, Swiss Tropical Health Institute</p> <p>Elias Mturi, Professor, Dar el Salaam University, Tanzania</p>	<p>INNOVATION LAB 8</p> <p>Modern Data Analytics</p> <p>Facilitator: Prabhat Jha, Professor, Global Health and Epidemiology, University of Toronto and Canada Research Chair at the Dalla Lana School of Public Health, University of Toronto, Canada</p> <p>Mireille Gomes, Associate Director, Strategy and Innovation, Centre for Global Health Research, St. Michael's Hospital and University of Toronto, Canada</p>	<p>INNOVATION LAB 9</p> <p>Health and CRVS</p> <p>Facilitator: Anshu Banerjee, Director (Global Coordination), Office of the Assistant Director-General in Family, Women's and Children's Health, WHO</p> <p>Theresa Diaz, Coordinator MCA/EME, WHO</p>
<p>INNOVATION LAB 10 (in FR/EN)</p> <p>Human centred design: Increased demand and utilization of services through community partnerships</p> <p>Facilitator: Irina Dincu, Senior Programme Specialist, Centre of Excellence for CRVS Systems, IDRC</p> <p>Kristen Wenz, Child Protection Specialist & Global Civil Registration and Legal Identity Technical Lead, UNICEF HQ</p>	<p>INNOVATION LAB 11</p> <p>New Technologies: Blockchain and Distributed Ledgers – implications for CRVS and ID</p> <p>Facilitator: Jane Thomason, CEO, Abt Australia</p> <p>Kyle Kemper, Executive Director, Canada Blockchain Association</p>	<p>INNOVATION LAB 12 (in French)</p> <p>Open Systems: Digital CRVS as a global good</p> <p>Facilitator: Edward Duffus, Head of Innovations, Plan International HQ</p>

15:15-16:00: Coffee/tea Break

16:00 – 17:30

CLOSING PLENARY: PUTTING IT ALL TOGETHER

- Review of sessions, discussions and Ideas Labs
- Discussion of strategic areas of interest
- Agreement on priorities for further development





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