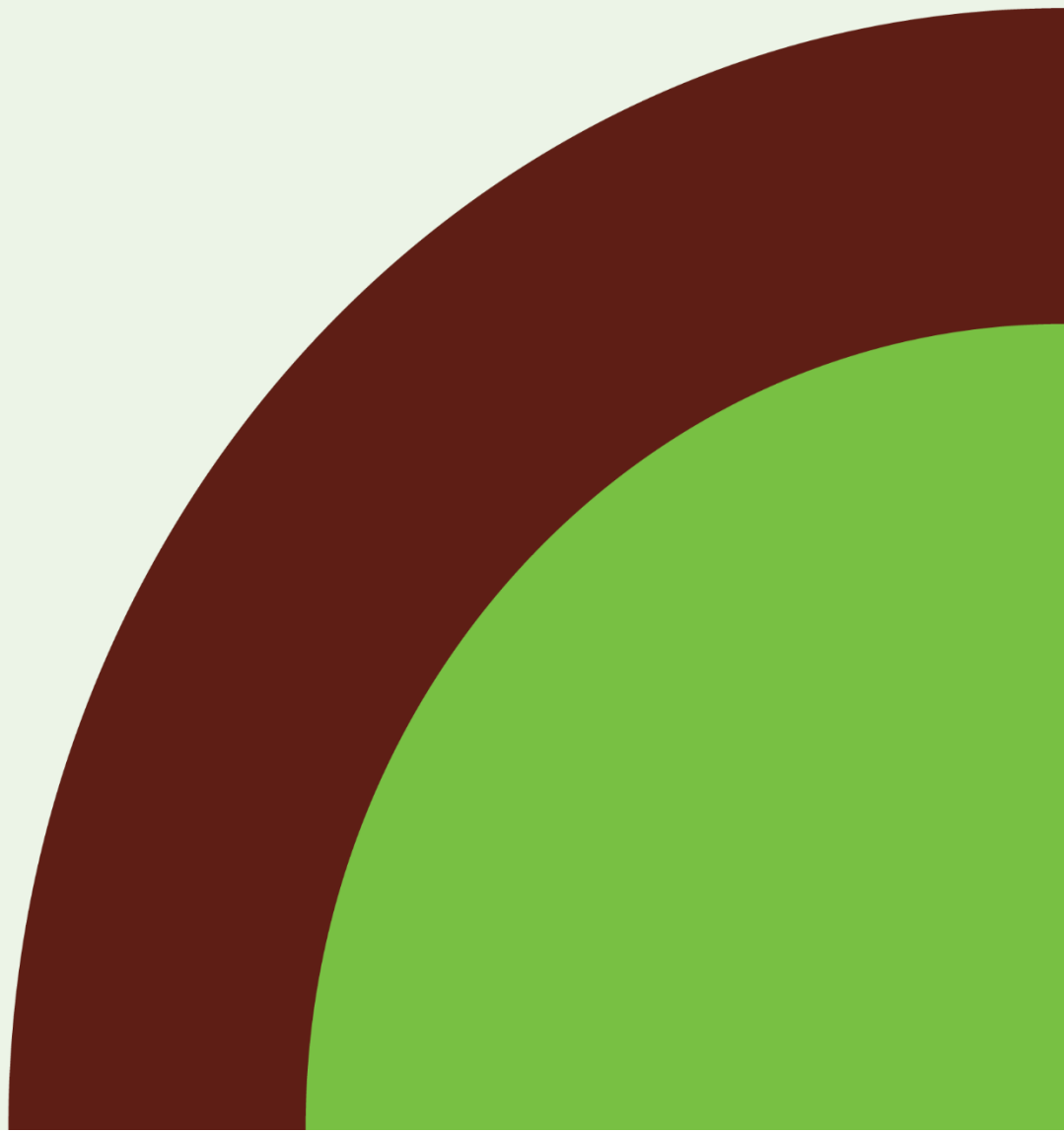


CRVS Systems Improvement Framework

Guidance for
Country Implementation

NOVEMBER 2025 (VERSION 2.0)





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The Civil Registration and Vital Statistics (CRVS) System Improvement Framework

Civil registration and vital statistics (CRVS) systems are complex. Encompassing two main components – the civil registration of vital events and the production of vital statistics – these components require the involvement of several government agencies, including Registrar General's Offices, National Statistics Offices, and Ministries of Health. Due to the number of agencies involved, it is often challenging for any one stakeholder or actor to have a comprehensive, end-to-end understanding of CRVS business processes. CRVS systems are also affected by the wider political, social, cultural, legal, and economic landscapes of a country, making it challenging to improve business processes without applying a holistic and integrated approach. Further, in an increasing number of countries, identity management is an integral part of the CRVS system and must be factored into any improvement activities.

Efforts to strengthen CRVS systems over the past decade have focused on the application of several system improvement tools, notably the World Health Organization/University of Queensland [Comprehensive CRVS Assessment Tool](#) and the APAI-CRVS Assessment Tool. These efforts strove for universal civil registration to generate vital statistics for planning and reporting. Experiences and lessons learned by countries and partners while implementing these assessment tools led, in 2021, to the development of The CRVS Systems Improvement Framework (hereafter referred to as 'the Framework'). The Framework builds on experiences from CRVS system-strengthening approaches used, while recognising civil registration as the foundation for comprehensive identity management and acknowledging the growing number of global and regional CRVS system-strengthening initiatives. It signifies the shift from questionnaire-based assessments to a process-centric approach.

The Framework was developed with the purpose of holistic strengthening of CRVS systems, including establishing or strengthening connections with identification systems. It provides guidance for reviewing the performance of a CRVS system to inform the development of a strategic and action plan, following a process-centric and results-oriented approach. The Framework takes a modular approach and can be applied to the overall CRVS system; a specific component, such as vital event registration; or a specific sub-process, such as death certification. Guidance provided in the Framework is focused on the timely registration and certification of two major vital events: **live births and deaths**. Governments may wish to adapt the Framework for other vital events, such as registering marriages, divorces, legal separations, annulments, adoptions or foetal deaths, or the integration of medicolegal death investigations into the CRVS system. The Framework includes limited guidance on business processes relating to the production of vital statistics, with detailed guidance provided in the [Technical Guidance for Strengthening the Vital Statistics Production Process](#) (1).

Updates to Version 2

The Framework has been updated based on lessons learned from country experiences since the launch of the first version. Key updates to Version 2 include:

- The scope of the Framework has been expanded to assess the ability of CRVS systems to connect to identification systems and ensure that CRVS systems are "ID ready".
- Guidance on the processes and use of tools in Stage 1 of the Framework has been strengthened. This includes, for example, addition of the "11 CRVS Strategic Outcomes" as



defined during the “Global Expert Workshop on Operationalizing Holistic Approaches to CRVS System Strengthening” held in Kigali in June 2024, which can be used to guide system-strengthening efforts.

- One of the crucial lessons learned from implementing the Framework is that it may not follow a linear process; but rather, needs to be adapted to the specific context of each country. This updated version acknowledges these diverse contexts and proposes plausible approaches to navigate context-specific challenges, while still adhering to the process-based approach, which is one of the fundamental principles of the Framework.
- Application of a process-centric approach to CRVS system strengthening has demonstrated its value not only as a one-off assessment of system performance, but rather as part of continuous monitoring and evaluation to inform the iterative improvement of these complex and multi-sectoral systems. As such, Key Performance Indicators (KPIs) have been reviewed and revised. KPIs have been organized under specific strategic outcomes (client- and service provider-centric) to ensure that system improvements are results-oriented from the beginning.
- Integrating specific considerations, activities, and stakeholders required to plan for and implement domestic resource mobilization to support CRVS system improvement throughout the process, to ensure financial sustainability and ultimately full government ownership and funding of the improved CRVS system, including its links with identification systems.

Acknowledgements

Partners

The Framework was prepared by the Economic Commission for Africa (ECA), Economic and Social Commission for Asia and the Pacific (ESCAP), and Vital Strategies. Financial support was provided by the Bloomberg Philanthropies Data for Health Initiative. Contributions of the following organizations are gratefully acknowledged.





Authors and contributors – Version 2.0

Version 2.0 of the Framework was prepared by the Economic Commission for Africa (ECA), Economic and Social Commission for Asia and the Pacific (ESCAP), and Vital Strategies. Financial support was provided by the Bloomberg Philanthropies Data for Health Initiative. Contributions of the following people and organizations are gratefully acknowledged.

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Version 1 of the CRVS Systems Improvement Framework was created under the auspices of the Africa Programme on Accelerated Improvement of Civil Registration and Vital Statistics (APAI-CRVS). It was developed in response to the [2017 Nouakchott Declaration](#), issued during the Fourth Conference of African Ministers Responsible for Civil Registration, which:



Encourages the Economic Commission for Africa, as the secretariat of the APAI-CRVS, to enhance research and development efforts, which foster methodologies that improve the processes pertaining to civil registration and vital statistics among African Union member States (conference outcome #12).

Overall guidance was provided by Oliver Chinganya of the Economic Commission for Africa (ECA). Financial support was provided by the Bloomberg Philanthropies Data for Health Initiative through Vital Strategies and complemented by the Centre of Excellence for CRVS Systems, International Development Research Centre (IDRC), Canada.

To support development of the Framework, APAI-CRVS formed a team of experts made up of Yacob Zewoldi, Gloria Mathenge, Elias Mturi, Raj Gautam Mitra, and Hippolyte Togonou. The team was complemented by two technical experts from Vital Strategies, James Mwanza and Martin Bratschi. The document benefited from the collective knowledge and experiences of the team about CRVS systems globally.

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Glossary

Note that definitions are provided in the context of the CRVS Systems Improvement Framework and may not be generalizable.

As-desired business process	The desired design of business processes or subprocesses with required enabling environment and organizational capabilities.
As-is business process	The current state of a business process.
Assessment, Analysis, and Redesign (AAR) Report	The AAR Report is a key output of Stage 1 and should include a description of the current status of the CRVS system, business process descriptions and maps, and a consolidated and prioritized set of redesign ideas.
Assessment and analysis of CRVS systems	A holistic, standards-based review of the performance of CRVS systems, subsystems, and their associated enabling environment and organizational capabilities against performance standards. This review helps identify key performance issues that need to be addressed to improve the performance of CRVS systems toward their fundamental goal of registering every vital event within a given geographical area (country) and providing a source of vital statistics. The outcome is a report that is used as a key input for formulating the CRVS strategic plan.
Baseline performance	The starting point or current performance used for comparisons.
Business process	A structured set of activities that takes an input and transforms it into an output — a more valuable and effective service or product — for a particular client or clients. In the context of this Framework, the term “business process” refers to a chain of events, activities, and decisions associated with the civil registration of vital events and/or the production of vital statistics.
Business process improvement	An approach designed to help organizations analyze and redesign their existing (as-is) business processes to accomplish significant improvements and implement desired processes.
Business process map	A visualization of a business process that takes into account roles and responsibilities.
Civil registration	The continuous, permanent, compulsory, and universal recording of the occurrence and characteristics of vital events pertaining to the population, as provided through decree or regulation in accordance with the legal requirements in each country.
Civil registration and vital statistics (CRVS) system	All the institutional, legal and technical settings established by government within which civil registration is conducted in a technically sound, coordinated and standardized manner throughout a country, taking into account cultural and social circumstances particular to that country.
Clients	Members of the public who are served by the civil registration system or who seek civil registration services, namely, for registration and certification of vital events.
Core team	The local team responsible for implementation of the Framework, which should include experts and managers from the CRVS and ID systems.
Costing study	A tool used in planning and budgeting, particularly in the development sector. It is a systematic analysis to estimate the total financial resources required to implement a program, policy, intervention, or strategy over a specific period. It is used to inform planning, budgeting, advocacy, and decision-making by providing



	evidence-based estimates of what it will cost to implement a new program, scale up an intervention, or achieve specific goals.
CRVS stakeholders	All entities at all levels that affect or are affected by the CRVS system. There are various types of CRVS stakeholders — government institutions and their staff who have the functional responsibility to implement aspects of the CRVS systems; government institutions and their staff who need the services of the CRVS system as input to their own operations (e.g., providers of government services that need to know about the occurrence of a birth or death to start providing or discontinue their services); development partners and other institutions that provide technical and financial assistance for CRVS systems; individuals and families (clients) who experience the vital events and require their registration and certification; and individuals who are required to report on events within their communities (informants).
CRVS strategic and action plan	A document used to communicate the vision, mission, strategic goals, and strategic outcomes of the CRVS system, and the actions needed to achieve these. Specifically, the action plan lists steps that should be taken to and resources required to achieve the intended vision, mission, goals, and objectives of the CRVS system.
CRVS system analysis and redesign (CRVS-SAR) tool	A tool designed to support countries in systematically collating and analyzing the performance of the CRVS system against a list of agreed-upon client- and service provider-centric key performance indicators. These indicators are also used to monitor system improvements following the redesign.
Desired target	The desired level of performance for a specific action, decision, or process as defined by the performance objectives, vision, mission, legislation, policies, or organizational culture.
Domestic resource mobilization (DRM) strategy	A comprehensive plan by a country to increase and effectively manage its own (primarily financial) resources generated within the country to fund national development priorities, reduce dependency on external aid, and support sustainable economic growth. A DRM strategy can be developed to fund a particular sector or sub-sector, costed implementation plan or strategy, or program/initiative. Key elements can include tax policy and administration reform, non-tax revenue optimization, strengthening public finance management, local government financing, and private sector engagement.
Enabling environment	See “Organizational capabilities and enabling environment”.
Fiscal space analysis	<p>An assessment of the budgetary room a government has to increase spending for a specific purpose without jeopardizing fiscal sustainability or economic stability. It helps decision-makers estimate how much they can spend on new initiatives or in a particular sector without endangering future fiscal and economic health, considering both the government's financial capacities and broader macroeconomic risks.</p> <p>An analysis for a sector or initiative focuses on how much additional funding can feasibly be mobilized for that sector/initiative through increased revenue, strategic reallocation of existing resources, earmarking new revenue, borrowing, or efficiency gains (through improved budget execution) within the boundaries of the country's macro-fiscal health.</p>
Funding gap analysis	A tool used in planning and budgeting, particularly in the development sector. It is a financial assessment that compares the total estimated cost of implementing a program, policy, intervention, or strategy with the available or committed financial



	resources, to identify the shortfall (funding gap) that must be filled to achieve the desired objectives.
Gender	A social construct, not limited to the binary; based on expectations and characteristics set forth by society on appropriate behaviour, norms, and established roles.
Key performance indicator (KPI)	A key measure that enables evaluation of performance in terms of progress toward a specific defined objective. Performance indicators and targets (see “Desired target”) are mechanisms to operationalize objectives.
Identification (ID) system	The databases, processes, technology, infrastructure, credentials and legal frameworks associated with the capture, management, and use of personal identity data for a general or specific purpose.
Indicator	A measurable value or metric that provides information about the performance of a project or program, helping to track progress and assess the effectiveness of interventions. Indicators provide evidence of change and are a key component in most monitoring and evaluation frameworks.
Interoperability	The ability of different functional units – e.g., systems, databases, devices, or applications – to communicate, execute programs, or transfer data in a manner than requires the user to have little or no knowledge of those functional units.
Legal identity	Legal identity is defined as the basic characteristics of an individual’s identity, e.g., name, sex, place and date of birth, conferred through registration and the issuance of a certificate by an authorized civil registration authority following the occurrence of birth. In the absence of birth registration, legal identity may be conferred by a legally-recognized identification authority.
Milestone	In monitoring and evaluation, a milestone represents a significant point or event in a project’s timeline that marks a key achievement or stage of progress, serving as a reference point for measuring progress and ensuring the project stays on track.
National identification (ID) system	A foundational identification system that provides national IDs (NIDs)—often a card—and potentially other credentials. In many countries, a primary function of national ID systems has been to establish and provide recognition and proof of nationality and/or residency status.
Once-only principle	The once-only principle (OOP) ensures that individuals and businesses provide data to public administration only once, while public bodies exchange this data when requested and in compliance with the relevant regulations.
Organizational capabilities and enabling environment	The policies, laws, and regulations; financial resources; management and coordination; human resources; physical infrastructure; and information technologies to support a country’s CRVS functions and processes to achieve the desired performance.
Performance issue	A failure to meet the desired target (see above). Performance issues are based on reasonable expectations of the results of a particular action, decision, or process as defined by the performance objectives, vision, mission, legislation, policies, or organizational culture.
Policy, legal, and regulatory frameworks	A set of constitutional, legislative, regulatory, jurisprudential, and managerial rules that together establish the CRVS system and thereby the rights of individuals to have their vital events registered and that guide how systems should operate to align with defined goals and objectives.



Process actors	All individuals or organizations that perform a specific activity in the CRVS process, or that interact with CRVS processes.
Process-centric approach	A holistic approach to assess the adequacy, efficacy, and appropriateness of business processes as part of overall system assessment.
Process flow	A description of key steps of a particular process from beginning to end.
Process input	A set of requirements and/or actions that trigger the onset of a particular process.
Process output	The result that a particular process is designed to achieve.
Process owner	The individual or entity responsible for managing and overseeing the objectives and performance of a process.
Process purpose	The goal that a particular process is designed to achieve.
Redesign of CRVS systems	Making changes to the structure and functions of the CRVS system or processes with the goal of improving their performance so that they serve their intended purpose in a better way. See also “Redesign proposals”.
Redesign proposals	Suggestions for making changes to the structure and functions of a system or process to better serve the purpose of the original design, or to serve purposes different from those set forth in the original design.
Registration completeness	The proportion of vital events that have been registered compared to the expected number of events within a specified period.
Resource mobilization strategy	A coordinated plan that enables various actors (government, development partners, civil society, etc.) to jointly secure, pool, and manage resources—financial, technical, and human—to achieve shared goals efficiently and sustainably.
Results-orientated	Organizing CRVS system improvement efforts in accordance with specific strategic outcomes (client- and service provider-centric) to ensure clear goals for the improvement process and enable the structured organisation of the performance assessment.
Return on investment (ROI) study	A method used to evaluate the economic value or benefit of a government investment compared to its cost. It is drafted in the language of finance ministries and serves as an authoritative basis for budget requests. An ROI is a way of answering the question: Will this investment be worth it? by quantifying expected results in monetary terms. It looks at the total estimated costs of the program or project, including direct and indirect costs, the measurable returns from the investment (typically in terms of savings, increased efficiency, productivity, or revenue), and the period over which the costs and benefits are measured.
Root cause	The initiating cause of a condition or causal chain that leads to an outcome of interest. It is the earliest, most basic, or deepest cause for a given behaviour.
Systems thinking	A holistic approach to analysis that focuses on the way a system’s constituent parts interrelate, and how systems work over time and within the context of larger systems. According to systems thinking, system behaviour results from the effects of reinforcing and balancing processes.
Task teams (TT)	A small group of people that brings together – into thematic groups – a specific set of skills to accomplish a short-term task. In this context, task teams are thematic groups of six to eight technical staff drawn from various CRVS stakeholder ministries or agencies that are charged with the responsibility of undertaking the field survey and associated tasks.



Timeliness	Timeliness in civil registration means that a vital event has been reported for registration within the legally stipulated time allowance. In register-based vital statistics, it means that for every timely registered event, a statistical report form has been forwarded to the agency responsible for vital statistics within the fixed time schedule established by the vital statistics program. It also implies that the production, publication, and dissemination of the vital statistics have been carried out promptly enough to ensure that users' needs are served.
Trigger event	An action that must occur to initiate a process.
Vital statistics	Vital statistics constitute the collection of statistics on vital events in a lifetime of a person as well as relevant characteristics of the events themselves and of the person or persons concerned. Vital statistics provide crucial and critical information on the population in a country. Vital statistics are usually shared in the form of annual reports but can also be analysed and shared more frequently in the form of tabulations, and in some instances, as deidentified unit-record data.



Concepts and definitions

Civil registration

This section has been adapted from the [Principles and Recommendations for a Vital Statistics System](#) (2).

Civil registration is defined as:

the continuous, permanent, compulsory, and universal recording of the occurrence and characteristics of vital events pertaining to the population, as provided through decree or regulation in accordance with the legal requirements in each country (para. 279).

The term “civil registration method” refers to the procedures employed in gathering the basic information on the incidence and characteristics of vital events, which occur in the population of a country (or area) within a specified period, upon which the preparation of vital event records with legal value and the production of vital statistics are based. A civil registration system then, is defined as:

...all the institutional, legal and technical settings established by government within which civil registration is conducted in a technically sound, coordinated and standardized manner throughout a country, taking into account cultural and social circumstances particular to that country (para. 284).

As stated by the United Nations:

Experience has shown civil registration to be the only reliable method for obtaining a continuous and current record of events occurring throughout a period (para. 281).

Vital statistics

This section has been adapted from the [Principles and Recommendations for a Vital Statistics System](#) (2).

Vital statistics constitute the collection of statistics on vital events in a lifetime of a person as well as relevant characteristics of the events themselves and of the person and persons concerned. Vital statistics provide crucial and critical information on the population in a country. For statistical purposes, vital events are events concerning life and death of individuals, as well as their family and civil status. Vital events proper concern life and death and include live births, deaths and foetal deaths (para. 1–2).

Vital statistics and their subsequent analysis and interpretation are essential for setting targets and evaluating social and economic plans, including monitoring health programmes, and for the measurement of important demographic indicators of levels of living or quality of life, such as life expectancy and the infant mortality rate.

While there are various sources of vital statistics, including household surveys and the population census, the preferred source is through:

... a civil registration system, as this is the ideal source from which to derive accurate, complete, timely and continuous information on vital events (para. 6).



In the context of defining a system as a set of interacting components forming an integrated whole, the components of a vital statistics system are: (a) civil registration; (b) statistical reporting of; and (c) collection, compilation and dissemination of statistics pertaining to vital events.

Identity management

This section has been adapted from [Guidelines on the legislative framework for civil registration, vital statistics and identity management systems](#) (3).

The civil registration system is the foundation for the identity management system. An individual's legal identity is established through birth registration, which provides evidence of their identity in the form of a birth certificate. The United Nations Legal Identity Expert Group, established in 2015, adopted a working definition of legal identity as follows:

'legal identity' is defined as the basic characteristics of an individual's identity, for example, name, sex, place and date of birth conferred through registration and the issuance of a certificate by an authorized civil registration authority following the occurrence of birth. In the absence of birth registration, legal identity may be conferred by a legally recognized identification authority; this system should be linked to the civil registration system to ensure a holistic approach to legal identity from birth to death. Legal identity is retired by the issuance of a death certificate by the civil registration authority upon registration of death (para. 18).

A birth certificate is used as the foundation document for all other identification credentials subsequently issued by a national identity management authority. A "credential" is a document, object, or data structure that vouches for the identity of a person through some method of trust and authentication (4).

While there is a lack of an internationally agreed definition of "identity management", the term most commonly refers to the registration of all individuals' resident in a particular territory by an agency or body of the public sector, and the issuance of legally valid proof of identity to each individual. It includes maintaining systems for managing information and documents associated with a person's identity, which may include biometrics. The identity life cycle generally has four stages (4):

1. registration, including enrolment and validation,
2. issuance of identity credentials,
3. authentication for service delivery or transactions, and
4. identity management, which entails updating identity attributes in the system, including invalidating or reissuing an identity credential due to fraud or security reasons, or retiring an identity credential after an individual's death.

In some countries, information collected through the civil registration and identification systems are submitted to and stored in a population register. Population registers are repositories of up-to-date information on the basic characteristics of all residents in a country, which has the potential to provide data on a population and its characteristics on a continuous basis at all administrative levels (5). The population register is the product of a continuous process in which notifications of certain events, which may have been recorded originally in different administrative systems, are automatically linked to it. The population register may also contain information pertaining to persons who are not usual residents of the country (e.g., citizens residing abroad), although the selected information regarding the non-resident population may be more limited than for the resident population.



In many other countries, functional identity databases (such as for social security, electoral rolls, or driver licenses) function as a form of *de facto* population register.

Civil registration, vital statistics and identity management systems

This section has been adapted from [Guidelines on the legislative framework for civil registration, vital statistics and identity management systems](#) (3).

To effectively fulfil its legal, statistical and identity management functions, civil registration must be compulsory, universal, continuous and permanent. In addition, because people provide a wide variety of information to the civil registration system, including information that may be highly sensitive, the information collected and stored in the civil registration system must be kept secure and confidential. Sharing of this information, while expected, should be only by consent or in accordance with law.

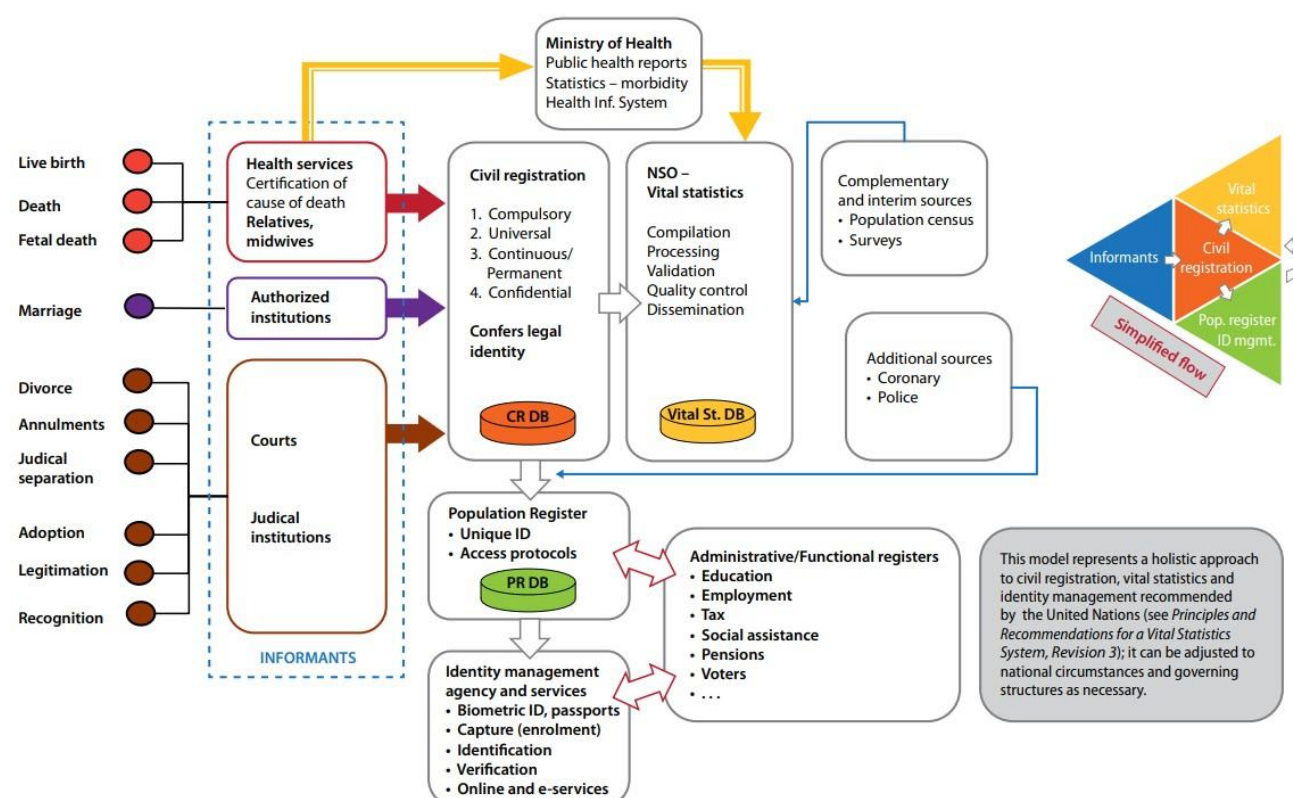
The principles of continuity, permanence and universality should also apply to national identity registration. The principle of compulsoriness, however, need not always apply, as identity registration for purposes of a national identity card (or other credential) or entry into a population register are not compulsory in many countries. As with the civil registration system, the identity management system stores personal information that must be kept secure and confidential.

While the civil registration system provides for legal registration and certification of vital events, many systems are not designed to securely link identity information in a register with a specific person. For example, when adults present a birth certificate it is difficult to know with a high level of assurance whether the document is truly theirs without the benefit of additional information. The addition of some form of biometric information, such as a facial image, fingerprints, or other information unique to the identity holder, when linked with civil registration information, is one way to increase the level of assurance. That identity information can be recorded on a secure medium that can then be used for identification purposes; to verify that the person claiming a certain identity is indeed that person. An increasing number of countries that update the population register in real-time with birth registrations are appending the national identity number from the population register to the birth registration record. This securely links the identity information in the birth register to the newborn.

Most civil registration, vital statistics and identification systems have numerous stakeholders, with information collected in, stored across, and transferred between multiple registries maintained by different agencies. The efficient functioning of each system depends on the effective cooperation of these stakeholder agencies to ensure the registries are interoperable, in the sense that they can communicate with one another and exchange information systematically. This holistic approach to civil registration, vital statistics and identity management systems is shown in **Figure 1**.



Figure 1 Civil registration, vital statistics and identity management systems



Key: CR DB – Civil registration database; Vital St. DB – Vital statistics database; PR DB – Population register database

Source: United Nations Statistics Division. Guidelines on the legislative framework for civil registration, vital statistics and identity management systems. New York: UNSD, Department of Economic and Social Affairs, Statistics Division; 2023 (https://unstats.un.org/unsd/demographic-social/Standards-and-Methods/files/Handbooks/crvs/CRVS_GOLF_Final-E.pdf).

Strengthening civil registration for the purpose of identity management

Managing identity systems is critically important for efficient and inclusive public and private sector service delivery, and can facilitate the exercise of social, economic, and political rights. The identity management system needs to perform several critical roles. For recipients of services, the system needs to enable them to accurately prove who they are and confirm their unique identity (e.g., through a unique identification number and/or biometrics). For service providers, the identity management system must have up-to-date information about the population and enable service providers to authenticate the unique identities of their clients.

While such an identity management system has the potential to increase the efficiency of the delivery of government and private sector services, it is important for governments to ensure that a lack of identity credentials does not become a barrier to accessing rights-based services – especially for populations and groups in vulnerable situations and those at risk of marginalization, who disproportionately experience legal, financial, and cultural barriers in obtaining identification. It is for these reasons, and others, that systems managing identities must be designed to ensure data privacy, and measures must be in-place to prevent misuse, while ensuring everyone is counted.

In-line with the guidance from the [United Nations Legal Identity Agenda \(UN LIA\)](#), the civil registration system should link to the population register for the purpose of legal identity management. Such



interconnectivity will support the continuous in-flow (based on legal identities established at birth registration) and out-flow (based on death registration) of identities to the population register and for the purpose of legal identity management. This interconnectivity will reinforce the complementarity between the different functions of the systems.

In addition, the specific added value of anchoring identification systems to civil registration systems for the in- and out-flow of identities includes:

- Only the civil registration system is tasked with the permanent and continuous legal recording of all vital events, thereby enabling a constant flow of up-to-date information about births, deaths, and other vital events to update the identification system and contribute to its inclusivity and sustainability.
- By collecting data (e.g., date of birth) close to the source, from trusted agents (e.g., health staff), and shortly after the occurrence of the vital event, the civil registration system is uniquely positioned to provide accurate and verified information to the identification system.
- Data on deaths from the civil registration system can enhance trust in the identification system by enabling the timely retirement of identities, preventing fraudulent use of those belonging to deceased individuals.
- By applying approaches such as the “once-only principle”,¹ civil registration can improve the efficiency of the identification system and avoid duplicative efforts. The once-only principle reduces the administrative burden on clients, particularly women and marginalized individuals, who often bear the brunt of bureaucratic inefficiencies, especially in contexts where travel or literacy is a barrier.
- Cost savings, as it reduces the need for new data systems as well as administrative costs by minimizing repeated data collection, verification, and enrolment procedures. Cost savings also result from streamlined service delivery, as public service agencies can use the integrated data, reducing the time and effort spent on verifying eligibility.

¹ The once-only principle (OOP) ensures that individuals and businesses provide data to public administration only once, while public bodies exchange this data when requested and in compliance with the relevant regulations. See: https://ec.europa.eu/isa2/isa2conf18/once-only-principle-project-toop_en/



Understanding the Framework

Intended audience

The Framework is intended to be used by staff working in civil registration, vital statistics and identity management – including government ministries, departments and agencies, and development partners and other stakeholders involved in CRVS/ID system implementation. This should include senior CRVS management and technical staff responsible for CRVS system implementation, performance, and improvement. The Framework should also be used by managers of identification systems, to help design interconnected business processes and ensure the “ID readiness” of CRVS systems.

While the institutions responsible for civil registration, vital statistics and identity management vary, in many countries, this generally includes the Ministry of Home Affairs, Ministry of Interior, Ministry of Justice, Agency for Identification, Ministry of Health, Ministry of Planning, National Statistics Office, and, in some cases, the Ministry of Local Government.

Ensuring gender responsiveness

Ministries or departments responsible for gender equality, women’s empowerment, and/or social protection should be engaged in the CRVS improvement process to ensure that policies and practices promote equitable access and do not unintentionally reinforce gender disparities. In addition, users of the Framework should encourage multidisciplinary collaboration that includes experts in gender data, gender-based barriers to registration, and inclusive public service design.

Conceptual framework

The CRVS Systems Improvement Framework introduces a process-centric and results-oriented approach to improve the performance of the civil registration and vital statistics system, and its connection with the national identification system. The Framework is based on six core principles:

1. **Country leadership and ownership.** The process is led and owned by the country, according to national priorities, which includes the government’s commitment of domestic co-financing to implement the Framework and an understanding from the outset that the government will eventually take over funding of the improved system to ensure its sustainability.
2. **Well-coordinated and consultative.** The implementation process involves all key stakeholders at multiple points. The Framework recognises that identity systems in many contexts involve multiple authorities and paradigms operating simultaneously, including traditional leadership structures, religious institutions, and customary practices alongside formal government systems. Rather than treating these as competing or secondary systems, the Framework acknowledges them as legitimate components of the broader identity ecosystem that must be understood and potentially integrated where communities desire such integration.
3. **Internationally aligned.** Improvement activities are grounded in global standards, promoting dissemination of emerging best practices and principles.
4. **Proactive.** The Framework supports the transition away from passive approaches towards proactive CRVS systems. Proactive CRVS systems are those that aim to make registration automatic, accessible and inclusive – reducing the burden on individuals.



5. **Inclusive.** The Framework promotes inclusive and universal civil registration systems that ensure every individual's right to legal identity and recognition is upheld. Suggested client-centric outcomes and their accompanying key performance indicators reflect this by focusing on the experiences of all clients – including groups at risk of marginalization and individuals in vulnerable situations.
6. **Interoperable.** The Framework encourages interoperability with key data management systems, including population registers, and health information and identification systems. For countries without formal identification systems, this interoperability should extend to *de facto* national identity management systems, such as social security databases.

Ensuring inclusivity

To ensure gender equity in CRVS system-strengthening efforts, gender considerations must be integrated into assessment, analysis, redesign, and performance monitoring. This includes disaggregating data, identifying gender-based barriers, and ensuring inclusive stakeholder engagement and design.

Beyond gender, when assessing business processes and performance, analyze how existing CRVS workflows may impact women, girls, gender-diverse populations, and other populations at risk of being left behind differently (e.g., through barriers to birth, marriage, or death registration for single mothers, survivors of gender-based violence, transgender individuals, indigenous populations, people with disabilities, or refugees, among others).

Use disaggregated data and analysis frameworks to identify performance gaps and root causes that disproportionately affect marginalized and vulnerable groups. Support this approach by developing key performance indicators that monitor gender equity outcomes, such as:

- Proportion of births registered where mother is the sole informant
- Gender or ethnic disparities in access to registration certificates
- Timeliness of registration disaggregated by various characteristics of the registrant/subject.

Ensure the data needed for these indicators are being collected and can be disaggregated by sex and other relevant variables.

Process-centric

The Framework is intended to help stakeholders assess, analyze, and redesign existing business processes to improve CRVS system performance and enable interoperability with other core systems. A holistic focus on processes ensures that all stakeholders involved in implementation are engaged in the process improvement effort. This is referred to as a process-centric approach.

The chain of events, activities and decisions across CRVS systems represent the system's business processes. A business process is defined as:

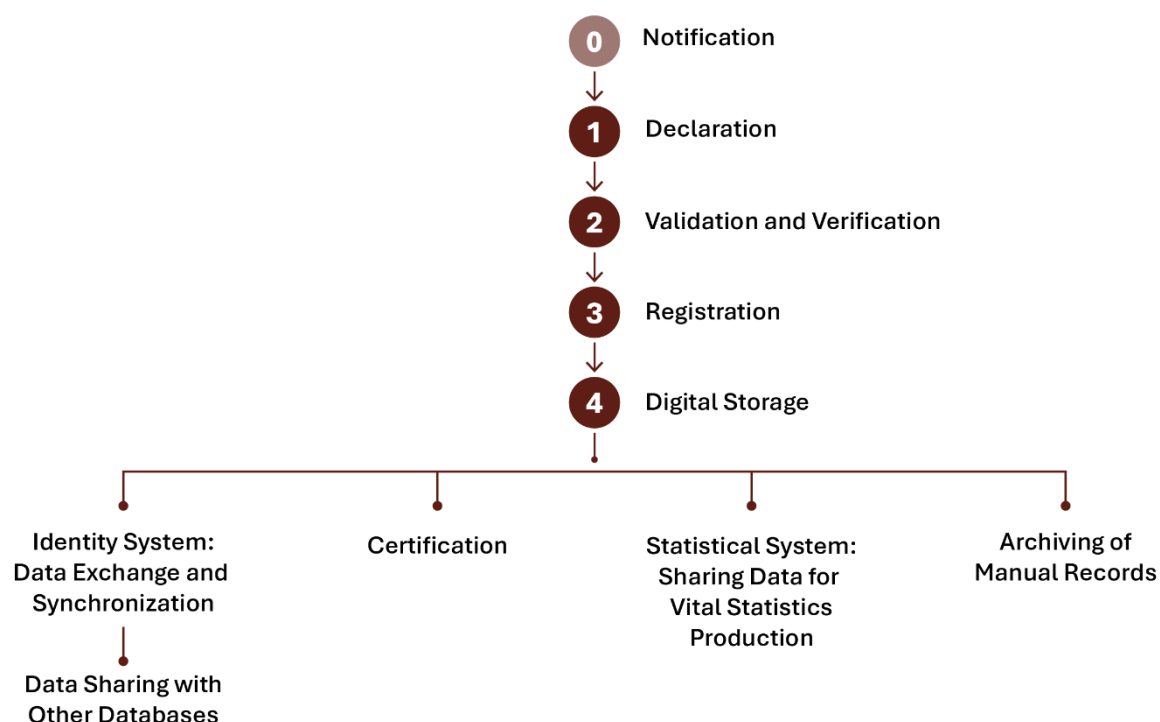
the set of activities and tasks that logically group together to accomplish a goal or produce something of value for the benefit of the organisation, stakeholder or customer (6).

Examples of business processes in CRVS and identification systems include the notification, declaration, verification, registration and certification of vital events, the flow of registration data into the vital statistics system for production of vital statistics, and flow of data between civil registration



and identification systems for the creation, maintenance and retirement of legal identities (see **Figure 2**). These steps are often represented as sub-processes within the overall process. The timely registration and certification process for a birth event, for example, includes a chain of events, several activities, various decisions, and multiple actors – all leading to the output of the birth being registered and a certificate being issued. Improving CRVS systems, therefore, requires not only redesigning the overall process but also streamlining these sub-processes to ensure timely and high-quality registration.

Figure 2 Key steps and flow of the civil registration of births and deaths



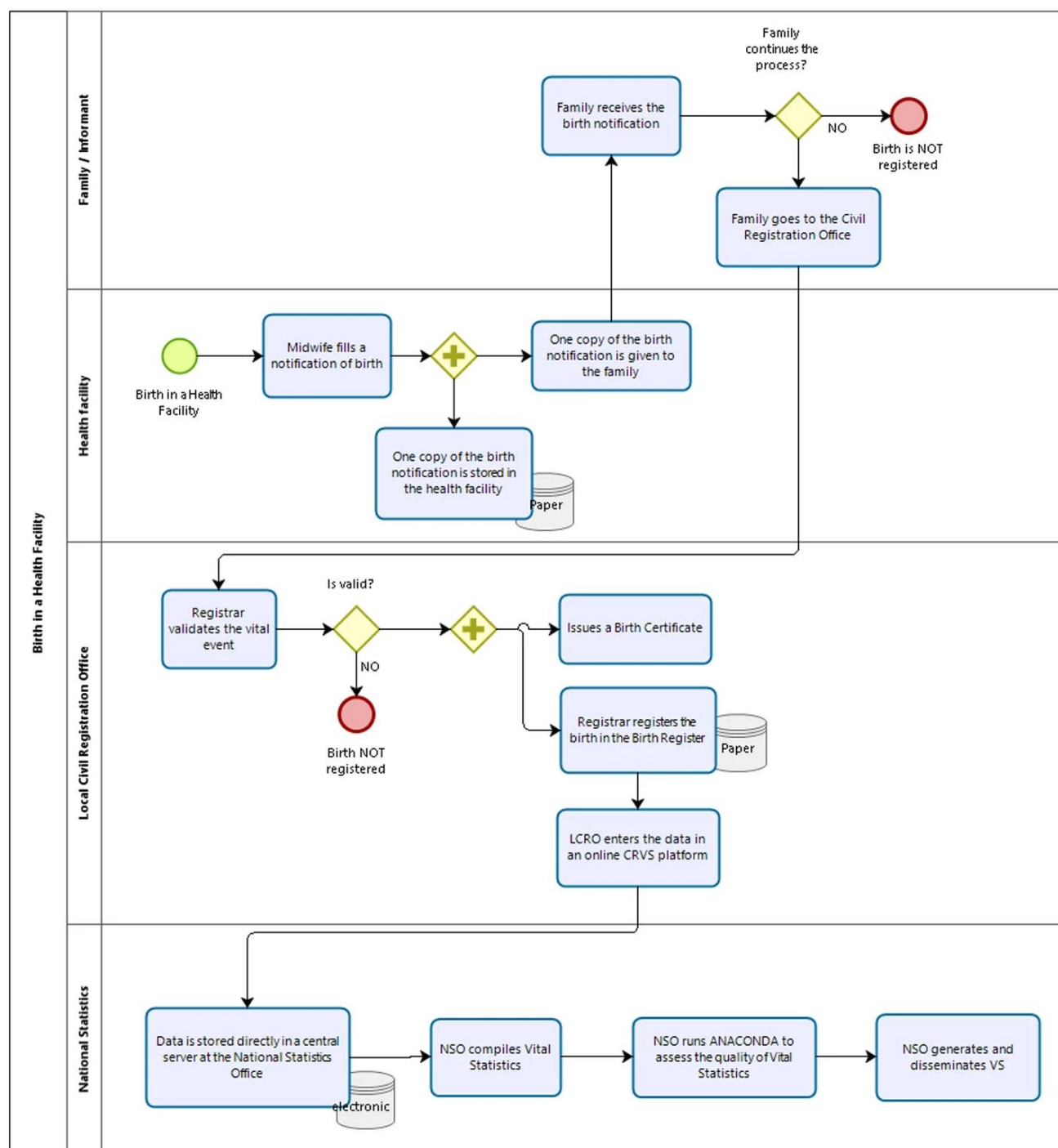
Source: “Overall process of civil registration”. eLearning course on civil registration and vital statistics (CRVS) systems. World Bank Group Open Learning Campus; 2025 (<https://www.worldbank.org/en/olc/course/34651>).

The performance of any business or organization (such as a civil registration office) depends on how well its business processes are designed and executed (7). The approach of assessing, analysing, and redesigning business processes to accomplish significant performance improvement is known as business process improvement (BPI). One of the objectives of BPI for CRVS systems is to develop business processes that are more proactive, thereby helping to ensure all events are registered in a timely manner, certificates are promptly issued, data are available for exchange with other systems, and vital statistics are compiled to inform policy and decision-making.

A key aspect of any BPI activity is business process mapping (BPM). Process mapping provides a visualisation of the activities and flow of data from start (occurrence of a vital event) to finish (registration and certification of the event, publication of vital statistics, creation of legal identity, etc.) whilst identifying process gaps and bottlenecks, allowing stakeholders to work collaboratively to find solutions and target interventions – the next step in effective process management (6). Stakeholders can start by developing “as-is” business process maps, showing current operations in the system, followed by “as-desired” maps to achieve a shared vision and goal for improvement. As process maps

show how data flows from start to finish, they can identify points in the process where data are lost or not being shared with the appropriate stakeholders (see **Figure 3**).

Figure 3. Simplified as-is business process map for the registration and certification of a birth occurring in a health facility, Rwanda, 2016



Source: Cobos Muñoz D, de Savigny D, Sorchik R, et al. Better data for better outcomes: the importance of process mapping and management in CRVS systems. BMC Med 2020; 18(67) (<https://doi.org/10.1186/s12916-020-01522-z>).



Additional resources

Annex 1. Example as-is process map for the registration and certification of a birth occurring at home (levels 1–3)

[ISO/IEC 19510:2013 Information technology – object management group business process model and notation](#). This standard creates a standardized bridge for the gap between the business process design and process implementation. It represents the amalgamation of best practices within the business modelling community to define the notation and semantics of business process diagrams.

Ensuring gender responsiveness

Gender-responsive BPI identifies where current processes contribute to gender disparities in registration and work to eliminate those barriers – for example, by training staff on gender sensitivity, ensuring services are accessible to women and gender-diverse individuals, and collecting sex- and gender-disaggregated data at each stage of the process.

Gender analysis should be integrated into both "as-is" and "as-desired" process maps to identify where women and marginalized gender groups may be disproportionately affected by process gaps – such as lack of documentation, lack of outreach to mothers giving birth at home, or underreporting of maternal deaths.

Results-oriented

Key performance indicators (KPIs) are used to evaluate the system's status, identify bottlenecks and generate redesign ideas. Strategic outcomes are identified at the onset of improvement efforts to define the results that the improvement aims to achieve.

The CRVS Systems Improvement Framework is results-oriented by design, ensuring that the improvement process is guided by clear and measurable outcomes. The improvement cycle begins with a comprehensive assessment and analysis of the status of the CRVS system, including its interconnectivity with the national identification system (if one exists), framed against the desired results the CRVS system should aspire to achieve during its improvement journey. This establishes a structured understanding of where the system stands and what success looks like.

Based on country experiences in implementing Version 1 of the Framework, 11 CRVS Strategic Outcomes (see **Table 1**) have been developed to help guide the system improvement journey. Countries are encouraged to adapt and prioritize outcomes based on context. For example, if a country has already achieved full interoperability between its civil registration and identification systems, it may choose to exclude Strategic Outcome 7 from its focus. Other countries may wish to add additional strategic outcomes that are not listed below.

Each outcome is measurable through a set of suggested Key Performance Indicators (KPIs) that define success and help track progress. Baseline information for each outcome should be established at the outset, along with clear targets to be achieved by the end of the improvement cycle. Performance gaps, including pain points and bottlenecks, should be identified for each KPI, and redesign ideas proposed to address them. The Strategic and Action Plan is built around this same results hierarchy, using the same set of KPIs to measure progress as part of Monitoring and Evaluation (M&E).



The Framework's long-term value lies in its use as part of an iterative and sustainable cycle of continuous CRVS system improvements. It must be recognized that implementation of the Framework is part of a continuous improvement cycle, and not just a milestone along the way.

Table 1. The “11 CRVS System Strategic Outcomes”

Client-centric	Service provider-centric
<ol style="list-style-type: none"> 1. Increased access to inclusive, proactive civil registration services 2. Simplified registration processes and procedures 3. No direct cost for civil registration 4. Improved quality of civil registration services and products 5. Increased public awareness about the need for civil registration and knowledge of relevant procedures 	<ol style="list-style-type: none"> 6. Effective governance and coordination mechanisms established 7. Connection with the population register and/or ID system established 8. Efficient monitoring and evaluation system established 9. Adequate domestic financing to ensure the sustainability of the CRVS system, and future improvements 10. Timely and quality vital statistics based on civil registration data are produced and disseminated 11. Timely and quality statistics on causes of death based on data from the civil registration system are produced and disseminated

Additional resources

Annex 2. The 11 CRVS System Strategic Outcomes

Ensuring gender responsiveness

Countries are encouraged to adapt or add strategic outcomes that specifically address gender equality – such as reducing gender disparities in registration rates, improving women's access to registration services, or enhancing gender data quality in vital statistics. Where possible, KPIs should include gender-sensitive indicators – for example, tracking registration completeness and time-to-registration by sex (and gender, where collected), or identifying whether women and men have equal awareness of, and access to, CRVS services.

In the early visioning phase, embed commitments to sex-disaggregated data collection and analysis and to capturing gender-relevant indicators (e.g., marital status, parental information, and cause of death data linked to maternal mortality and gender-based-violence-related deaths, where applicable).

M&E systems should integrate gender analysis and ensure that sex-disaggregated results are routinely collected, reported, and used to inform decision-making. Stakeholders should be trained to interpret and act on gender-related findings.

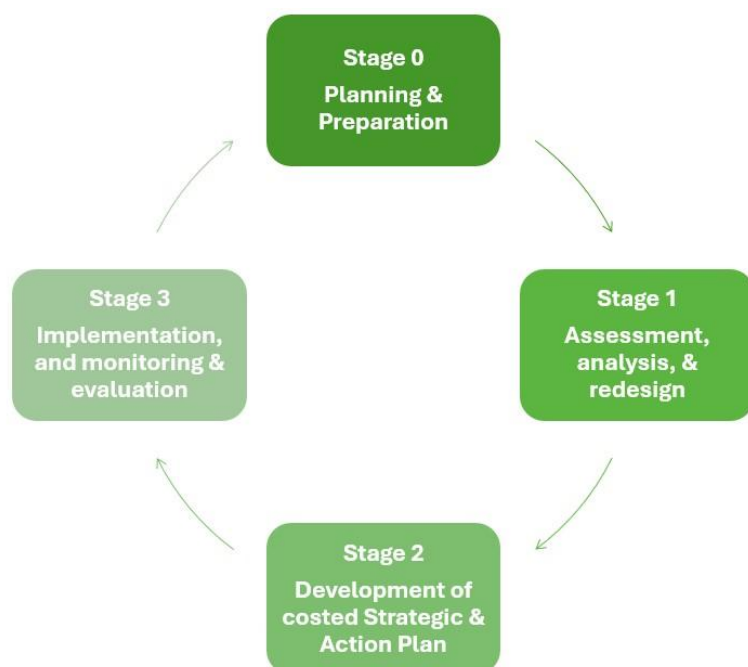


Stages

The Framework is made up of a planning preparation stage and three main implementation stages (see **Figure 4**), each with their own set of objectives, activities, and expected outputs:

- **Stage 0: Planning and preparation.** Ensures the preconditions for success are in place before implementing the Framework. Nine core activities are proposed, which range from establishing a core team to lead implementation, through to developing the implementation roadmap and planning for resource mobilization. At the end of this stage, the core team should have all the requisite knowledge and resources to successfully implement the Framework.
- **Stage 1: Assessment, analysis, and redesign.** Identifies issues affecting the performance of business processes and the root causes of these issues and recommends redesign ideas. A key output of this stage is the Assessment, Analysis and Redesign (AAR) Report, which includes process descriptions and maps, and the vision and goals for the CRVS system.
- **Stage 2: Development of the costed Strategic and Action Plan.** Develops practical strategies and an action plan to improve the CRVS system and ensure interconnectedness with the identification system, based on findings from the AAR Report. At the end of this stage, the country team should have produced a costed national CRVS Strategic and Action Plan.
- **Stage 3: Implementation, and monitoring and evaluation.** Refers to activities as part of implementing the strategic and action plan, including change management. During this stage, process improvements will begin, organizational capabilities will be enhanced, and the enabling environment will be strengthened. The development and operationalization of a Monitoring and Evaluation (M&E) Plan is an expected output.

Figure 4 The CRVS Systems Improvement Framework's four stages



The stages are interconnected and iterative. For example, the findings and recommendations from Stage 1 will form the basis for the development of the strategic and action plan. Subsequently, the plan will require implementation (Stage 2), and a results framework should be established to measure



progress through a monitoring and evaluation framework. Key performance indicators developed and measured in Stage 1 should be used across the other stages of the Framework for continuous monitoring and for evaluation as part of Stage 3.

Additional resources

Annex 3. Objectives, main activities and deliverables: Stages 0–3

Applying the Framework

The Framework can be customized to meet each country's needs and applied differently each time it is used. For example, it may be that only the business process for births occurring in health facilities needs to be redesigned to allow for the use of a new health information management system. Conversely, if the country is in the process of implementing a national identification system, it is likely that all business processes in the CRVS system will need to be assessed and redesigned to ensure interoperability and the establishment of identities upon birth registration and retirement of identities upon death registration.

The Framework can be used to validate improvement processes that have already been included in an existing CRVS strategic and action plan and make modifications where required. There may be several other interventions underway or in the early stages of planning at the time when the government decides to implement the Framework. However, three of the most important interventions that have a bearing on CRVS business processes include those related to:

1. Reviewing and revising (or developing) the legislative framework for the CRVS system. This presents an opportunity to identify and remove discriminatory laws (for example, laws that restrict unmarried mothers or women from registering births independently, or laws that effectively make registration impossible for undocumented migrants).
2. Implementing (or significantly changing) the level of digitalization within the CRVS system. Digital divides must be considered, including if women and girls, and marginalized communities have access to and control over digital tools and platforms.
3. Implementing (or significantly changing) a national identity management system. The design of identity systems should ensure universal access, especially for groups at risk of marginalization or those in situations of vulnerability, who may lack foundational identity documents due to social or legal constraints or face other barriers in establishing their identity.

These considerations, along with resource mobilization efforts and levels of domestic co-financing, will drive the scale and scope of process improvement and enhancement of the enabling environment and organizational capabilities for implementation of the new process. The approaches shown in **Table 2** are recommended for applying the Framework, depending on the country's status of implementing CRVS improvements and establishing connections to identification systems. As the Framework adds value to all stages of the CRVS system improvement cycle, its application is expected to be an ongoing effort.



Table 2 Guidance on applying the Framework

Country status	Guidance
Countries that have not undertaken any recent CRVS assessments, or who have implemented significant changes since the last assessment	Full application Stages 0–2 of the Framework will provide full scope of the analysis, assessment, and redesign to develop a strategic and action plan for CRVS system improvement. Stage 3 will provide further guidance on implementing the activities including measurement of progress made.
Countries that are yet to implement (or are in the very early planning stage of) major CRVS interventions, including those related to the legal framework, digitization, and/or identity management	Full application Stages 0–2 of the Framework will provide full scope of the analysis, assessment, and redesign to develop a strategic and action plan for CRVS system improvement, including any critical changes to the legal framework, impact of digitization on business processes, and interoperability with the identification system. Stage 3 will provide further guidance on implementing the activities including measurement of progress made.
Countries that have recently completed an assessment of their CRVS system	Limited application Findings from the assessment can be used to inform the process-centric assessment of CRVS business processes in the Framework.
Countries that are in the final stages of implementing major CRVS interventions, including those related to the legal framework, digitization, and/or national identity management OR Countries that wish to focus on one set of business processes for improvement	Limited application Applying Stage 1 to selected business processes will help countries identify measures to optimize those processes and improve their performance. When optimizing selected business processes of the overall system, countries should consider implications for other processes. As the selected processes get implemented, Stage 3 will provide further guidance on implementation and to monitor and evaluate performance.
Countries that have an active strategic and action plan	Varied application Countries can apply any of the stages, depending on the current state of the country's improvement efforts. For example: <ul style="list-style-type: none"> • A country that is at the midpoint of the implementation could apply all stages of the Framework and revise the strategic and action plan as needed. If a mid-term assessment is planned, the Framework could be incorporated as part of the assessment. • Countries in the late or final stages of implementing the national CRVS strategic and action plan could implement all stages of the Framework to plan for future improvement activities. Learnings from implementing the strategic and action plan will be valuable inputs to Stage 2 of the Framework. • Countries looking to evaluate the progress of implementing their strategic plan could apply core concepts and good-practice principles of monitoring and evaluation, as outlined in Stage 3.



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Annexes

- Annex 1. Example as-is process map for the registration and certification of a birth occurring at home (levels 1–3)
- Annex 2. The 11 CRVS System Strategic Outcomes
- Annex 3. Objectives, main activities and deliverables: Stages 0–3

