Streamlining CRVS Systems and Vital Statistics Production through Business Process Improvement

Using a process-centric approach for improving civil registration and vital statistics system and producing vital statistics based on civil registration data

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Data for Heath Initiative

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7th Asian and Pacific Population Conference

Side Event: Getting everyone in the picture: investing in children

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Presentation overview:

1. Overview of the CRVS Systems Improvement Framework

2. Vital Statistics based on civil registration data

3. Technical Guidance for Strengthening the Vital Statistics Production Process

Civil Registration & Vital Statistics Program

Overview of the CRVS Systems Improvement Framework

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The CRVS Systems Improvement Framework: A process centric approach

- Provides guidance to countries to continually improve the performance of the CRVS system
- Adopts a process-centric approach
- Is results driven and rights-based
- Enables a multi-sectoral, participatory, and country led and owned approach to CRVS system strengthening
- Customizable to country needs

Download the CRVS Systems Improvement Framework
https://www.vitalstrategies.org/resources/crvs-systems-improvement-framework/

CRVS Systems Improvement Framework e-learning course
vitalstrategies.org/resources/crvs-systems-improvement-framework-e-learning-course/

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What is a Business Process?

A business process is a chain of events, activities and decisions organized logically to accomplish a certain goal.

1. Every process has some inputs
2. Different stakeholders perfom some tasks
3. the process has some outputs

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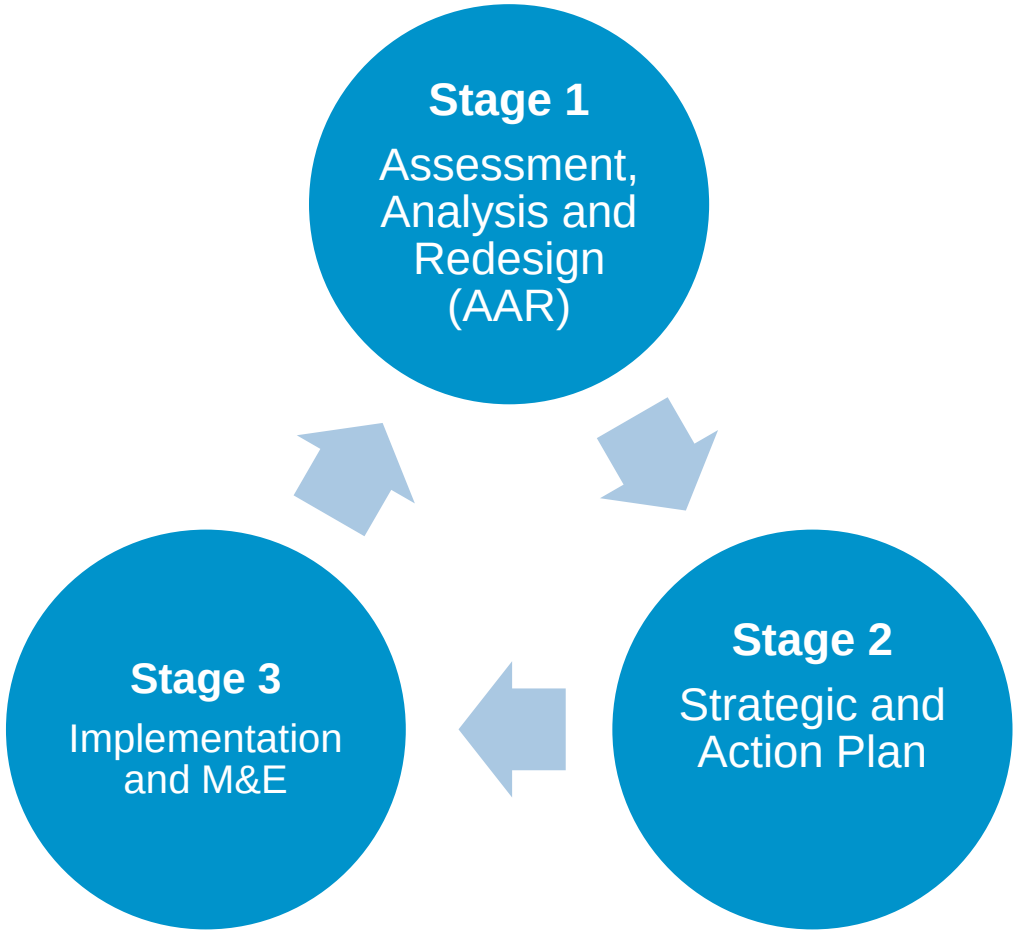
Stages of The CRVS Systems Improvement Framework

Designed for iterative and modular application



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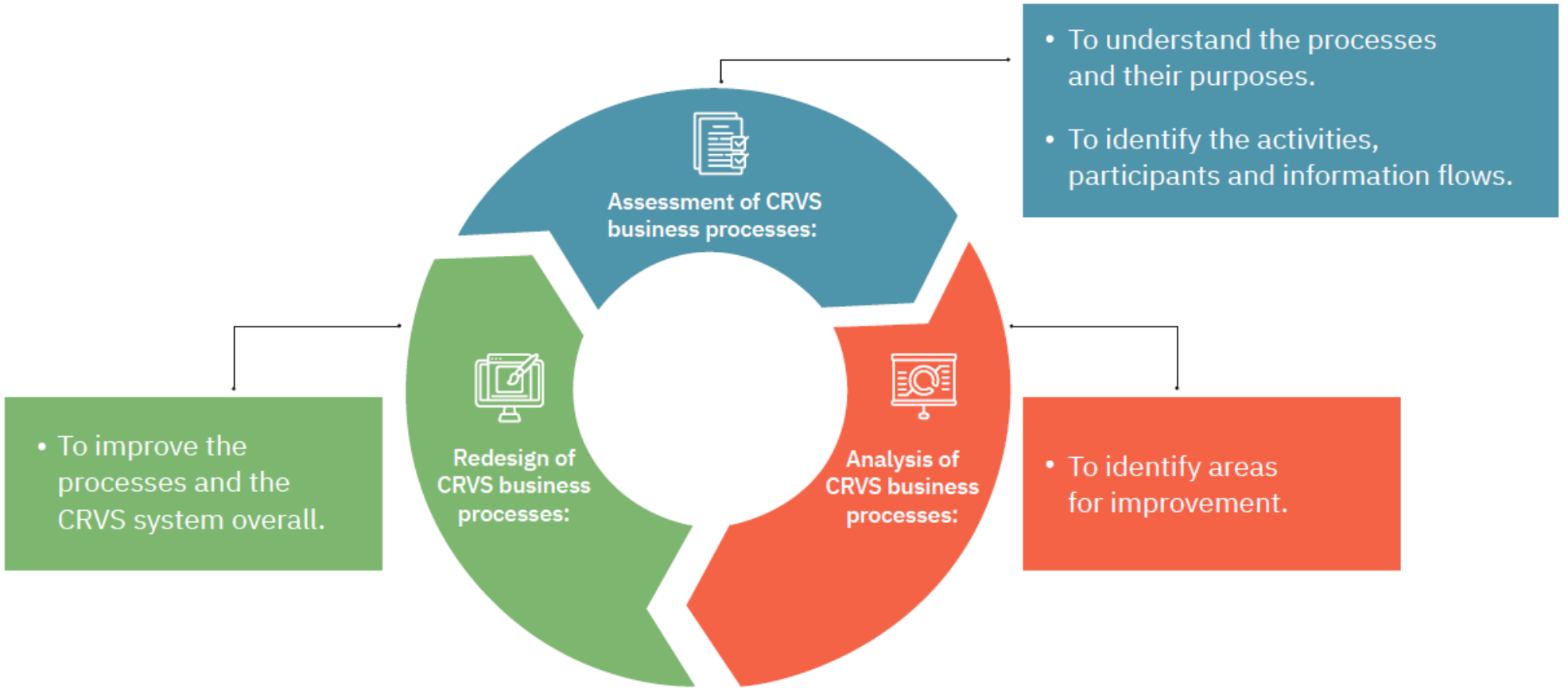
CRVS Systems Improvement Framework: Stage 1: Assessment, Analysis, Redesign



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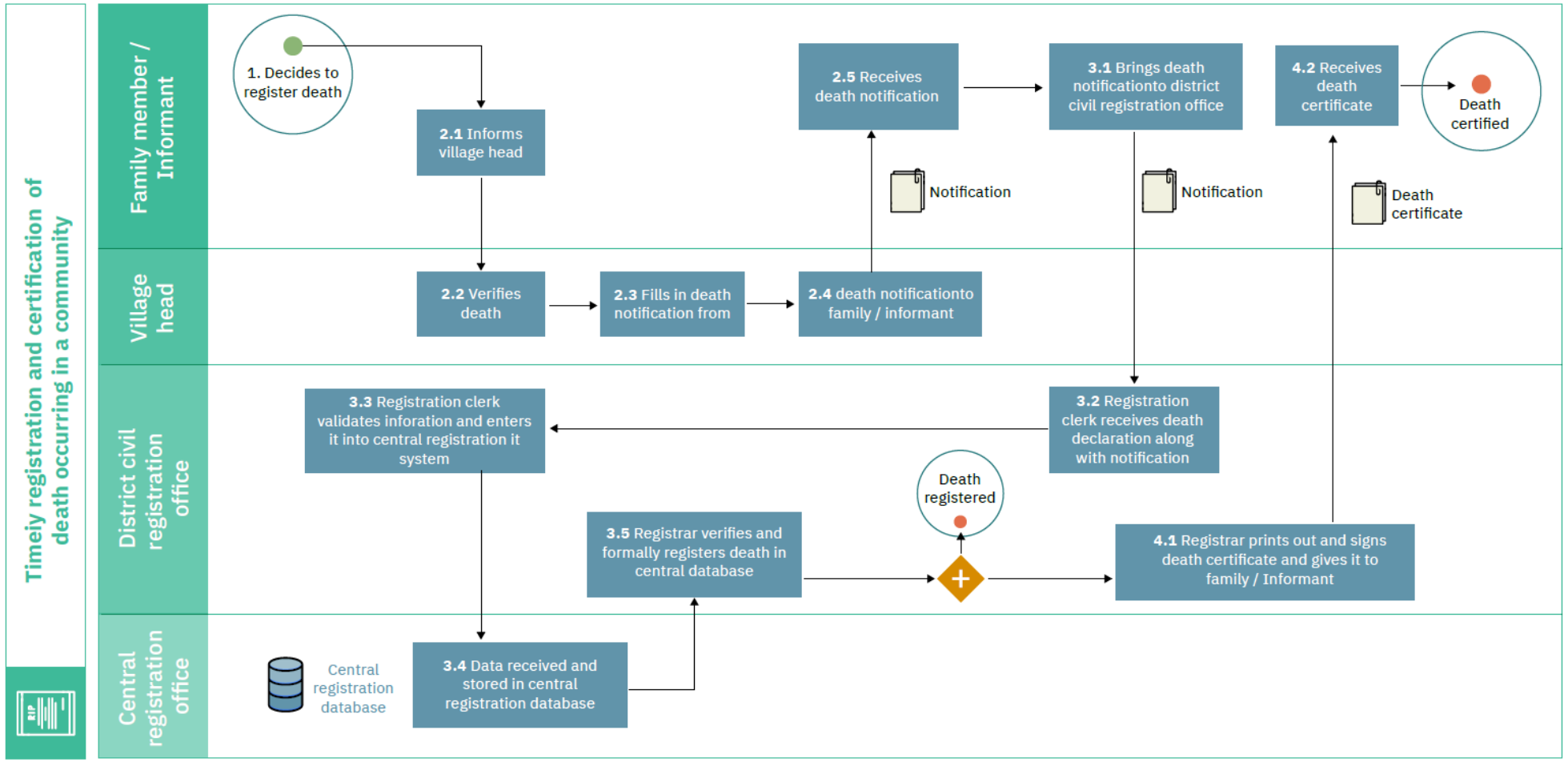
CRVS Systems Improvement Framework: Implementation tools for Stage 1

- Business Process Map (BPM) ⟸ **A process centric approach**
  - Provides a visual documentation of the business process

    Uses business process improvement principles to identify and improve an existing process to streamline its overall efficiency

Business process map (BPM)



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CRVS Systems Improvement Framework: Implementation tools for Stage 1

- Business Process Map (BPM) ← A process centric approach
  - Provides a visual documentation of the business process

    Uses business process improvement principles to identify and improve an existing process to streamline its overall efficiency

- CRVS System Analysis and Redesign (CRVS-SAR) tool ← **A result driven & rights based approach**
  - Guides the user through the Assessment, Analysis, and Redesign stage

    Uses Key Performance Indicators to assess current status and define targets – focuses on improvement of client services and demand

CRVS Systems Improvement Framework: CRVS-SAR tool

Assessment | Analysis | Redesign

Key performance indicator (KPI)	Baseline information	Desired target	Performance issues	Root causes	Root cause category	Redesign ideas
Measures the **current performance** of CRVS systems against set targets for performance • High-level • Client centric • Service provider centric	Current Performance	Desired performance	Gap between desired performance and current performance (problem)	Deepest cause of performance issue	Main root cause category • Human resources • Management and coordination • Business Process • Physical infrastructure • Policies, laws, regulations • Information Technologies	Solution to address the root cause

Rolling out of the stage-1 of the framework

- Establishment of a **core team** with relevant government stakeholders (usually led by the CR office)
- Identification of a **focal point** in the government
- Deployment of a senior advisor (if needed international) and local consultant(s) for guiding the process
- Orientation of the core team members on CRVS system strengthening using the framework
- Constitution of a smaller **working team** to undertake the activities in Stage-1(in some countries)
- **Training** of the core team/working team members on business process mapping and CRVS SAR tool
- Implementation of **assessment, analysis, and redesign**-by the working team members with input from advisors as needed
- The core team briefed on the progress made by the working team regularly
- The findings of the assessments documented and the recommendations made for improvement based on **redesign ideas** presented to core team and high level committee for approval

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Outcomes that may be expected after implementation

1. In-depth understanding of end-to-end process by all CRVS system stakeholders
2. Detailed understanding in terms of the actions needed to address root causes of issues in the CRVS system
3. Design of a more efficient process that is expected to improve coverage, efficiency, and quality in services; for example
    - A more pro-active system
    - Optimal use of ICT
    - Timely delivery of services
4. Improved vital statistics including cause of death
5. Improved coordination and management (including M&E)

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Customization of the Framework to country need

Countries may be at different starting points; for example

- A comprehensive assessment may have been recently completed
- A strategic action plan may already exist
- The law may have been recently reviewed or amended
- The ICT infrastructure may be at different levels of maturity
- The human resource capacity may vary
- No vital statistics systems exist or vital statistics not routinely computed from civil registration data

Application of the framework can be adjusted according to the above starting points

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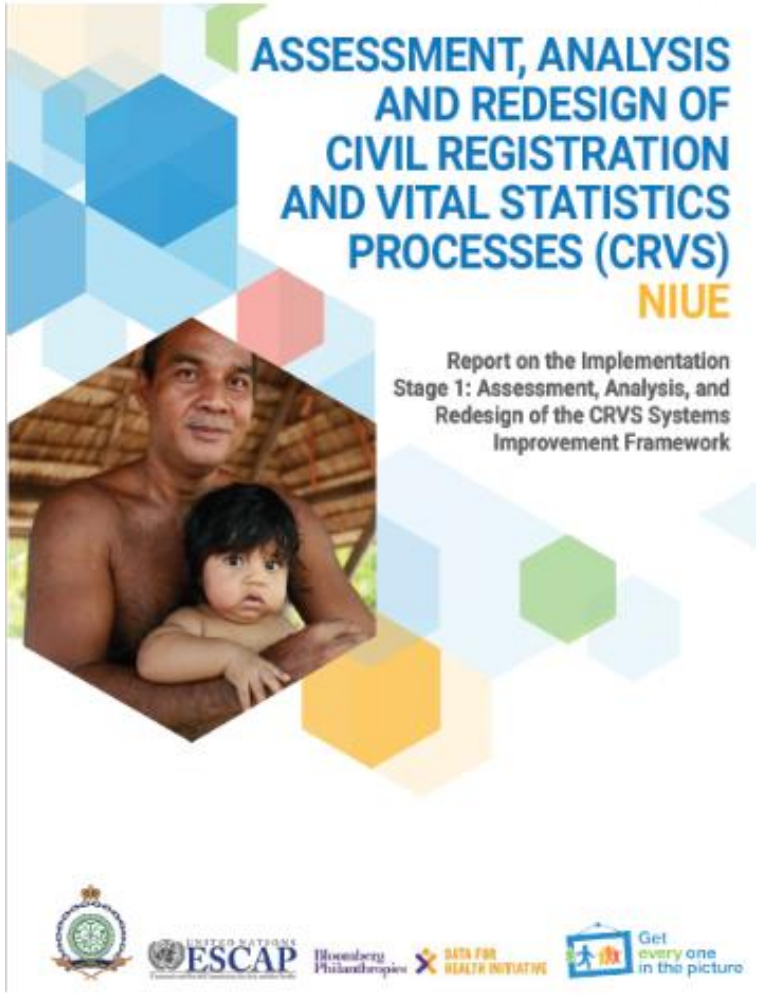
Country Examples: AAR Reports



https://getinthepicture.org/resource/assessment-analysis-and-redesign-civil-registration-and-vital-statistics-processes-crvs

https://getinthepicture.org/sites/default/files/resources/CRVS_BPI_profile_Maldives.pdf

Assessment, Analysis, and Redesign of Birth and Death Registration Business Processes

Maldives (2020-2021)

CRVS Business Process Improvement (BPI) Brief

Maldivian Civil Registration and Vital Statistics (CRVS) stakeholders (from the Department of National Registration, National Bureau of Statistics, Ministry of Health, Local Government Authority, National Centre for Information Technology and Malé City Council) were engaged to examine current birth and death registration processes, identify gaps and determine areas for improvement, using Stage 1 of the CRVS Systems Improvement Framework as the methodological guide. The findings of this assessment have informed continued efforts to strengthen the recently developed digital birth and death registration platform in Maldives, known as 'GEMEN', as well as budget advocacy and sustainable financing initiatives, supported by the Global Health Advocacy Incubator. The full report can be accessed here.

As part of its ongoing collaboration with the Bloomberg Data for Health Initiative and in support of the implementation of the Regional Action Framework on CRVS in Asia and the Pacific, the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) has been providing support to countries to assess, analyse and redesign selected CRVS processes.

Get every one in the picture

1

Maldivian CRVS system

The legal framework for civil registration in the Maldives is mostly founded on the Birth Registration and Death Registration Act (Act No. 7/92), enacted in 1993. The Ministry of Health, along with Local Councils and the Department of National Registration (DNR) are the main authorities responsible for the CRVS system in the Maldives. The Ministry of Health maintains the notification system for births and deaths, while the DNR is responsible for the collection of birth and death registration forms, and their entry into the online database.

Registration can occur in two hospitals (both in the capital city Malé), six Regional Hospitals, 13 Atoll Hospitals, 168 Health Centres, 189 Island Councils or 19 Atoll Councils. Birth and death registration rates are both estimated to be close to 100% complete in Maldives. The recently developed digital birth and death registration platform 'GEMEN' has helped streamline registration processes, however, some challenges remain.

Methodology

Using the methodology and tools defined by the CRVS Systems Improvement Framework, the Core Team of national CRVS stakeholders (supported by a country coordinator and senior advisor), organised a total of six online consultation sessions/webinars to compile

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Vital Statistics based on civil registration data

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Vital Statistics : Definition and Sources

Definition:

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.

Main sources

- **Civil Registration System**
- Household Sample Surveys (for example SRS, DHS, MICS)
- Population Census

Civil Registration is the best source of vital statistics

* Priority Vital events : live birth, death, foetal death/still birth, marriage, divorce

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Civil Registration – the best source of vital statistics

Data collected from civil registration system is the best source of vital statistics because

- ✓ *It is a continuous and permanent source*
- ✓ *It can produce data at lowest administrative level*
- ✓ *The data collected for civil registration is free from recall error and is unbiased*
- ✓ *Once established, it is the most inexpensive source*

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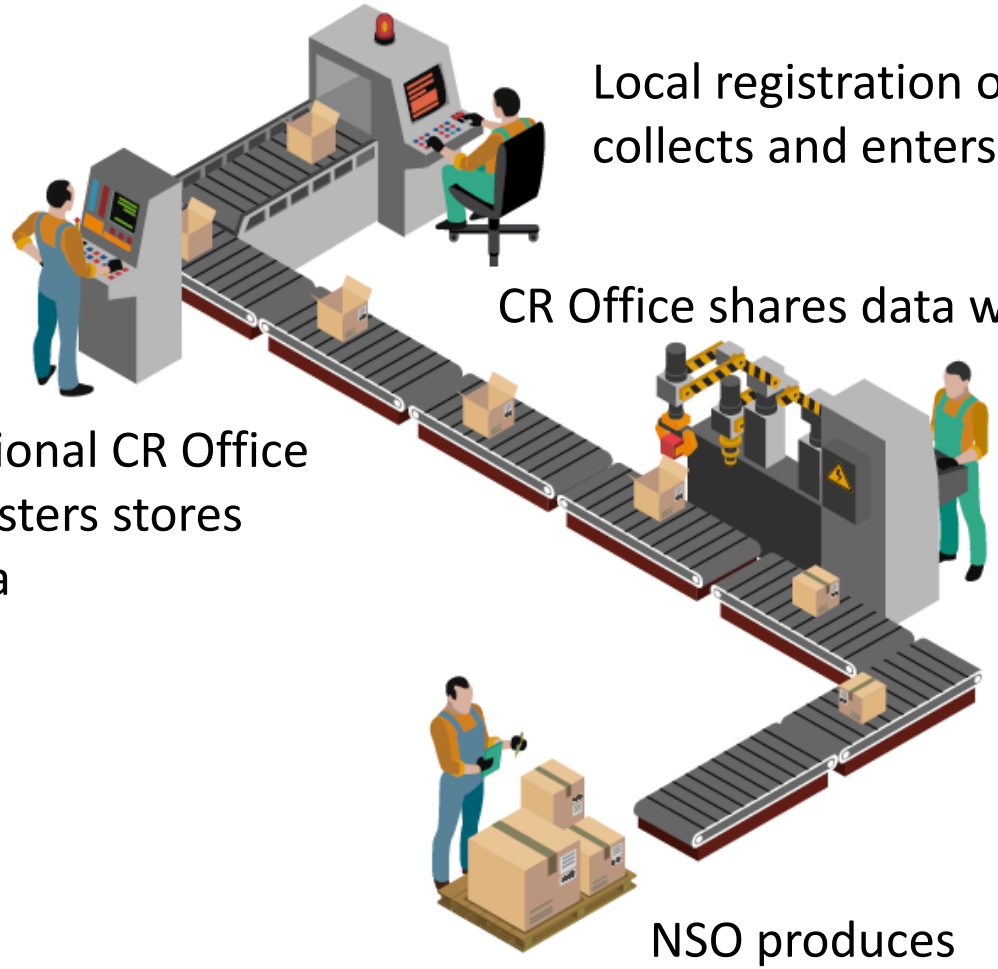
Generic Business Process for Production for Vital Statistics

A business process is a chain of events, activities and decisions organized logically to accomplish a certain goal.

1. Every process has some inputs
2. Different stakeholders perfom some tasks
3. the process has some outputs



Local registration office collects and enters data

CR Office shares data with NSO

National CR Office registers stores data

NSO processes vital statistics

NSO produces vital statistics report

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Technical Guidance for Strengthening the Vital Statistics Production Process

“Vital Statistics Business Process Model (VSBPM)”

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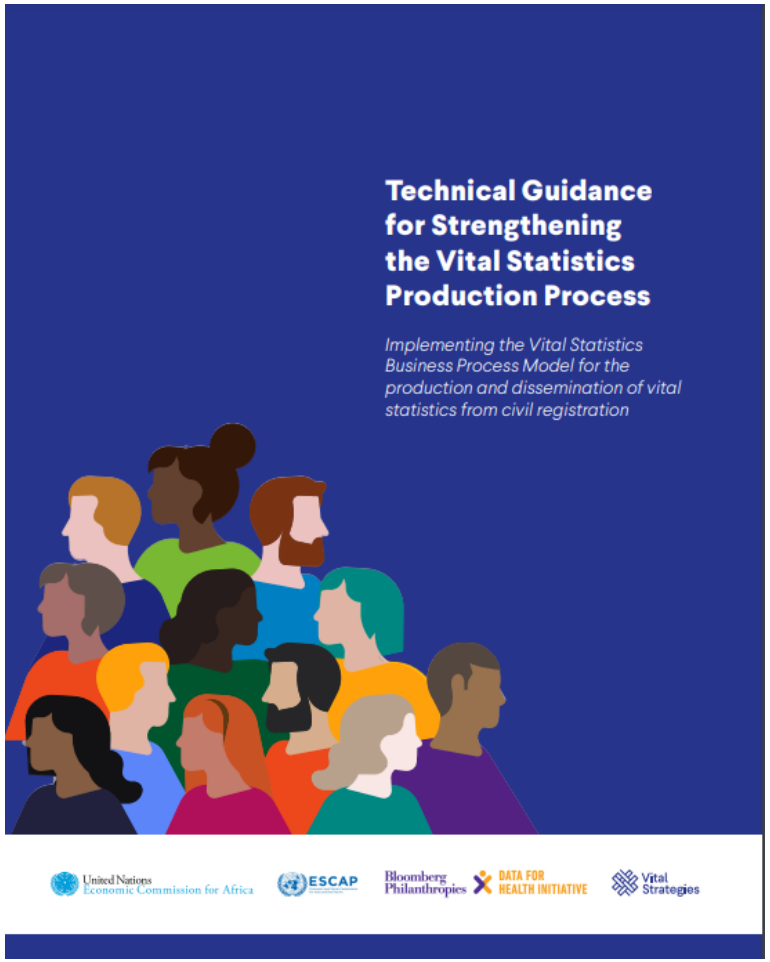
VSBPM: an integral part of CRVS Systems Improvement Framework

CRVS Systems Improvement Framework

Stage 1: Assessment, Analysis and Redesign	Stage 2: Development of Strategic and Action Plan (3 components)	Stage 3: Implementation of Action plan (lead agencies)
Assessment Analysis Redesign	Civil Registration	CR Agency
	Vital Statistics	National Statistics Office
	MCCD	Health Ministry

Technical Guidance will be used in all three stages



[Download the Technical Guidance for Strengthening the Vital Statistics Production Process]

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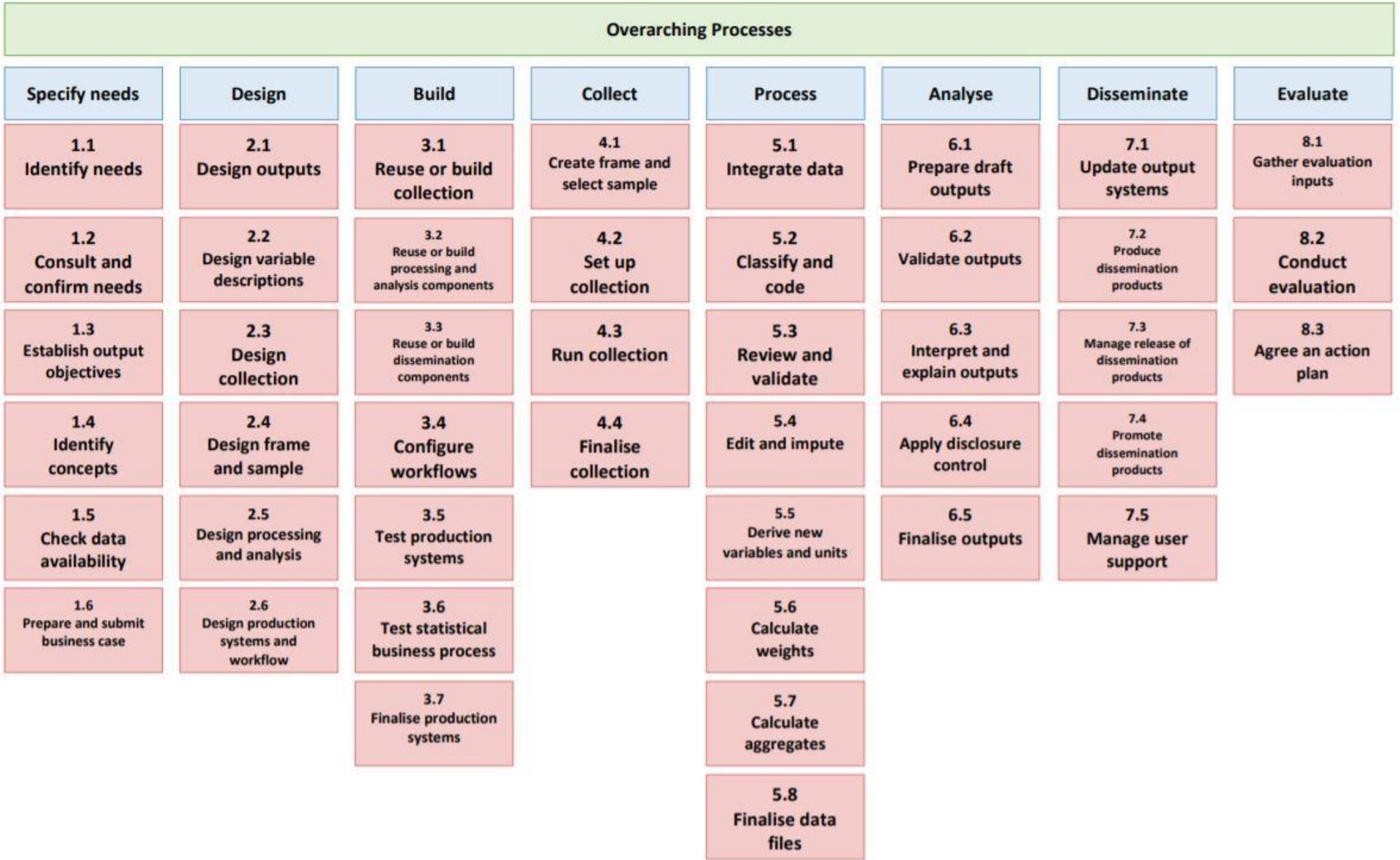
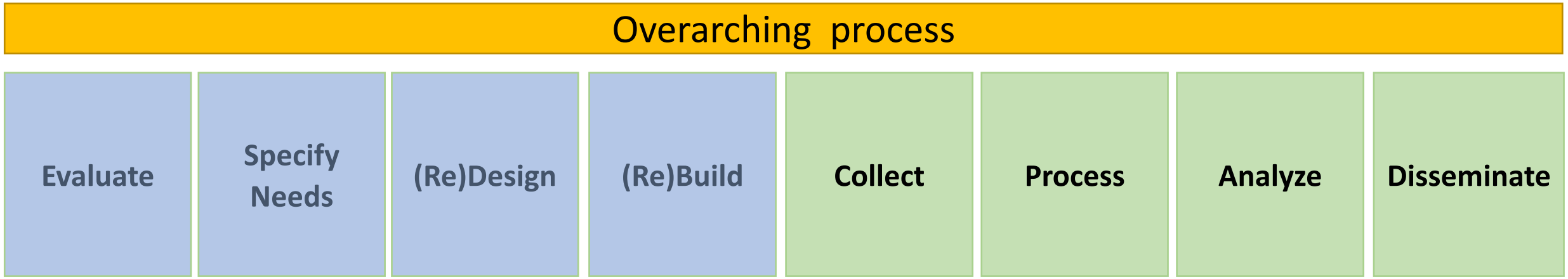
General Statistical Business Process Model (GSBPM)



Phases of Vital Statistics Business Process Model (VSBPM)

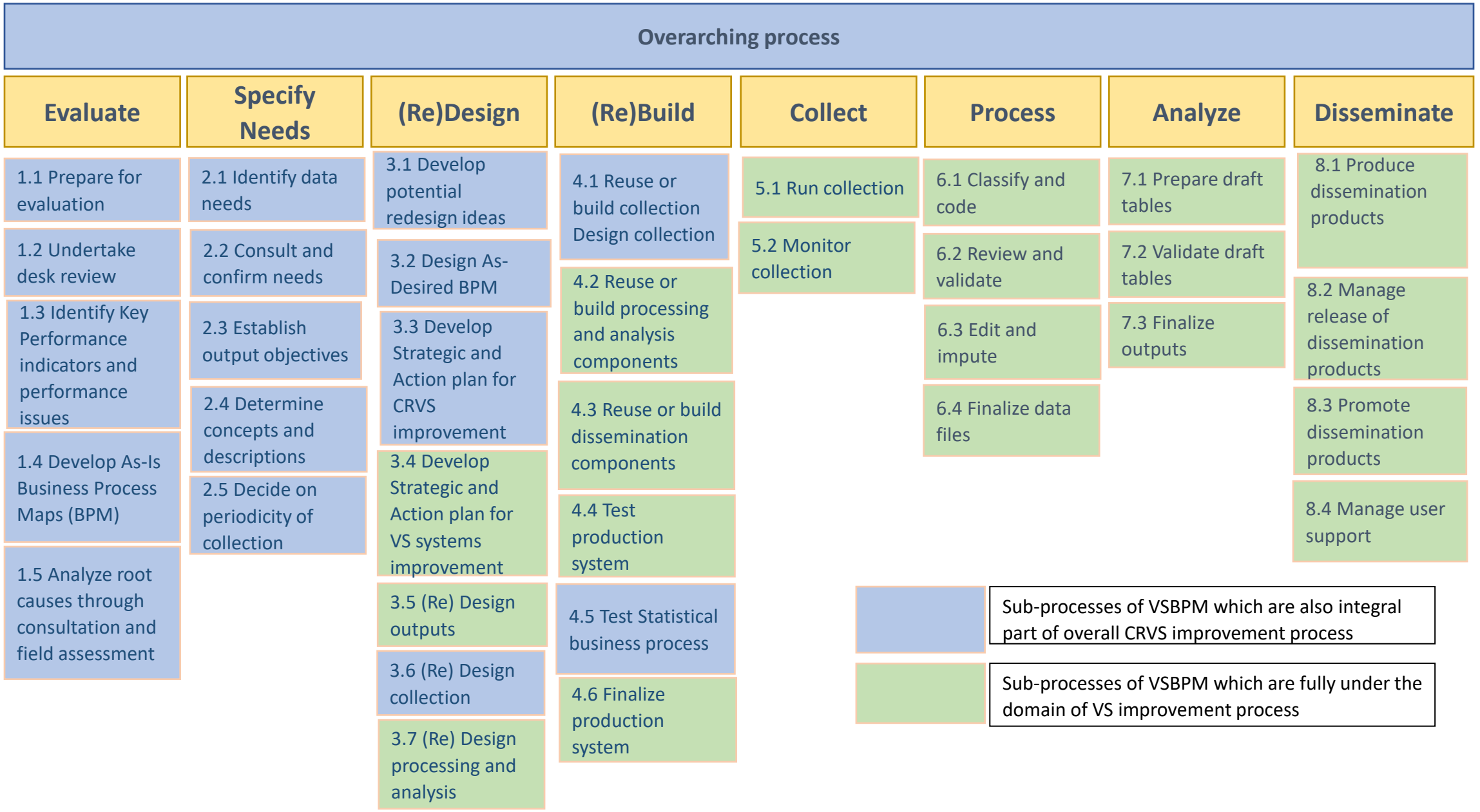


Phases of VSBPM that are within the domain of Civil Registration agency. The agency responsible for producing vital statistics has a big role to play in each of these phases.

Phases of VSBPM which are fully within the domain of the agency responsible for producing vital statistics.

1: Adapted from General Statistics Business Process Model (GSBPM) version 51 2019: United Nations Economic Commission for Europe

Vital Statistics Business Process Model (VSBPM)



Steps to be taken to implement the Framework

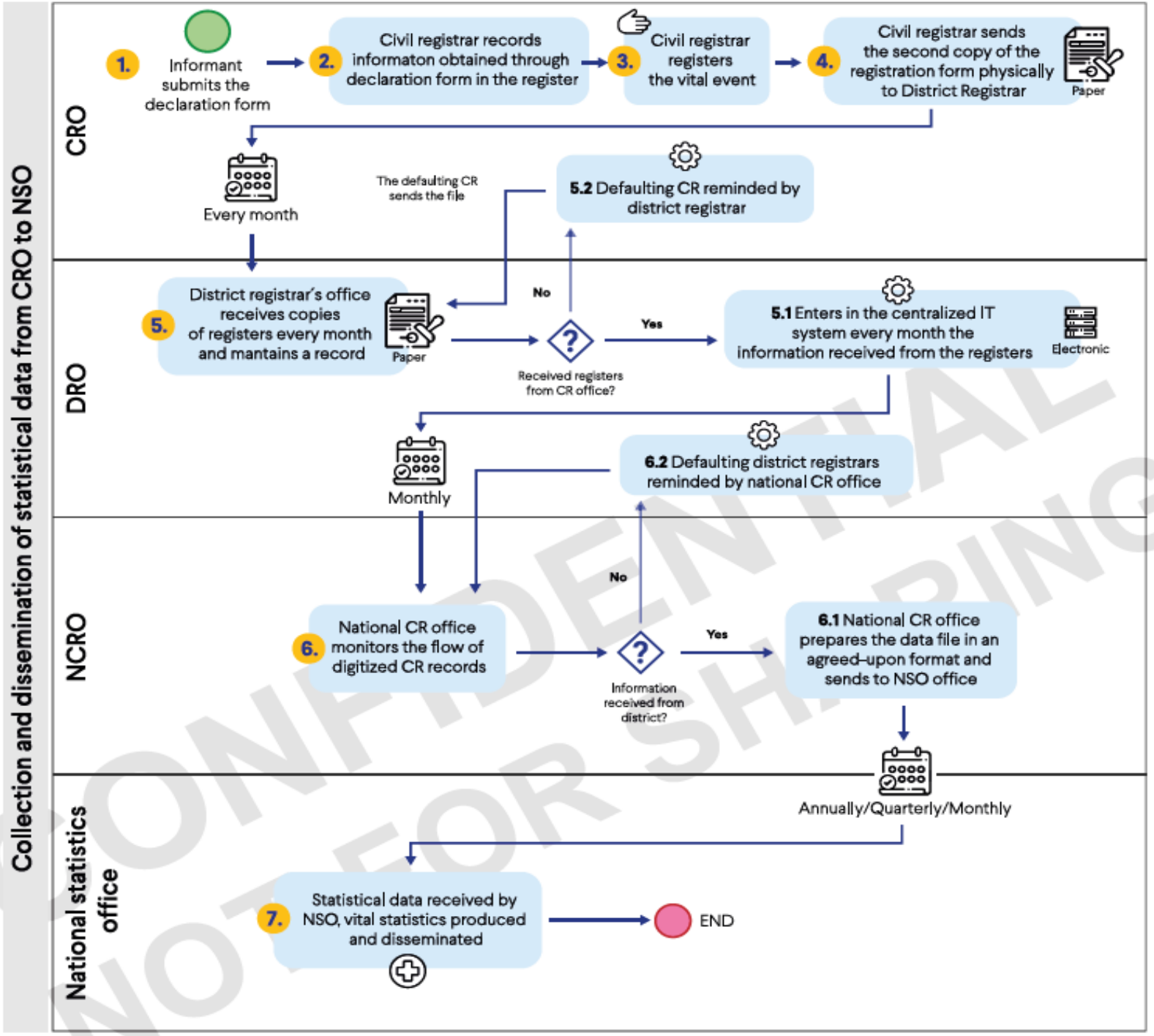
- Establishment of a **Technical Support Team** (TST) as soon as the government decides to implement the Framework
- Using the guidance in the Framework, TST will
  - **Assess** current system of vital statistics production (if exists) and its output
  - Identify **data needs** aligned with the UN standards for tabulations
  - **Map** as-is processes and suggest **redesigned processes**
- The TST will then prepare a **Technical Note** that will include among other things, all the above
- The TST will be responsible for preparing a detailed **action plan** for production and dissemination of vital statistics and guide its implementation
  - Proposing enhancements of human resources and technology to meet the new demands
  - Advocating for additional resources for implementation

Technical Note

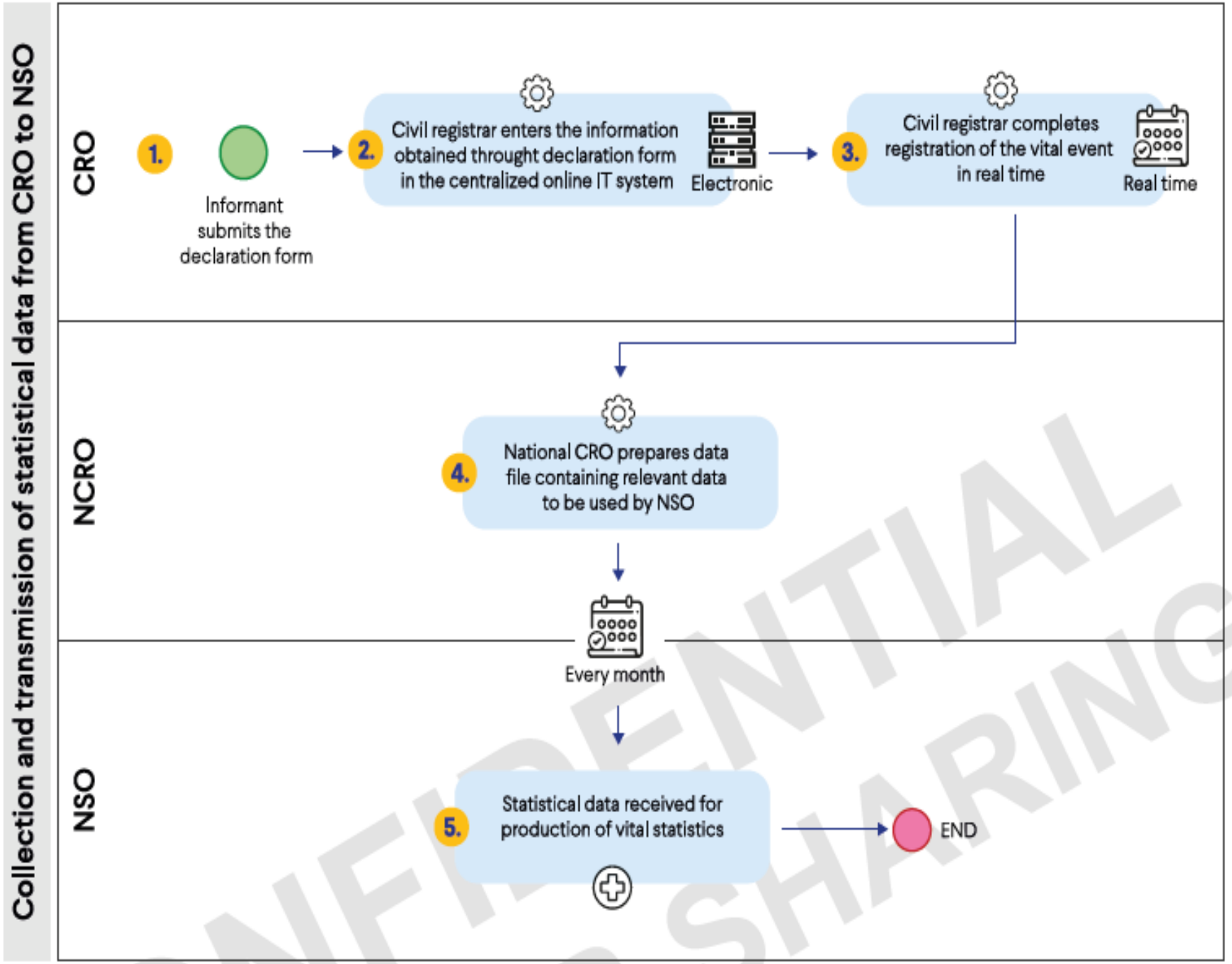
The Note will include 11 chapters

- Chapter I: Background
- Chapter II: Current status
- Chapter III: Proposed tabulations and data needs
- Chapter IV: As-desired Business Process Maps
- Chapter V: Mechanism for monitoring of data collection
- Chapter VI: Human resources
- Chapter VII: Coordination
- Chapter VIII: IT infrastructure and software requirement
- Chapter IX: Data dissemination strategy
- Chapter X: Quality management for collection, processing, tabulation, and dissemination of vital
- Chapter XI: Advocacy and communication

As-is Business Process Map



As-desired Business Process Maps



Plans for overall strengthening of CRVS and VS systems and their interconnection

Vital statistics subplan of the overall improvement plan of the CRVS system				Plan for improvement of vital statistics system			
Strategic goal: "Produce and disseminate timely and quality vital statistics"				**Strategic goal: "Produce and disseminate timely and quality vital statistics"**			
Examples of outputs				***Examples of outputs***			
Newly designed declaration form and/or registerion data collection instrument introduced	Established online registration system in a phased manner	Contents in the data collection instrument aligned with the UN priority list	Report on the legal review obtained and examined	Monitoring framework for tracking flow of statistical data established	Template for the annual vital statistics report finalized	Data quality management framework established	Strategy and action plan for dissemination of vital statistics report finalized
Lead agency: NSO and CRO jointly *Main support agencies: health department and relevant development partners*				*Lead agency: NSO* *Main support agencies: CRO, health department and relevant development partners*			

Acknowledgments:
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Subhashree Dash
Jana Shih

Thank you

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https://www.vitalstrategies.org/resources/crvs-systems-improvement-framework/

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