

# ASSESSMENT, ANALYSIS AND REDESIGN OF CIVIL REGISTRATION AND VITAL STATISTICS PROCESSES - MALDIVES

Report on the implementation of  
Stage 1: Assessment, analysis,  
and redesign of the CRVS  
Systems Improvement Framework





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# 1 INTRODUCTION

Civil registration and vital statistics (CRVS) are closely linked to a person's legal identity, including their right to recognition as a person before the law and their formal relationship with the state. A birth certificate provides individuals with documentary evidence proving their name, age, and family relationships. A death certificate constitutes a final and permanent record of the fact of death, which is needed by next of kin to manage the legal or financial consequences of death. Additionally, recording every life event is also an opportunity to produce accurate, complete and timely vital statistics on the health and demographics of the population, as well as maintain a national civil registry or population database.

Civil Registration and Vital Statistics (CRVS) authorities of Maldives are continuously exploring mechanisms to develop policies for addressing challenges while also taking advantage of regional and global good practices. With this goal in mind, Maldivian authorities recently implemented a new online birth and death registration platform. To further improve the platform, they also accepted the invitation of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) to apply the CRVS System Improvement Framework<sup>1</sup> as a novel approach for analysing, redesigning and improving vital events registration processes.

This report documents the results of the work of the Maldives Core Team in the implementation of the "Assessment, analysis, and redesign" stage of the CRVS System Improvement Framework. Using the methodology and the tools defined by the CRVS System Improvement Framework, the Core Team, supported by a Country Coordinator and a Senior Adviser, organised a range of online and in-person consultations to apply the Framework tools. The consultations enabled the Core Team to provide detailed descriptions of existing birth and death registration business processes, analyse aspects of the processes affecting performance, and design a vision for improving registration business processes, overcoming performance bottlenecks, and increasing overall efficiency.

The report is organised into four distinct parts. The first part introduces the key characteristics of the Maldives CRVS system, as well as background information on the CRVS System Improvement Framework and the methodology for implementing the Framework implementation in the context of Maldives CRVS business processes. The second part of the report provides a detailed description of birth and death registration business processes as presently operated in Maldives. The third part of the report documents the analysis conducted by the Core Team to determine existing business processes, performance bottlenecks and their root causes, as well as redesign suggestions and how best to prioritize improvements. Finally, the fourth part of the report envisions the processes that would emerge after improvement policies are implemented.

## **Maldives CRVS system**

The Civil Registration and Vital Statistics (CRVS) system of Maldives is a well-rounded system which continuously delivers on its main task of ensuring universal birth and death registration for the population residing in its territory. The legal framework for civil registration in the Maldives is mostly founded in the law on birth registration and death certification, enacted in 1993.

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<sup>1</sup> CRVS Systems Improvement Framework (2021). Available at <https://getinthepicture.org/resource/crvs-systems-improvement-framework>

Concerning the primary CRVS stakeholders, the Ministry of Health, along with the Local Councils and the Department of National Registration (DNR) are the authorities responsible for the CRVS system. DNR is responsible for the collection of birth forms and death forms, and their entry into the online database, while the Ministry of Health maintains the notification system for births and deaths, including information collected with the forms completed at the time of occurrence of the vital event.

Meanwhile, the National Bureau of Statistics, a bureau of the Ministry of National Planning and Infrastructure, is responsible for the production and dissemination of vital statistics. Moreover, the government of Maldives established a CRVS coordination committee in 2017, which is chaired by the State Minister of Health, and includes representatives from the Department of National Registration, the National Centre for Information Technology and the National Bureau of Statistics.

Registration can occur at two hospitals in the capital city Malé, six Regional Hospitals, 13 Atoll Hospitals, 168 Health Centres, 189 Island Councils or 19 Atoll Councils. Legally, births must be registered within seven days of their occurrence, with applicable fees, and while registering a death has no legally defined limit, it is necessary to obtain a funeral permit and is free of charge. Birth registration rates approach universal converge, and death registration completeness was estimated to be around 100% in 2020. The establishment of the online birth and death platform GEMEN, a software application built on the Government Network of Maldives or GNM (e-Government platform), helped in improving the CRVS system, but some challenges remain.

Some of the remaining challenges include personnel limitations, including limited numbers, resources, and training. The limited resources result in inconsistent data quality, most prominently in cause of death coding. Challenges also persist with the registration of vital events of Maldivian citizens occurring abroad. However, as part of their continued efforts in improving digital platforms for vital events registration, CRVS authorities are also looking into the design of registration business processes. The authorities hope to leverage opportunities provided by digitized data processing, with the view toward increasing overall efficiency of the registration process, and simultaneously improving the overall experiences of the end-users. Furthermore, CRVS authorities are reviewing the civil registration act to provide a strong legal basis for the processes.

### ***Background on the CRVS System Improvement Framework***

The CRVS System Improvement Framework is based on important lessons learned and experiences shared by countries that conducted the comprehensive assessment to prepare a strategic action plan. Under the Bloomberg Philanthropies Data for Health Initiative, as well as other global and regional system strengthening efforts, the Framework draws on experiences in supporting system-wide approaches. Building on existing CRVS system-strengthening guidelines developed by the Africa Programme for Accelerated Improvement of CRVS (APAI-CRVS), the World Health Organization (WHO), the University of Queensland, and others, the Framework introduces a unique, process-centric approach. It provides guidance for countries in applying a multi-sectoral, participatory approach to continually improving the performance of their CRVS systems. The Framework introduces systems-thinking tools such as, process mapping as a key strategy to engage stakeholders, methods for improving understanding of the CRVS system and its weaknesses, identifying solutions, and monitoring changes in performance over time.

The Framework is composed of three stages:

- Stage 1: Assessment, analysis, and redesign;
- Stage 2: Development of the strategic and action plan; and
- Stage 3: Implementation, monitoring, and evaluation.

The approach of measuring, analysing, and redesigning business processes to improve performance significantly – which is applied in the Framework – is known as business process improvement.

With the overall goal of improving registration business processes, Maldivian CRVS stakeholders focused on the stage 1 of the Framework with two key objectives:

- 1) identifying issues affecting the performance of business processes in the CRVS system and the root causes of these issues, and**
- 2) identifying redesigns that should be implemented to address the performance issues and root causes.**

Following the initial consultations on the Framework and discussions on CRVS processes, Maldivian CRVS stakeholders decided to strictly focus on improving birth and death registration business processes.

## 1.1. Methodology

In line with the Framework, Maldivian CRVS stakeholders established a National Core Team responsible for Framework activities and comprised of experts and managers from Maldives CRVS system stakeholder institutions. The work of the National Core Team was facilitated by the National Coordinator. The National Core Team and the National Coordinator were supported by the senior CRVS advisor, who provided strategic and senior-level input to the process.

With COVID-19 restrictions in place, the work was organised as a series of one-on-one, online consultations and weekly, online Core Team consultations. In line with the Framework, the work of the Country Team was implemented through the following stages:

1. Identifying and documenting current birth and death registration processes.
2. Gathering performance information on current birth and death registration business processes.
3. Identifying performance issues of current birth and death registration business processes and identifying root causes of the issues.
4. Defining policies for improvement of birth and death business processes.
5. Redesigning birth and death registration business processes.
6. Developing birth and death registration process descriptions and process maps for redesigned CRVS business processes.

This report documents the results of the work of the Core Team from each of these six stages.



## 2

# AS-IS ANALYSIS OF SELECTED BUSINESS PROCESSES

To achieve the first stage of the process, birth and death registration process are documented verbally and graphically using the business process description table (see Table 1 and Table 2) and business process maps (see below Figure 1 and Figure 2). Table 1 and Table 2 provide the business process description of the birth and death processes in a narrative form. For each of the selected CRVS business processes, the process description template was completed by each stakeholder institution of the process and later discussed together with the core team to finalise the process description and the process maps.

## 2.1 Birth Registration Process of events occurring in health facilities

**Table 1: Birth Registration Process of events occurring in health facilities and at home**

|                        | As-is Birth Registration Process Description   | Who (name of unit/section, institution) | Time taken (days/hours/minutes) |
|------------------------|--|---|---------------------------------|
| <b>Name of process</b> | <b>Birth registration at health facility</b>   | City Council (MCC) - Vital Registration | <b>3-5 days</b>                 |
| <b>Process actors</b>  | <p><b>Direct actors:</b> Health facility, Family member, Department of National Registration (DNR).</p> <p><b>Indirect actors:</b> National Centre for Information Technology (NCIT), Local Government Authority (LGA), family court, gender ministry, embassies/ Foreign ministry, Islamic ministry, National Bureau of Statistics (NBS), Ministry of Health (MoH), Maldives Police Services (MPS).</p> |   |                                 |
| <b>Process purpose</b> | To ensure every birth is declared to the local council within the period specified by law for timely registration, is registered and certified.  |   |                                 |

| 1   | Notify Birth (1 day)  |  |             |
|-----|---|--|-------------|
| 1.1 | <p>When mother is known (i.e., delivery at health facility, home or anywhere else but not abandoned baby), collect ID card/passport of mother, fathers, marriage certificate and informant ID (if informant is different to mother or father) [In case the delivery is not at health facility, baby is always brought to health facility for completing birth record].</p> <p>If any problem with the system, help desk at the national centre for information technology supports the health facilities.</p> | Clerk if caesarean, else Midwife attending birth | 1 - 3 hours |
| 1.2 | <p>If mother is unknown (abandoned babies), a sub-process is initiated by the Police and family protection services. The court assigns a legal guardian and is recorded as the parent (mother or father). Obstetrician's assessment of the baby is used to determine birth date and condition of the baby.</p>  | Clerk/Mid-wife                                   | 3-7 days    |
| 1.3 | <p>If mothers ID is not available (very rare – not encountered in last 3 years), record information provided by the family and request DNR to check and verify ID and share with health facility (via phone message).</p>   | Clerk/Mid-wife                                   | 1-3 hours   |
| 1.4 | <p>If DNR cannot verify, cannot proceed with birth form - record all known information on the birth register at the health facility - once ID number for the mother is available, the details are entered in the system (all births entered in the GEMEN are also recorded in the register).</p>  | Clerk/Mid-wife                                   | 10min       |
| 1.5 | <p>Family provides the ID cards (or in cases when family does not have them, DNR verifies based on information provided).</p>   | Family   | 1-2 hours   |



|      |  |                |               |
|------|--|----------------|---------------|
| 1.6  | When ID is available (or DNR verifies ID based on the information provided), note down required ID information on paper and/or make copies (depends on the health facility) and return originals to the family.  | Clerk/Mid-wife | 5 min         |
| 1.7  | Login into the GEMEN portal (only select personnel have access).   | Clerk/Mid-wife | 3 min         |
| 1.8  | Select birth registration tab in GEMEN portal and select "Add birth".  | Clerk/Mid-wife | 10 sec        |
| 1.9  | Enter nationality information.   | Clerk/Mid-wife | 10 sec        |
| 1.10 | If Maldivian, enter mothers ID number.   | Clerk/Mid-wife | 30 sec        |
| 1.11 | Select "fetch" for GEMEN system to automatically fill in identity information of the mother.<br>[if the system does not fetch ID details, click " Add new" and enter mothers ID number, Date of birth, Name and address as in the ID card].  | Clerk/Mid-wife | 30 sec [1min] |
| 1.12 | If foreigner, enter passport number, date of birth, name, nationality and address.   | Clerk/Mid-wife | 1min          |
| 1.13 | Click next to enter mother marriage status at the time of delivery. If the mother's detail is in the system, details are fetched by the system.  | Clerk/Mid-wife | 10 sec        |
| 1.14 | If the system does not fetch, enter the details (marriage cert number, date of marriage, husband name).  | Clerk/Mid-wife | 10 sec        |
| 1.15 | Next enter mother's pregnancy status details (age at first marriage, age at first pregnancy, total number of live births, total still births, total abortions, total deliveries, total pregnancies) - this detail is taken from medical record and entered manually into the system. | Clerk/Mid-wife | 1 min         |

|      |  |                |        |
|------|--|----------------|--------|
| 1.16 | Click next to enter father's details – first chose husband or Not husband or Unknown (husband can be chosen only if married was entered in mother's status).   | Clerk/Mid-wife | 10 sec |
| 1.17 | If father is husband and marriage details entered in previous step, the system fetches ID details automatically.   | Clerk/Mid-wife | 10 sec |
| 1.18 | If not husband (or system did not fetch), enter nationality of father.   | Clerk/Mid-wife | 30 sec |
| 1.19 | If Maldivian, enter ID number of fathers.  |                |        |
| 1.20 | Fetch ID details fetched from DNR.<br>If the system does not fetch enter other details Date of birth, Name and address of the father as on the ID card.  |                |        |
| 1.21 | If father is a foreigner, add passport number, date of birth, name, nationality and address (even if ID is not available enter whatever information is available, like name DoB, nationality as provided by family). | Clerk/Mid-wife | 1 min  |
| 1.22 | If father is unknown, select unknown and move on to the birth attendant section.   | Clerk/Mid-wife | 10 sec |
| 1.23 | Next select Yes or No for question on paternal grandfather known or not.   | Clerk/Mid-wife | 10 sec |
| 1.24 | If paternal grandfather is known, enter ID number, and select fetch.<br>If not enter other details - date of birth, name and address, then select "save and next",   | Clerk/Mid-wife | 10 sec |
| 1.25 | Next enter the birth attendant details as per step 1.26, 1.27 or 1.28  | Clerk/Mid-wife | 1 min  |
| 1.26 | If Maldivian, enter ID card number.  |                |        |



|      |   |                |        |
|------|---|----------------|--------|
| 1.27 | System fetches other details if ID card number is in the system), if not, enter date of birth, name and address of the attendant.   |                |        |
| 1.28 | If foreigner enter identity details, if ID already in the system it fetches the rest automatically.<br>If not enter manually.   |                |        |
| 1.29 | Enter designation of the birth attendant (doctor, nurse, health worker, other) and if trained in midwifery or not and select next.  | Clerk/Mid-wife | 1 min  |
| 1.30 | Next enter the informant details – nationality.   | Clerk/Mid-wife | 10 sec |
| 1.31 | If Maldivian, enter ID card number.   | Clerk/Mid-wife | 10 sec |
| 1.32 | System fetches other details if ID card number is in the system.<br>If not, enter date of birth, name and address of the attendant.   | Clerk/Mid-wife | 10 sec |
| 1.33 | If foreigner enter identity details - Passport no, date of birth, name, nationality and address.  | Clerk/Mid-wife | 1 min  |
| 1.34 | Next enter birth details and generate birth form number.  | Clerk/Mid-wife | 10 sec |
| 1.35 | Enter birth detail of the newborn: sex, birth type (live birth, still birth, abortion), mode (vaginal/caesarean), gestation, birth weight, place of birth, date and time of birth, Arabic birth date. | Clerk/Mid-wife | 3 min  |
| 1.36 | Select "add child" and Save.  | Clerk/Mid-wife | 10 sec |
| 1.37 | Next take a print of the birth form and checks for any mistakes (typos and against medical record).   | Clerk/Mid-wife | 5 min  |

|          |   |   |         |
|----------|---|---|---------|
| 1.38     | If any mistakes the clerk/nurse logs back into the system, select the record and correct the errors in the system, save and print again. First print is destroyed.  | Nurse in charge/Midwife   | 1 min   |
| 1.39     | Take the form to the mother to sign, then father to sign.<br>If father is not available, signature is not obtained.   | Clerk/Mid-wife  | 1-3 min |
| 1.40     | If father signature was not obtained, the mother is instructed not to sign them at home, but to sign at the local council when making application for birth registration.   | Clerk/Mid-wife  | 1 min   |
| 1.41     | Birth attendant signs the birth form.   | Midwife attending birth   | 30 sec  |
| 1.42     | Apply hospital stamp.   | Clerk/Mid-wife  | 3 min   |
| 1.43     | Scan and upload to the GEMEN system and add document date then save,  | Clerk/Mid-wife  | 3 min   |
| 1.44     | Give the original birth form to the family. Family is also given a copy of the application for birth registry & birth certificate and instructed to register at local council within seven days,  | Clerk/Mid-wife  | 5 min   |
| <b>2</b> | <b>Register birth (7-15 days)</b>   |   |         |
| 2.1      | a. Family received the birth form and member "application for birth registry & birth certificate" form.<br>b. Family give an approved name.<br>c. If name given in not already in the approve list of names then sub process to approve name from an authorised person- family needs to check if the name is an approved one (names can be verified from MCC approved name list or name book of Ministry of Islamic Affairs). | Family, Islamic ministry/ approved people to give names Council reception staff | 7 days  |



|     |   |                         |           |
|-----|---|-------------------------|-----------|
|     | <p>d. Family collects required documents<br/>– ID card of mother and father, marriage certificate, household registry, house owner ID.</p> <p>e. Family fills "application for birth registry &amp; birth certificate" form and submit to the local council.</p>  |                         |           |
| 2.2 | <p>MCC reception staff checks if the application form is complete (approved name); has attached mother and Father ID card copy; Marriage certificate original and copy; Household registry; house owner ID card copy</p> <ul style="list-style-type: none"> <li>- Checks child name; checks whether child name is approved or not, spelling of the name, name arrangement (e.g., Child name + father's name or child name + father's name + grandfather's name etc..);</li> <li>- Checks ID cards expiry date, address of both parents (to add child name to the household registry: child can be registered where child's mother/father are registered; parents permanent address or any address of the same island in which parents reside); and</li> <li>- Checks marriage certificate particulars; names of parents, grandfather's information, ID card numbers, address, date of marriage.</li> </ul> <p>Check that all required documents have been submitted:</p> <ul style="list-style-type: none"> <li>- Application form;</li> <li>- Originals of Birth Registration certificate or particulars relating to birth occurred in the hospital (foreign birth/ child born before 01 July 2020);</li> <li>- Original of Marriage Certificate.</li> </ul> | Council reception staff | 15-20 min |

|     |  |  |           |
|-----|--|--|-----------|
| 2.2 | <ul style="list-style-type: none"> <li>- If the parents are divorced, original of divorce certificate;</li> <li>- Unexpired ID copy of child's father, mother and grandfather; and</li> <li>- Original of household registry (applicable for Male', Hulhumale', and Vilimale residents).</li> <li>- If submitted documentation/ information is not complete, e.g., name not approved by Islamic ministry - then reject - given back to family to approve name and reapply, e.g., consent to reside on the declared residence address not signed by the household owner.</li> </ul> | Council reception staff                                | 3-5 min   |
| 2.3 | If some information is available that can be verified by Council, complete it for the family at reception and accept the application.  | Council reception staff                                |           |
| 2.4 | Council reception accepts the application, ask to pay application fee at reception.  | Council reception staff                                |           |
| 2.5 | Family makes payment at council reception.   | Family   |           |
| 2.6 | Issue receipt upon payment.  | Council reception staff / Council fee collection staff | 3-5 min   |
| 2.7 | Council reception staff enters the application in the government administration system (GEMS) and stamp, enter date and number on the hard copy.   | Council fee collection staff                           | 3-4 min   |
| 2.8 | Council reception staff prepares entry list for the day and take the applications to GEMEN data entry staff.   | Council reception staff                                | 10-15 min |
| 2.9 | GEMEN data entry staff logs in GEMEN and checks for pending registrations.   | GEMEN data entry, Council                              | 1 min     |



|      |  |                           |              |
|------|--|---------------------------|--------------|
| 2.10 | GEMEN data entry staff checks the application information with the data in the system.   | GEMEN data entry, Council |              |
| 2.11 | GEMEN data entry staff checks the information and adds any missing information - (usually marriage certificate details and checks duration and verifies father; enters paternal grandfather ID details).                                 | GEMEN data entry, Council | 5 min        |
| 2.12 | If any identity information does not look right, contact DNR and verify (subprocess by phone).   | GEMEN data entry, Council |              |
| 2.13 | GEMEN data entry staff checks child name against approve name list (name book of Islamic ministry and at council); enters the child's name (Dhivehi and English); and the household to be registered.                                    | GEMEN data entry, Council | 5 min        |
| 2.14 | If household registration information is complete, then enter household to be registered for the child.  | GEMEN data entry, Council | 1 min        |
| 2.15 | If the household to be registered is not same as for either mother or father, then check from ID card System (NARES) (if not) then suspend the application (pending) or ask DNR to check if the address is the correct address – verify. | GEMEN data entry, Council | 6 hr – 2 day |
| 2.16 | Inform family of legal requirements and ask the family to register at wither mother or father's registered household (if no consent process pending).  | GEMEN data entry, Council | 6 hr – 2 day |
| 2.17 | GEMEN data entry staff check for any errors- Birth form (Foolhumaa form), dates, marriage certificate. If any problem, contact health facility, family. Check duration of marriage and gestation weeks at delivery.                      | GEMEN data entry, Council | 3 min        |

|          |   |                           |        |
|----------|---|---------------------------|--------|
| 2.18     | GEMEN verification staff (approver)<br>- Rechecks Birth Record form, name, address, dates, marriage certificate. Check duration of marriage and gestation weeks at delivery. If any problem, contact health facility, DNR.  | Council staff (Approver)  | 3 min  |
| 2.19     | If errors, ask the data entry staff to correct.   | Council staff (Approver)  | 1 min  |
| 2.20     | If all okay, approves the application.  | Council staff (Approver)  | 10 sec |
| 2.21     | Request DNR for ID card number (select submit).   | Council staff (verifier)  | 10 sec |
| 2.22     | If there are information that is not validated (like marriage certificate or address to register) process stops but temporary registration is issued in certain circumstances (non-resident foreigners, child has to be taken abroad for healthcare or any purpose).  | GEMEN data entry, Council |        |
| <b>3</b> | <b>Issuing an ID number (2 hrs – 1 day)</b>   |                           |        |
| 3.1      | DNR GEMEN operator logs into GEMEN and check for any pending ID number requests.  | DNR data entry            | 15 sec |
| 3.2      | DNR data entry officer takes a printout of the pending child information and checks data entered by council - quality check - Foolhumaa form, birth registry form, birth certificate form and marriage certificate and passport (if any parent is from different nationality). The quality check includes name (spelling), DOB, Place of birth, gender, Address, mother info, father info, paternal grandfather info (Address and ID number). | DNR data entry            | 5min   |



|     |  |                |        |
|-----|--|----------------|--------|
| 3.3 | <p>If any issues, DNR will reject and will send issues back to the councils to correct them. Issues are communicated to councils through Viber groups.</p> <p>Issues:</p> <ul style="list-style-type: none"> <li>- If name of the child and DOB does not match with Birth certificate form (which parents fill) and GEMEN System.</li> <li>- Gender not filled (this happens only if the birth occurs abroad).</li> <li>- Paternal grandfather's details missing.</li> <li>- Child added to new household in GEMEN, even though that house is not entered to NARES.</li> </ul> | DNR data entry | 7 mins |
| 3.4 | <p>If everything is correct DNR will enter child's information to ID card System (NARES) to get an ID number (Full Name, Common name, sex, DOB, Place of Birth, Island of birth and address (Atoll, Island, District and house name), ID number of Father, Mother and Paternal grandfather (when ID number is entered all the other fields will be filled automatically))</p>  | DNR data entry | 1 min  |
| 3.5 | Generate ID number in NARES.   | DNR data entry | 15 sec |
| 3.6 | DNR approver informed and re-checks the information.   | DNR approver   | 1 min  |
| 3.7 | DNR approver approves the information.   | DNR approver   | 10 sec |
| 3.8 | <p>Enter generated ID number to GEMEN system (copy and paste)</p> <p>Assign ID number to the child in GEMEN and save.</p>  | DNR data entry | 5 mins |

|          |  |                                |        |
|----------|--|--------------------------------|--------|
| <b>4</b> | <b>Verification of ID number in GEMEN (1hr)</b>  |                                |        |
| 4.1      | DNR verifier will check the data entered to DNR ID system NARES and the information for the given ID number matches with GEMEN system.<br>Child's information: Full Name, Common name, ID number, sex, DOB, Place of Birth, Island of birth) and Address (Atoll, Island, District and house name), ID number of Father, Mother and Paternal grandfather (Name, address and DOB). | Approver                       | 1 min  |
| 4.2      | DNR approver approves the information.   | DNR approver                   | 10sec  |
| 4.3      | If any discrepancy, DNR data entry staff is asked to correct and again goes back to verifier.  |                                |        |
| <b>5</b> | <b>Registration completed/ Issue birth certificate (6 hrs – 1 day)</b>   |                                |        |
| 5.1      | Council data entry staff checks GEMEN to see if ID number is assigned and start process to issue birth registry and birth certificate.   | Council GEMEN data entry staff | 5 min  |
| 5.2      | Council data entry staff checks all fields (birth date (Luna-hijree & Gregorian -meelaadhee), child, mother father, grandfather, house address, ID card number.  | Council GEMEN data entry staff | 5 min  |
| 5.3      | Council data entry staff takes a print of the birth registry and birth certificates and takes to verification staff.   | Council GEMEN data entry staff | 5 min  |
| 5.4      | Council verification staff checks all information and gives okay.  | Council staff (verifier)       | 5 min  |
| 5.5      | MCC senior staff (designated to sign birth registry and certificate) signs the certificate.  | Council Section Head           | 3-5min |



|      |   |                                |           |
|------|---|--------------------------------|-----------|
| 5.6  | Council data entry staff places council seal and revenue stamp.   | Council GEMEN data entry staff | 10-15 min |
| 5.7  | Council data entry staff enters the date of completion on the application form.   | Council GEMEN data entry staff | 3-5 min   |
| 5.8  | One copies of the registry and certificate filed at Council's archive.  | Council GEMEN data entry staff | 5 min     |
| 5.9  | The copy of application form and copy of signed birth certificate is sent to citizens registration for listing in the household register. Household register staff will enter the new child to the register (data entering/checking/signing).                     | Council GEMEN data entry staff | 3-5 min   |
| 5.10 | Council data entry staff informs the applicant that registry and certificate is ready for collection.   | MCC data entry                 | 2 min     |
| 5.11 | Issue the birth registry and certificate to family. MCC reception staff issues the birth certificate to anyone who bring the fee payment slip at application. If slip is lost, issue the registry and certificate only if the come with mother or father ID card. | Council GEMEN data entry staff | 3 -5 min  |
| 5.12 | Family collects the birth registry and certificate.   | Council GEMEN data entry staff |           |
| 5.13 | Council reception staff records and attaches the slip of issuance of the birth registry and certificate.  | Council GEMEN data entry staff |           |
| 5.14 | Council reception notes the date of issue on the original application and sent to council record keeping.   | Council GEMEN data entry staff | 1 min     |



## 2.2 Birth registration process of events occurring at home

The birth registration process for births occurring at home and outside of health facilities follows the same process as births occurring at health facilities. To proceed with registration, each baby delivered at home must be brought to the nearest health facility which triggers the registration process as described above. While the process remains largely the same, some steps are omitted or done differently. For example, steps 1.21 and 1.22 are not implemented as the information on the birth attendant is not entered. Also, medical data relating to the birth event otherwise available on the health facility record is not entered in the case of births at home.

## 2.3 Death Registration Process of events occurring in health facilities

**Table 2: Death Registration Process of events occurring in health facilities and at home**

|                        | As-is Process Description  | Who (name of unit/section, institution) | Time taken (days/hours/minutes) |
|------------------------|--|---|---------------------------------|
| <b>Name of process</b> | <b>Death certification</b>   |   | <b>6-8 hours</b>                |
| <b>Process actors</b>  | <p><b>Direct actors:</b> health facility, Island Council, Family member (Family), Department of National Registration (DNR).</p> <p><b>Indirect actors:</b> National Centre for Information Technology (NCIT), Local Government Authority (LGA), family court, gender ministry, embassies/ Foreign ministry, Islamic ministry, National Bureau of Statistics (NBS), Ministry of Health (MoH), Maldives Police Services (MPS). Police Services (MPS).</p> |   |                                 |
| <b>Process purpose</b> | To ensure that every death is declared, MCCOD completed and issued death form before burial process specified by law.  |   |                                 |
| <b>Triggers</b>        | Declaration of death by a medical practitioner.  |   |                                 |



| 1   | Prepare death notification  |               |           |
|-----|---|---------------|-----------|
| 1.1 | Doctor declares the death and records it on the medical record form (even if death occurs somewhere else such as home or on a boat, body is brought to health facility for declaration of death).                         | Doctor        | 2 min     |
| 1.2 | After declaring death, nurse/doctor requests ID card of the deceased and that of informant from the family (Makes copy of the ID card/ or records the details on paper).  | Nurse/ Doctor | 2 min     |
| 1.3 | Family provides identity documents and clarifies any questions nurse or doctor has on the identity details.   | Family        | 1-2 hours |
| 1.4 | Nurse/doctor make copy of the identity documents and/or notes the details on paper.   | Nurse/Doctor  | 2 min     |
| 1.5 | If identity is not known or police case, subprocess to fill in the medicolegal forms and reporting.   | Doctor        | 10 min    |
| 1.6 | Doctor/Nurse logs into the GEMEN portal and select Deceased tab from death records tab (user access controlled) - the user is different in different wards, health facilities - customised to their operational capacity. | Nurse/Doctor  | 3-5 min   |
| 1.7 | Refresh the date period and select "create death record".   | Nurse/Doctor  | 10 sec    |
| 1.8 | Select Yes or No to the question on "ID card produced". If no ID card/PP move to generate death registration number.  | Nurse/Doctor  | 10 sec    |
| 1.9 | Select nationality and if Maldivian, enter ID card number.  | Nurse/Doctor  | 10 sec    |

|      |   |              |         |
|------|---|--------------|---------|
| 1.10 | Select fetch (the system fetches from DNR database NARES the date of birth, name and address.<br>If system doesn't fetch, enter these details from ID card).  | Nurse/Doctor | 1 min   |
| 1.11 | If deceased is a foreigner enter Nationality and Passport number, (system can fetch other details if in the system, if not enter date of birth, name, address).                                       | Nurse/Doctor | 2-3 min |
| 1.12 | Create death registration number (generated from the system – if using manual forms number is taken from the register at health facility and entered manually).                                       | Nurse/Doctor | 30 sec  |
| 1.13 | Enter the religion and marital status of the deceased and number of children.   | Nurse/Doctor | 2-3 min |
| 1.14 | Enter occupation (choose from a list in the system – can also add other and enter text) and place of work and move to next. If occupation not known move to next step.                                | Nurse/Doctor | 2-3 min |
| 1.15 | Next enter the father's information of the deceased. Select father's nationality.   | Nurse/Doctor | 3-5 min |
| 1.16 | If local, select Yes or No to the question on "ID card produced" and if No go to next step to enter deceased's mothers details).  | Nurse/Doctor | 3-5 min |
| 1.17 | If local, enter ID card number.   | Nurse/Doctor | 3-5 min |
| 1.18 | Click fetch to get the identify details, the date of birth, name and address from the DNR system.<br>If not enter these details.  | Nurse/Doctor | 3-5 min |
| 1.19 | If father is a foreigner enter Nationality and Passport number, (system can fetch other details if the person was previously entered in the GEMEN system, if not enter date of birth, name, address). | Nurse/Doctor | 3-5 min |



|      |  |              |        |
|------|--|--------------|--------|
| 1.20 | Next, enter the mother's information of the deceased. Select mother's nationality.   | Nurse/Doctor | 3-5min |
| 1.21 | If local, select Yes or No to the question on "ID card produced" and if No go to next step to enter deceased's informant's details).   | Nurse/Doctor | 3-5min |
| 1.22 | If local, enter ID card number.  | Nurse/Doctor | 3-5min |
| 1.23 | Click fetch to get the identify details, the date of birth, name and address from the DNR system. If not enter these details.  | Nurse/Doctor | 3-5min |
| 1.24 | If mother is a foreigner enter Nationality and Passport number, (system can fetch other details if the person was previously entered in the GEMEN system, if not enter date of birth, name, address).    | Nurse/Doctor | 3-5min |
| 1.25 | Next enter the informant's information of the deceased. Select informant's nationality.  | Nurse/Doctor | 3-5min |
| 1.26 | If local, select Yes or No to the question on "ID card produced" and if No, go to next step - MCCOD).  | Nurse/Doctor | 3-5min |
| 1.27 | If local, enter ID card number.  | Nurse/Doctor | 3-5min |
| 1.28 | Click fetch to get the identify details the date of birth, name and address from the DNR system. If not enter these details.   | Nurse/Doctor | 3-5min |
| 1.29 | If informant is a foreigner enter Nationality and Passport number, (system can fetch other details if the person was previously entered in the GEMEN system, if not enter date of birth, name, address). | Nurse/Doctor | 3-5min |

| 2    | Medical certification of cause of death (MCCOD)   |        |         |
|------|---|--------|---------|
| 2.1  | Doctor who declared death enters death details in GEMEN. Select Death certification tab.  | Doctor | 1 min   |
| 2.2  | Doctor enters date (English and Arabic dates) and time of death.  | Doctor | 1 min   |
| 2.3  | Doctor enters the category of death (infant, child, maternal, still birth, neonatal, other).  | Doctor | 1 min   |
| 2.4  | Doctor fills Part A of the MCCOD (other significant conditions contributing to the death but not related to the disease or condition causing it) and Part C (duration of each condition contributing to death). | Doctor | 3-5 min |
| 2.5  | Doctor completes Part B of MCCOD - other underlying conditions of the deceased not directly related to the leading cause of death contributing to the death).   | Doctor | 3-5 min |
| 2.6  | Doctor enters other medical data (surgery in last month, if so, date and reason for surgery).   | Doctor | 3-5 min |
| 2.7  | Complete Yes or No for the question on "was autopsy requested", if yes, was the findings used in death certification - select yes or no.  | Doctor | 1 min   |
| 2.8  | Select Manner of death (disease, accident, assault...).   | Doctor | 1 min   |
| 2.9  | If external cause or poisoning, enter date of injury and specify cause or poisoning agent and place of occurrence.  | Doctor | 2 min   |
| 2.10 | If foetal or infant death, add type of pregnancy, hour survived, gestation, birth weight, age of mother.  | Doctor | 2 min   |



|      |  |        |         |
|------|--|--------|---------|
| 2.11 | If perinatal, enter condition of mother that affected the foetus.  | Doctor | 2 min   |
| 2.12 | If the deceased was female, enter if pregnant or not - yes, no or unknown.   | Doctor | 2 min   |
| 2.13 | If the deceased was pregnant complete the duration of pregnancy prior to death - pregnant within 24 days prior to death or at the time of death or prior to 43 days to 1 year prior to death.  | Doctor | 2 min   |
| 2.14 | Doctor who declared death complete certifier 1 bio details – Select nationality.   | Doctor | 1-2 min |
| 2.15 | If local, enter ID card.   | Doctor | 1-2 min |
| 2.16 | Select fetch to get details from DNR records.  | Doctor | 1-2 min |
| 2.17 | If foreigner, enter work permit or passport and enter the identify document number and select fetch. If the details were previous entered in GEMEN, it is fetched. If not enter manually.  | Doctor | 1-2 min |
| 2.18 | Enter designation and place of work of Certifier 1.  | Doctor | 1-2 min |
| 2.19 | If there is a second certifier (in police cases) Complete certifier 2 bio details – Follow same steps as Certifier 1: Select nationality.<br>If local, enter ID card. Select fetch to get details from DNR records.<br>If foreigner, enter work permit or passport and enter the identify document number and select fetch. If the details were previous entered in GEMEN, it is fetched. If not enter manually<br>Enter designation and place of work of Certifier 2. | Doctor | 1-2 min |

|          |   |                        |           |
|----------|---|------------------------|-----------|
| 2.20     | <p>If there is a third certifier (Not usually completed) Complete certifier 3 bio details – Follow same steps as Certifier 1: Select nationality.</p> <p>If local, enter ID card. Select fetch to get details from DNR records.</p> <p>If foreigner, enter work permit or passport and enter the identify document number and select fetch. If the details were previous entered in GEMEN, it is fetched. If not enter manually.</p> <p>Enter designation and place of work of Certifier 3.</p> | Doctor                 | 1-2 min   |
| 2.21     | Take print of the Death certification form (Maru form).   | Doctor                 | 2-3 min   |
| 2.22     | All certifiers sign the document and apply hospital stamp.  | Doctor                 | 5 min     |
| 2.23     | Scan the death registration form and upload (GEMEN).  | Nurse                  | 3-5 min   |
| 2.24     | Take a copy and attach to the patient medical record.   | Nurse                  | 3-5 min   |
| 2.25     | The printed original of the death form is given to the family.  | Nurse                  | 2-3 min   |
| 2.26     | Family receives the Maru form.  | Family                 |           |
| <b>3</b> | <b>Produce burial record</b>  |                        |           |
| 3.1      | Family takes the Death registration form to the cemetery with the body and handover to cemetery staff (Cemetery first steps are recorded on the printed form) – Cemetery is managed by the council. On smaller islands it is the same staff that maintains records at cemetery and council.   | Cemetery record keeper | 1 min     |
| 3.2      | If medicolegal, police also grant permission for burial.  | Police                 | 10-15 min |



|      |   |                              |           |
|------|---|------------------------------|-----------|
| 3.3  | If medicolegal - Record the details of the police officer granting permission (permission granted by, name, designation) and get signature.   | Police                       | 10-15 min |
| 3.4  | If routine, only council grants permission (in medicolegal, in addition to police, council also grants permission.  | Cemetery staff/Council staff | 1-2 min   |
| 3.5  | Record details of council person granting permission granted by, name, designation and get signature.   | Cemetery staff/Council staff | 1-2 min   |
| 3.6  | If the body is to be repatriated, subprocess to keep at mortuary and additional documentation required for international transport of dead body.  |                              |           |
| 3.7  | Cemetery record keeper enters burial details on the form burial registration number, from the register at cemetery (only in one cemetery system is available at cemetery and burial number is autogenerated). | Cemetery staff/Council staff | 2-3 min   |
| 3.8  | Cemetery record keeper enters place of burial, burial registration number, burial date and time.  | Cemetery staff/Council staff | 2-3 min   |
| 3.9  | Cemetery record keeper enters undertaker name and address, burial date and time and signs.  | Cemetery staff/Council staff | 2-3 min   |
| 3.10 | Apply council stamp and take a copy of the form and uploads to the GEMEN and date of upload entered.  | Cemetery staff/Council staff | 2-3 min   |
| 3.11 | Take the copy to the council office to enter into GEMEN (only one cemetery has the system – so entered there).  | Cemetery staff/Council staff | 5-10 min  |
| 3.12 | Original is given to the family and ask to sign receipt for receipt of the death form.  | Cemetery staff/Council staff | 5 min     |

|          |  |                                  |          |
|----------|--|----------------------------------|----------|
| 3.13     | Family received the death form and signs receipt of issuance.  | Family                           |          |
| 3.14     | a. If at council, Council data entry staff logs into GEMEN and choose deceased - list of pending burials viewed.<br>b. If at cemetery, cemetery data entry staff logs into GEMEN and choose deceased - list of pending burials viewed.   | Cemetery staff/<br>Council staff | 2 min    |
| 3.15     | Select burial tab GEMEN and enter burial details - permission granted by, name, designation, place of burial, registration number, undertaker name and address, burial date and time. (Burial registration number can be autogenerated, but usually entered from what is recorded on the printed form/). | Cemetery staff/<br>Council staff | 5-10 min |
| 3.16     | Council data entry staff scans and upload the copy of the signed form to GEMEN and enter date of upload.   | Council data entry staff         | 1 min    |
| 3.17     | Copy is filed in archive.  | Council data entry staff         | 1 min    |
| <b>4</b> | <b>Marking of deceased in the DNR system, NARES</b>  |                                  |          |
| 4.1      | DNR data entry staff log into GEMEN and check for new death records.   | DNR data entry staff             | 1 min    |
| 4.2      | If new records in GEMEN DNR data entry staff checks ID details, Name, and permanent address is verified (cross check against ID card data-base NARES).   | DNR data entry staff             | 5 min    |
| 4.3      | DNR checks for upload of signed certification and burial document.   | DNR approver                     | 1 min    |



|     |  |                      |           |
|-----|--|----------------------|-----------|
| 4.4 | If not uploaded, get printed copy from Council, asks council and health facility to update GEMEN.  | DNR data entry staff | 1-2 hours |
| 4.5 | Crosscheck ID details on uploaded form with information in NARES.  | DNR data entry staff | 1 min     |
| 4.6 | Scan and upload the copy received from council to GEMEN.   | DNR data entry staff | 2-3 min   |
| 4.7 | Enter deceased status in NARES and upload copy of the death certification form in NARES.   | DNR data entry staff | 1 min     |
| 4.8 | Save the record in NARES.  | DNR data entry staff | 10 sec    |
|     | If death is not entered in GEMEN and hard copy is sent to DNR.   |                      |           |
|     | <p>Enter all the information in Death certificate form to DNR system– NARES:</p> <ul style="list-style-type: none"> <li>- Get Forms via post (if from islands) and health Facilities (if from Male') (have difficulties to get forms on time);</li> <li>- check the forms for any missing fields, if incomplete then call the health facility.</li> </ul> <p>When Deceased ID Number and DOB are entered it will automatically fetch the details (Name and Permanent Address, current address and date of death) (if ID card is not produced Foolhuma form serial number will be needed).</p> <p>Enter the following Data:</p> <ul style="list-style-type: none"> <li>- Deceased information (Death form Number / Occupation / place of work).</li> <li>- Father (Enter ID number if provided. If not enter name and address).</li> <li>- Mother (Enter ID if provided. If not enter name and address)</li> <li>- Informant (Enter ID, Information will provide existing system, DNR).</li> <li>- Details (Enter time of death and cause of death).</li> </ul> | VRS Data entry staff | 11 mins   |

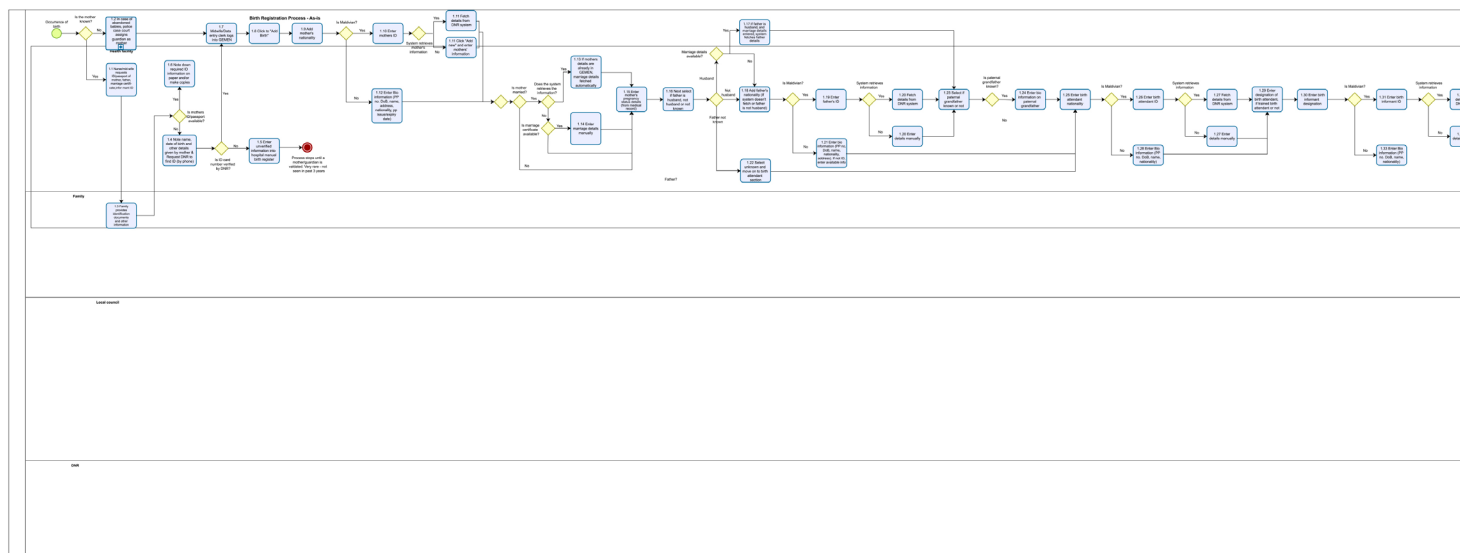
|                |   |  |  |
|----------------|---|--|--|
|                | <ul style="list-style-type: none"> <li>- Certifier (Enter ID and Designation Official Address); and</li> <li>- Upload signed Death certificate form (upload the physical form as it is), (if the copy is not clear get a clear copy from the health facilities, councils or family members).</li> </ul> |  |  |
| Process output | Death certified and registered in the GEMEN system, copy handed over to the concerned person and updated in NARES.  |  |  |
| Date created   | 22.02.2021  |  |  |

## 2.4 Death registration process of deaths occurring at home and abroad

In Maldives, deaths can occur at hospital or at home. Those who die at home are transported to the nearest health facility to be certified by a doctor before burial can take place. Indeed, a death certificate is required for burial. Maldivians who die abroad are also registered in the country and this can happen in two ways. First, once a person dies, their body is repatriated back to Maldives, certified by a doctor and the information is entered into the GEMEN system. The registration process is then the same as that of a person who died in the country. The second way process requires the relatives of the deceased to bring the death certificate to the DNR/City Council, where it is entered into the GEMEN system.

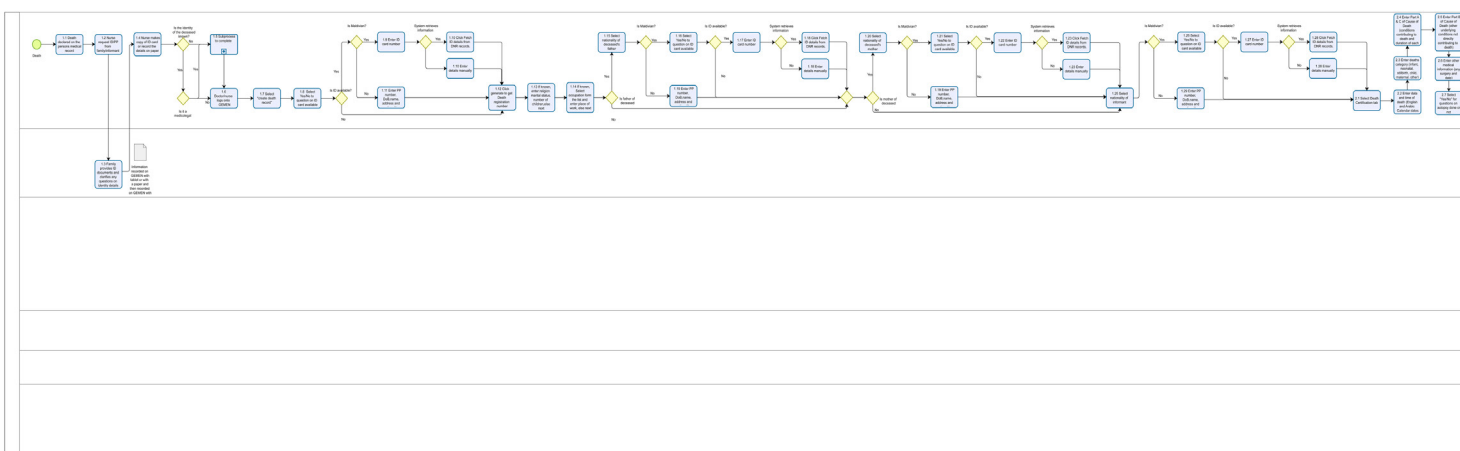


**Figure 1: Birth registration process map**



For a clearer view of the process, please consult **Attachment 1\_Birth registration process\_as-is**.

**Figure 2: Death registration process map**



For a clearer view of the process, please consult **Attachment 2\_Death registration process\_as-is**.



# 3

## KEY PERFORMANCE INDICATORS AND PROCESS ANALYSIS

In line with the Framework methodology, the development of key performance indicators (KPIs) are a central element of the analysis and redesign of the registration processes. KPIs are the metrics used to measure the performance of the CRVS business process. By defining KPIs, Maldivian CRVS stakeholders established references for monitoring progress towards specific targets.

The discussions among the stakeholders focused on determining the below elements of the CRVS-System Analysis and Redesign tool. The determination of these elements allowed the stakeholders to document the root causes of performance issues and the redesigns to address those root causes. In the process, for each defined KPI, the stakeholders determined:

- Baseline performance - the level of current performance that was compared to target performance levels to test if the performance of the as-is process meets expectations.
- Data Collection methods/sources - the source of the data used as the baseline level for the KPI, such as a previously completed comprehensive or rapid assessment, vital statistics report, etc.
- Desired target - the desired level of performance of the CRVS business process for a particular KPI. The target will be determined using the vision and mission of the CRVS system, relevant legislation or policies, and/or senior decision-makers in the CRVS System
- Performance issues - a substantial gap between the current or as-is performance of the CRVS business process and the desired target performance indicates a performance issue that needs to be addressed as part of the improvement effort.
- Root causes - the fundamental contributory factor or factors leading to the poor performance of the CRVS business process for the relevant KPI, identified using a root case analysis. If the root cause is resolved, the performance issue is less likely to recur.
- Root cause category - this is the classification of root causes as they relate to a process or organizational capability (i.e. policies, laws, and regulations; management and coordination; human resources; physical infrastructure; and/or information technologies).
- Redesign ideas - recommendations and ideas to resolve the root causes of any performance. Redesign ideas were used to discuss and agree on improvement policies that are explained at greater level of detail in the section 4 – Improvement policies.

**Table 3: Key Performance Indicators**

| KPI   | Baseline information  | Data collection methods/sources | Desired target   | Performance issues   | Root causes | Root causes category | Redesign ideas  |
|---|---|---------------------------------|--|--|-------------|----------------------|---|
| <b>Not all verifications can be completed in time to issue birth certificates within three days</b>                   | Local council statistics on time required to process birth registration records | Local council                   | <b>Verify all information within 3 days</b>  | <p>Time it takes to get an ID number from DNR.</p> <p>Foreign births-country not listed in the system.</p> <p>Fathers details not provided.</p> <p>Not enough space to write address.</p> <p>System can't view the entered forms.</p>  |             |                      | <p>Link marriage records with GEMEN and digitize the marriage records from the Atolls as well. Have a function to verify identity with DNR (NARES) data</p> <p>Health facility enters personal data and verifies IDs of mother and father as well as their marriage certificate. Where ID/passport could not be verified in DNR (i.e. foreign documents) a copy of presented document is uploaded in the system. Parent's mobile phone number recorded. Parents receive Foolhumaa form. Registration notification with all recorded information communicated electronically (via GEMEN) to city council for follow-up. At the council, if all data is correct with evidence from GEMEN that prior notifications have been completed, the event is registered and SMS is sent to a parent indicating that the registration has been completed and the certificate can be collected at the parent's convenience. If further documentary evidence is required, an SMS is sent requesting parents to submit missing evidence.</p> |
| <b>Average time taken to issue birth certificate from the moment the application is submitted to the city council</b> | Estimated at 3 days total   | Local council                   | <b>Reduce time taken to issue birth certificate within 1 day or a single visit to the local council.</b> | <p>Birth certificate can be issued only after giving an ID number. Some delays are experienced if parents are not using approved names, but mostly due to how Arabic names are written in Thaana (Dhivehi script). It is not standardised and DNR only accepts the standardised version, thus creating delay in issuing ID number for the child.</p> |             |                      | <p>Develop a database of common Arabic names and approved names and the accepted spellings in Thaana. Link this with the GEMEN module. Migrate data from previous system to GEMEN.</p>  |



|  |                |               |   |  |  |  |
|--|----------------|---------------|---|--|--|--|
| <b>Average time taken to register and issue birth certificate for persons living in social housing flats</b> | Up to one week | Local council | <b>Persons residing in social housing flats provided with a way to register birth at such address</b> | A person cannot be registered under social flats due to legal issues (currently ownership cannot be done due to mortgage). Some internal migrants may not be registered at a household, but in a Dhaftharu (a register maintained by the council). Need approval of the house owner if they can be registered in a particular household. Many pending issues and birth certificate not issued.   | Land and household registry is maintained by the councils, but Dhaftharu are manual paper based registries.                | <p>Digitise household registries and link with birth and death module.</p> <p>Initiate the discussions on introducing in the legislation a provision on temporary household address. This will allow for registering a permanent address but also temporary one for families renting apartments, properties under mortgage, and social flats.</p>  |
| <b>Average time taken to issue ID number for birth certificates received daily from all Councils</b>         | 1 day          | DNR records   | <b>Automatized with reduced number of cases requiring manual follow up</b>                            | <ul style="list-style-type: none"> <li>- In the GEMEN system, mistakes with the name to be corrected and verified again.</li> <li>- Once the ID number is issued, there is no way they can change and verify the record for spelling mistakes.</li> <li>- Delays in attending to such cases by respective authorities (like city councils).</li> <li>- There is no way in the system to alert the cases sent back to each agency to correct the mistake (there is a status for 'remarks' but it is not visible for other agencies. There is a summary in the system that can be viewed by other agencies, but it is not operable)</li> <li>list not categorized, e.g.: Male' city council</li> <li>- cannot select IGMH, treetop etc.</li> <li>- DNR cannot correct info entered by Male' city Council.</li> <li>- Birth form - cannot view district in the printed form.</li> </ul> | GEMEN system not tuned to address all possible eventual problems that might arise as result of problems with entered data. | GEMEN platform should be redesigned to incorporate a wide range of validations and prompts that should be communicated to the local council in real-time as the data is submitted for the allocation of ID number. This should be done with the view to fully automatize the process of assigning ID number. The local council should be ultimately responsible to verify and approve each record entered in the ID database. To operationalize this process GEMEN and NARES should be interconnected, and a software developed to facilitate automatized ID allocation. |

|  |  |  |  |  |  |   |
|--|--|--|--|--|--|---|
| <b>Marriage certificates inspected manually</b>  | Existing birth registration procedures | Health facility and local council feedback | <b>Marriage information verification automatized and records verified in the marriage database</b> | Possibility of mismatching the data. Unverified data entered in the system. Currently there is no system to record marriage. | Marriage information is not recorded in any system.  | Fully digitize and integrate marriage records with GEMEN.   |
| <b>Foreign nationals' residence determined manually by inspecting documents with no possibility of document verification</b> | Existing birth registration procedures | Local council feedback                     | <b>Foreign nationals' residence verified through central system</b>                                | Possibility of mismatching the data. Unverified data entered in the system. Currently there is no system to record marriage. | No systemic approach taken in the past to explore the possibility of integrating immigration records with GEMEN. | Easy access to foreign individual information in the GEMEN should be enabled.<br>To check with immigration if there is any such system that could be integrated with GEMEN.<br>Meetings need to be held to discuss the integration of the work permit system with GEMEN to MED. |

Building on the analysis and improvement policies on overarching key performance indicators (table 3), the core team extended the discussions to address a range of specific performance bottlenecks pertaining to some of the critical aspects of birth and death registration processes. As presented in Table 4, the core team identified these specific issues, analysed the root causes of the issues exacerbating registration bottlenecks, and followed internal consultations to determine potential solutions for resolving the bottlenecks.

**Table 4: Bottleneck issues in the birth process and potential solutions**

| Problem  | Root cause  | Potential solutions  |
|--|---|--|
| <b>At the health facility</b>                    |   |  |
| <b>Mother ID not available</b>                   |   |  |
| Not able to proceed - wait until ID is available | Causes include that ID is lost. However, this is very rare – not encountered in the last 3 years. The system does not have any option to proceed with birth form (Foolhumaa form) without entering a mother's name. | Enter known data for Foolhumaa form with name, address - proceed without ID verification; Can add "pending". Health facility has to update when ID is available.<br><br>Consideration should be given to the way health facilities approach establishing the identity upon admitting mothers |



|  |  |  |
|--|--|--|
|  |  | <p>to maternity wards. It would be useful to verify if the health facility keeps a record of mother's ID from the moment they approach health facility for the first time for neonatal care.</p> <p>The general approach should assume that mother and father's IDs as well as marriage certificates are verified already upon arrival at the health facility. That would allow for faster processing after the birth.</p> <p>Also, a procedure should be devised to register births of abandoned children (foundlings).</p> |
|--|--|--|

### Marriage certificate

|  |   |   |
|--|---|---|
| For married mothers, if the marriage certificate is not available, can only complete Foolhumaa form, but not birth registry/certificate.             | It is a legal requirement to establish legitimacy and lineage in birth registry/certificate. But sometimes families don't have the original marriage certificate and verification and it has to be done manually by calling courts.   | Complete birth form and birth registry without marriage details. Issue temporary birth certificate pending verification of marriage records for all such cases - but in the system it is pending verification. 1 year given to verify marriage certificate.   |
| Original hard copy now required to enter marriage details. If a copy is brought, has to call family court/magistrate court and ask for verification. | Marriage records are not linked to the GEMEN system or NARES system. Also, only the family court in the Male' area maintains an electronic database. Atoll magistrate court records are not in electronic form. The Department of Judicial Administration (JDA) has started to compile all marriage and divorce records in a database – updated to 2019 for atolls and up-to-date for Male' area. But JDA notes a number of | Foolhumaa form should be completed even without the marriage records- remove the field in the birth form but keep it in the registration/birth certificate stage. Establish an Application Programming Interface (API) with the marriage records; either councils enter (if the law allows courts to share that information with local councils) or give the information to courts to enter it and keep it pending verification |

|  |   |  |
|--|---|--|
|  | <p>data quality issues and a need for further verification of the records against hard copies. Marriage and divorce are quite common in the country, so DJA data are not up-to-date – particularly those happening in the Atolls.</p>   | <p>until JDA updates the records. Need to make sure only verified data are shared through the API. Need policy decision to link to NARES or GEMEN. Need data sharing agreements and arrangements for confidentiality. Need to have marriage data entered in the electronic data base and produce marriage/ divorce certificates from the system.</p> |
| <p>Name and other details not consistent with DNR details in the marriage certificate.</p>   | <p>Marriage records data have errors and does not match with the individual's data in the national ID data NARES. This is because marriage records data are manually written on paper before being registered and are thus prone to human errors. At the moment even in Male' area, the family court does not have data links with DNR.</p> | <p>Court's marriage registration needs to be able to fetch data from DNR. Link Family court database with NARES to be able to fetch individual's identity data. Same needs to be put in place with the database at JDA that includes Atolls marriage/ divorce data.</p>  |
| <b>Paternal grandfather</b>  |   |  |
| <p>Name of grandfather written incorrectly - cannot fetch paternal grandfather when this happens - has to go back and ask health facility to correct it.</p> | <p>Councils cannot correct data entered by health facility. Error when entering the name. But this is very rare. Now most of the time the health facility does not enter grandfather details but can proceed to complete Foolhumaa form.</p>  | <p>Even the health facility can skip this field. In the redesign, this field does not need to be in the Foolhumaa form, but in the birth certificate stage.</p>  |
| <b>At the city council</b>   |   |  |
| <b>Childs Name</b>   |   |  |
| <p>Non-approved names.</p>   | <p>Parents have to go to an authorized person to approve the name they want to give the child.</p>  | <p>Awareness of parents.</p>   |



|   |   |   |
|---|---|---|
| Spelling - Dhivehi/English - only Dhivehi and Arabic has to be the same - standardized - English can be anything. | Different approvers write the Arabic name differently in Thaana, so different versions of the same Arabic name have to be approved.<br>There is no government agency given mandate to standardize this. | Islamic ministry to advise the people who they have authorized to approve name to use standards for Thaana script when writing Arabic names. But who standardizes this? No governing mechanism in place yet - need to give this role to DNR by law/ regulation. |
|   |   | To inform all councils and the public about the standards for writing names.  |

### Rahvehivun - household register

|  |   |  |
|--|---|--|
| Male Dhaftharu - if once changed to Dhaftharu, cannot register the child to the original household of the mother/father. | A child can be registered at one of the parents' resident islands. Many parents moved to Male or other bigger islands, but since they don't have a house, their residence at the island of origin entered on a register (Dhaftharu) at the council. But they usually want their children to be registered on their original residential address prior to migration. This is not allowed under current law on residency. | Legal barrier - need to change law/regulations – residency law (Rahvehivumuge Gaannonu - 46/78). |
|--|---|--|

### Mother unknown (abandoned child)

|   |  |   |
|---|--|---|
| The Ministry of Gender, Family and Social Services identifies the guardian and the court appoints the guardian. | Can process the birth form in the system by choosing unknown, but later cannot change when the guardian is appointed. As a result, the form is not processed until the court process is completed. | Option to issue temporary birth certificate without a mother's name. Need change in regulation for this, otherwise have to wait till court appoints the legal guardian. |
| System can choose unknown - and issue register/certificate; but no option to enter guardian/ adopted parent.    | Council cannot enter into the system the name of guardian/ adopted parent.   | Legal barrier to change certificate field.<br>Include option to have fields to add guardian in the redesign.  |

**Table 5: Key issues in the death certification process and potential solutions**

| Problem  | Root cause  | Potential solutions   |
|--|---|---|
| <b>Continued use of printed forms</b>  |   |   |
| Some health facilities don't enter data even when they have access and system is accessible, they continue to send printed form copy to the council and DNR. | Doctors don't see this as their responsibility. They would like clerical support to complete the form and for them to only sign. Need to identify any other factors causing non-compliance. | Have senior management and policy level meeting to implement policy.<br>Session for doctors to make them familiar with the application and assert their accountability on what is on the death certificate. Get clerical staff support for the doctors. |
| Not all health facilities are online yet, so printed forms continue to be made available.  | Health facilities are not connected with e-government network. No clear policy for this. Now relying on VPN for this.   | Speed-up roll out death module access to all hospitals.   |
| <b>Poor quality scan uploaded to GEMEN</b>   |   |   |
| Scans uploaded from some health facilities (particularly at referral hospital - IGMH) are not legible.   | No standardized quality specified. Also, doctors/health facility does not appear to see this as a critical issue.   | Have standards set out for scanning death certificate in the GEMEN user guide.  |
| <b>Double entry of burial data</b>   |   |   |
| Burial approver and undertaker details have to be written on the form and also entered into the GEMEN.   | Form design have all signatures on the last page. This does not allow for separating the burial part.   | Redesign form that does not require duplicate work. Have the burial record part on a separate page.   |
| <b>No formal death registry</b>  |   |   |
| Death certificate is default death registry.   | No legal requirement to produce death registry. The death certificate is also regarded as the death registry.   | Needs to be a legal requirement to have a death registry – included in the draft bill on birth and death registration being sent to parliament.<br>GEMEN has the possibility to produce death registry. Will need to redesign.                          |



| Deaths of Maldivians occurring aboard does not get reported/or reported very later  |  |   |
|---|--|---|
| Foreign ministry reports some deaths if they come to know- but is not consistent. DNR also do media monitoring of Funeral prayer notice to detect deceased Maldivians abroad. | There is no legal requirement to register death. Only for the ID card, by regulation, people need to inform of death and the death certificate is provided for this purpose to DNR.                    | Need legal mechanism that requires family to report.            |
| Poor quality of cause of death data   |  |   |
| Medical cause of death entered is poor with majority being garbage codes.   | The field for cause of death entry are free text and not linked to International classification of disease (ICD) GEMEN system has ICD-10 embedded but is not linked to the death certification module. | Standardize cause of death field with links to ICD-10 in GEMEN. |

Regarding children born to Maldivian and non-Maldivian parents, the Core Team concluded that marriages abroad involving Maldivian nationals experienced significant delays. Depending on the circumstances, the recognition of marriages abroad in the national CRVS system could take from 3 to 12 months. In the meantime, birth registration process is halted. While the overall number of such cases is symbolic, this nevertheless remains a systemic problem that could be addressed through redesigned marriage registration business processes.



## IMPROVEMENT POLICIES

### CRVS Redesign ideas

The Core Team used the as-is analysis process map to identify problems affecting performance of the birth registration and death certification processes. The core team discussed and analyzed the root causes of specific problems to identify possible solutions for the re-design of the two processes (See table 1 and table 2). The core team proceeded with discussing how to translate their redesign ideas into concrete policies facilitating their realization.

The policies for processes redesign were discussed, determined and prioritized by frequency, as well as by expected impact on the performance of the birth and death registration processes. These policies are presented, ranked by implementation priority in tables 6 and 7.

#### 4.1 Birth registration process

1. Linking marriage records with the GEMEN system to enable the timely verification of records.
2. Linking the household register with the GEMEN system.
3. Completing collection of key parental information and automating verification of identity/marriage data already at the health facility to eliminate parental follow-up when records are communicated to the city council.
4. Standardizing the Dhivehi spelling of approved Arabic names written in Thaana script.
5. Linking the GEMEN and NARES systems to automate unique identification number assignments to newborn children.
6. Fully integrating immigration records and the work permit system with the GEMEN system.

First, linking marriage records with GEMEN will require updating the marriage records of the Atolls in the Department of Judicial Administration's database, as well as verifying the identity data with the Department of National Registration's NARES database. Furthermore, data sharing requirements and agreements will need to be established through legislation. Currently, the proposed birth and registration bill provides this opportunity for establishing such data sharing requirements.

Additionally, the Ministry of Health (MoH) holds the mandate to review and revise the fields in the birth form and the MoH can proceed without necessary policy approvals from the respective stakeholder agencies. Once MoH finalizes the fields for the birth form and birth registry, the National Center for Information Technology will be able to implement the necessary changes in the GEMEN system. For this to happen the current regulations would need to be amended or new regulations introduced with the goal of appointing DNR as the agency in charge of developing the standardization of transcribing names in Thanna font.

The redesign ideas require changes to regulations and may take some time. However, linking marriage records can be initiated through a data sharing agreement with the necessary nondisclosure requirements. Once this information sharing can begin, the stakeholders can establish an application programming interface which will be a quick win and represent a significant step towards increasing performance.

**Table 6: Birth registration improvement policies ranked by priority**

| No. | Ranking of priority policies   | Description   | Benefit  |
|-----|--|---|--|
| 1   | Linking GEMEN with NARES platforms.                                  | Enable automatized issuance of ID (in most cases) in the process of birth registration.   | The time period required to generate ID for newborn would be reduced significantly.  |
| 2   | Digitizing marriage records and linking them with GEMEN.             | Enables marriage records verification already at the health facility for Maldivian citizens.  | Facilitates verification of marriage information and enables completing verification already at the health facility. Removes the requirement to repeat the same verification process at the later stages of birth registration process.  |
| 3   | Digitize household records and link them with GEMEN.                 | Enables parents to verify and assign the household address to the newborn already at the health facility or later at the local council. | Facilitates assigning and verification of address information and enables completing verification already at the health facility. Removes the requirement to repeat the same verification process at later stages of the birth registration process.                                       |
| 4   | Link GEMEN with immigration records or work permit digital database. | Enables verification of identity data of foreign citizens parent(s) already at the health facility.                                     | Facilitates verification of identity information of resident non-nationals and enables completing verification already at the health facility. Removes the requirement to repeat the same verification process at later stages of the birth registration process.                          |
| 5   | Abolish or redesign registration form.                               | Registration notification transmitted electronically to local council.  | No need to wait for family to come and register the event. The notification is communicated instantly, if all verifications completed at the health facility, finalize registration and call parents to collect the certificate. Request documentary evidence from the family as required. |



|   |  |   |  |
|---|--|---|--|
| 6 | Islamic ministry to advise the public who they have authorized to approve name to use standards for Thaana script when writing Arabic names. No governing mechanism in place yet - need to give this role to DNR by law/regulation.                            | Ensure that name of newborn complies with relevant naming legislation and are spelled accurately.     | Full compliance with the naming legislation ensured and consistency in spelling of identity information ensured across different platforms.                                |
| 7 | <i>(Where mother ID not available when reporting to the health facility for birth)</i><br><br>Enter known data for Foolhumaa form with name, address - proceed without ID verification; Can add "pending". Health facility has to update when ID is available. | Allow to proceed with birth notification and registration until the issue of mother's ID is resolved. | Enable to proceed with the "provisional" registration until ID data of mother is established.  |
| 8 | <i>Mother unknown (abandoned child)</i><br><br>Institute an option to issue temporary birth registry without a mother's name. Need change in regulation for this, otherwise have to wait until court appoints legal guardian.                                  | Allow registration of children that have been found with no information of mother.                    | Child is recognized by the state and has identity. The special case of temporary registration would allow for changing parent/guardian information after court's decision. |

## 4.2 Death registration process

1. Re-structuring the death form to enable separate entry of burial data.
2. Creating a death registry in the GEMEN system
3. Standardizing cause of death field in GEMEN and linking with ICD-10 tables

Restructuring the death certificate form will require the MoH to review and approve any such changes. Once MoH approves the change, NCIT will be able to implement the necessary changes in the GEMEN system. Linking cause of death fields with ICD-11 tables will also require approval from the MoH. Moreover, creating a death registry is also possible within the GEMEN system and once the policy is finalized NCIT could start, particularly when this is already in the proposed birth and death registration bill. All these are possible quick wins as it does not require additional cost and can be done quickly with consensus from the core team and approval of the MoH.

**Table 7: Death registration improvement policies ranked by priority**

| No. | Ranking of priority policies  | Description  | Benefit  |
|-----|---|--|--|
| 1   | Standardize cause of death field in GEMEN linking with table of ICD-10. | Enable drop-down menu in GEMEN system to select the cause of death as per the standard.                                    | Standardised application of cause of death ensured across all death registration records.  |
| 2   | Creating of the death register in the GEMEN system.                     | Data subset in GERMIN created, from which at any point death certificate can be printed at any local council upon request. | Duplicate death certificate can be printed if ever required for legal purposes including at the nearest local council. Generation of vital statistics further facilitated. |
| 3   | Re-structuring of the death form.                                       | Enable separate entry of burial data.  | Completion of the death form at the cemetery facilitated.  |



## 5

## REDESIGNED BUSINESS PROCESSES

This section provides detailed description of redesigned business process. The processes as described in tables 8 and 9 will emerge as result of the implementation of all improvement policies. As policy improvements will be based on the established priority, all elements of redesigned processes will not be implemented at once though. That means that new elements of the redesigned processes will be added gradually as the conditions for their implementation are in place. The redesigned business processes provide a blueprint and the guidance for the adoption and practical implementation of the determined improvement policies.

**Table 8: Redesigned birth registration process**

(text highlighted in red points to the new elements of the process introduced as part of the process redesign)

|                        | Redesigned Process Description  | Who (name of unit/section, institution) | Time taken (days/hours/minutes) |
|------------------------|---|---|---------------------------------|
| <b>Name of process</b> | Birth registration at health facility   | City Council (MCC) - Vital Registration |                                 |
| <b>Process actors</b>  | <b>Direct actors:</b> health facility, Family member (Family), Department of National Registration (DNR).<br><b>Indirect actors:</b> National Centre for Information Technology (NCIT), Local Government Authority (LGA), family court, gender ministry, embassies/Foreign ministry, Islamic ministry, National Bureau of Statistics (NBS), Ministry of Health (MoH), Maldives Police Services (MPS). |   |                                 |
| <b>Process purpose</b> | To ensure that every birth is declared to the local council within the period specified by law for timely registration, is registered and certified.  |   |                                 |
| <b>Triggers</b>        | Formal report of the occurrence of the birth - Birth Record Form completion (includes still births, abortions)  |   |                                 |

| 1   | Notify Birth (1 day)   |  |             |
|-----|--|--|-------------|
| 1.1 | When mother is known (as in regular situations delivery at health facility, home or anywhere else but not abandoned baby), collect ID card/passport of mother, fathers, marriage certificate and informant ID (if informant is different to mother or father) [In case the delivery is not at health facility, baby is always brought to health facility for completing birth record]. If any problem with the system, help desk at the national centre for information technology supports the health facilities. | Clerk if caesarean, else Midwife attending birth | 1 - 3 hours |
| 1.2 | If mother is unknown (abandoned babies), sub-process is initiated by the Police and family protection services. The court assigns a legal guardian and is recorded as the parent (mother or father). Obstetrician's assessment of the baby is used to determine birth date and condition of the baby.  | Clerk/ Mid-wife                                  | 3-7 days    |
| 1.3 | Family provides the ID documents of mother (and father) (or in cases when family does not have them, for locals DNR verifies based on information provided).   | Family   | 1 - 2 hours |
| 1.4 | When ID is not presented, note name, date of birth and other details given by mother & Request DNR to find ID (by phone).  | Clerk/ Mid-wife                                  | 1-3 hours   |
| 1.5 | If DNR cannot verify, cannot proceed with birth form - record all known information on the birth register at the health facility - once ID number for the mother is available, the details are entered in the system (all births entered in the GEMEN are also recorded in the register).  |  |             |
| 1.6 | When ID is available (or DNR verifies ID based on the information provided), note down required ID information on paper and/or make copies (depends on the health facility) and return originals to the family.  | Clerk/ Mid-wife                                  | 5 min       |
| 1.7 | Login into the GEMEN portal (only select personnel have access).   | Clerk/ Mid-wife                                  | 3 min       |
| 1.8 | Select birth registration tab in GEMEN portal and select "Add birth".  | Clerk/ Mid-wife                                  | 10 sec      |
| 1.9 | Enter mother's nationality information.  | Clerk/ Mid-wife                                  | 10 sec      |



|      |  |                    |                   |
|------|--|--------------------|-------------------|
| 1.10 | If Maldivian, enter mothers ID number.   | Clerk/<br>Mid-wife | 30 sec            |
| 1.11 | Select “fetch” for GEMEN system to automatically fill in identity information of the mother.   | Clerk/<br>Mid-wife | 30 sec<br>(1 min) |
| 1.12 | If foreigner, enter passport number.   | Clerk/<br>Mid-wife | 1 min             |
| 1.13 | GEMEN connects to the immigration or work permit data-base and fetch identity data.  |                    |                   |
| 1.14 | Enter contact details (email and/or mobile phone number) of mother<br>Assign mother’s contact details as primary or secondary contact.   | Clerk/<br>Mid-wife | 10 sec            |
| 1.15 | Click next to enter mother marriage status at the time of delivery.  | Clerk/<br>Mid-wife | 10 sec            |
| 1.16 | GEMEN system connects to marriage records database and fetch marriage record information.  |                    |                   |
| 1.17 | If the system does not fetch (and for foreigners), enter the details available (marriage cert number, date of marriage, husband name) as provided by the family.   | Clerk/<br>Mid-wife | 10 sec            |
| 1.18 | GEMEN system flags marriage record a) verified or b) not.  |                    |                   |
| 1.19 | Next enter mother’s pregnancy status details (age at first marriage, age at first pregnancy, total number of live births, total still births, total abortions, total deliveries, total pregnancies) - this detail is taken from medical record and entered manually into the system. | Clerk/<br>Mid-wife | 1 min             |
| 1.20 | Click next to enter father’s details – first chose husband or Not husband or Unknown (husband can be chosen only if married was entered in mother’s status).   | Clerk/<br>Mid-wife | 10 sec            |
| 1.21 | If father is husband and marriage details entered in previous step, the system fetches ID details automatically.   | Clerk/<br>Mid-wife | 10 sec            |
| 1.22 | If not husband (or system did not fetch), enter nationality of father.   | Clerk/<br>Mid-wife | 30 sec            |

|      |   |                    |        |
|------|---|--------------------|--------|
| 1.23 | If Maldivian, enter ID number of father.  | Clerk/<br>Mid-wife | 10 sec |
| 1.24 | a) Fetch ID details fetched from DNR.<br>b) If the system does not fetch enter other details Date of birth, Name and address of the father as on the ID card.   | Clerk/<br>Mid-wife | 10 sec |
| 1.25 | If father is a foreigner, add passport number, <b>instruct GEMEN to connect the immigration and/or work permit database to verify and fetch identity data</b> . If not fetched, date of birth, name, nationality and address (even if ID is not available enter whatever information is available, like name DoB, address as provided by family). | Clerk/<br>Mid-wife | 1 min  |
| 1.26 | <b>GEMEN system flags father's ID</b><br>a) verified, or<br>b) not verified.  | Clerk/<br>Mid-wife | 10 sec |
| 1.27 | <b>Enter contact details (email and/or mobile phone number) of father</b><br><b>Assign father's contact details as primary or secondary contact.</b>  | Clerk/<br>Mid-wife | 10 sec |
| 1.28 | If paternal grandfather is known,<br>a) enter ID number, and<br>b) select fetch,<br>c) if not enter other details - date of birth, name and address, then select "save and next". Current practice is to collect information on the grandfather only for Maldivians. However, the system is able to record information on foreigners too.         | Clerk/<br>Mid-wife | 10 sec |
| 1.29 | <b>GEMEN system flags grandfather's ID</b><br>a) verified; or<br>b) not verified.   | Clerk/<br>Mid-wife | 10 sec |
| 1.30 | Next enter the birth attendant details – nationality,   | Clerk/<br>Mid-wife | 1 min  |
| 1.31 | If Maldivian, enter ID card number  | Clerk/<br>Mid-wife | 10 sec |



|      |   |                    |        |
|------|---|--------------------|--------|
| 1.32 | If ID card number is in the medical system<br>a) System fetches other details<br>b) If not, fetch from DNR. If not fetched from DNR. enter date of birth, name and address of the attendant   | Clerk/<br>Mid-wife | 1 min  |
| 1.33 | If foreigner enter identity details, if ID/Passport<br><b>instruct GEMEN to connect the immigration and/or work permit database to verify and fetch identity data.</b> If not fetched enter manually.                                 | Clerk/<br>Mid-wife | 1 min  |
| 1.34 | <b>GEMEN system flags if ID of birth attendant</b><br>a) verified; or<br>b) not verified; or<br>c) verified (if foreigner); or<br>d) not verified (if foreigner).   | Clerk/<br>Mid-wife | 1 min  |
| 1.35 | Enter designation of the birth attendant (doctor, nurse, health worker, other) and if trained in midwifery or not and select next.  | Clerk/<br>Mid-wife | 10 sec |
| 1.36 | Next enter the informant details – nationality.   | Clerk/<br>Mid-wife | 10 sec |
| 1.37 | If Maldivian, enter ID card number.   | Clerk/<br>Mid-wife | 10 sec |
| 1.38 | a) System fetches other details if ID card number is in the system),<br>b) if not, enter date of birth, name and address of the attendant.  | Clerk/<br>Mid-wife | 10 sec |
| 1.39 | If foreigner enter identity details - Passport no, <b>instruct GEMEN to connect the immigration and/or work permit database to verify and fetch identity data.</b> If not fetched enter date of birth, name, nationality and address. | Clerk/<br>Mid-wife | 1 min  |
| 1.40 | <b>GEMEN system flags if ID of birth attendant</b><br>a) verified; or<br>b) not verified; or<br>c) verified (if foreigner); or<br>d) not verified (if foreigner).   | Clerk/<br>Mid-wife | 10 sec |
| 1.41 | Next enter birth details and generate birth form number.  | Clerk/<br>Mid-wife | 10 sec |

|      |   |                                |         |
|------|---|--------------------------------|---------|
| 1.42 | Enter birth detail of the newborn: sex, birth type (live birth, still birth, abortion), mode (vaginal caesarean), gestation, birth weight, place of birth, date and time of birth, Arabic birth date. | Clerk/<br>Mid-wife             | 3 min   |
| 1.43 | Insert "chosen name of the child" if declared by parents. If not declared, mark "to be determined".   | Clerk/<br>Mid-wife             | 1 min   |
| 1.44 | GEMEN checks the name if in accordance with the naming legislation and spelling standard from the saved lists.  | Clerk/<br>Mid-wife             | 10 sec  |
| 1.45 | Insert "household residence" for the child. Mark either mother or father household address.   | Clerk/<br>Mid-wife             | 30 sec  |
| 1.46 | GEMEN connects to household register database and fetches the household address data. If different household address declared, mark "to be determined".   | Clerk/<br>Mid-wife             | 10 sec  |
| 1.47 | Select "add child" and Save.  | Clerk/<br>Mid-wife             | 10 sec  |
| 1.48 | Next take a print of the birth form and checks for any mistakes (typos and against medical record).   | Clerk/<br>Mid-wife             | 5 min   |
| 1.49 | If any mistakes the clerk/nurse logs back into the system, select the record and correct the errors in the system, save and print again. First print is destroyed.                                    | Nurse in<br>charge/<br>Midwife | 1 min   |
| 1.50 | Take the form to the mother to sign, then father to sign. If father is not available, signature is not obtained.  | Clerk/<br>Mid-wife             | 1-3 min |
| 1.51 | If father signature was not obtained, the mother is instructed not to sign them at home, but to sign at the local council when making application for birth registration.                             | Clerk/<br>Mid-wife             | 1 min   |
| 1.52 | Birth attendant signs the birth form.   | Midwife<br>attending<br>birth  | 30 sec  |
| 1.53 | Apply hospital/health facility stamp.   | Clerk/<br>Mid-wife             | 3 min   |
| 1.54 | Scan and upload to the GEMEN system and add document date then save.  | Clerk/<br>Mid-wife             | 3 min   |



|          |  |   |          |
|----------|--|---|----------|
| 1.55     | Give the original birth form to the family. and instruct them that they will be contacted to collect the birth certificate or supply additional documentary evidence.  | Clerk/<br>Mid-wife                                    | 5 min    |
| <b>2</b> | <b>Register birth (7-15 days)</b>  |   |          |
| 2.1      | GEMEN data entry staff logs in GEMEN and checks for pending registrations.   | GEMEN data entry, Council                             | 1 min    |
| 2.2      | For birth notification received, collect GEMEN generated summary of data fields not verified and fetched from GEMEN system.  | GEMEN data entry, Council                             | 1 min    |
| 2.3      | Check that the child's name is fetched from and approved by GEMEN.   | GEMEN data entry, Council                             | 1 min    |
| 2.4      | If all data fields have been verified proceed directly to generate ID number (step 3).   | GEMEN data entry, Council                             | 1 min    |
| 2.5      | If some fields are not verified, generate a message/email to parents requesting to come forward and provide documentary evidence for the information that could not be verified/determined at the health facility (attach custom form to submit a request with the required documents attached). | GEMEN data entry, Council                             | 1 min    |
| 2.6      | Family approach council reception with required documentary evidence and submits an application.   | Family/Council reception                              | 1-5 days |
| 2.7      | If some information is available that can be verified by the Council, complete it for the family at reception and accept the application.  | Council reception staff                               | 3-5 min  |
| 2.8      | Council reception accepts the application, ask to pay application fee at reception.  | Council reception staff/ Council fee collection staff | 5 min    |
| 2.9      | Family makes payment at council reception.   | Family member/  | 5 min    |

|          |   |   |           |
|----------|---|---|-----------|
| 2.10     | Issue receipt upon payment.   | Council reception staff /Council fee collection staff | 3-5 min   |
| 2.11     | Council reception staff enters the application in the government administration system (GEMS) and stamp, enter date and number on the hard copy.  | Council fee collection staff                          | 3-4 min   |
| 2.12     | Council reception staff prepares entry list for the day.  | Council reception staff                               | 10-15 min |
| 2.13     | Council reception sends the applications to GEMEN data entry staff.   | Council reception staff                               | 2-3 min   |
| 2.14     | MCC data entry staff inspects the submitted documents and enters data in GEMEN system. if presented information could not be verified at the source database, depending on the type of verification required, the staff follows up with the family and DNR, household register, immigration/work permit authority. MMC data entry staff follow up with the family if proposed child name does not pass regulations compliance test. | GEMEN data entry, Council                             | 3 min     |
| 2.15     | GEMEN verification staff (approver) -checks that all birth records are verified.  | Council staff (Approver)                              | 3 min     |
| 2.16     | If errors, ask the data entry staff to correct.   | Council staff (Approver)                              | 1 min     |
| 2.17     | When birth records with all verifications are completed, a request is made in GEMEN to generate ID number.  | Council staff (Approver)                              | 10 sec    |
| <b>3</b> | <b>Issuing an ID number (1min-1hr)</b>  |   |           |
| 3.1      | GEMEN connects to NARES system.   | Council/DNR systems, NCIT helpdesk                    | 1 min     |
| 3.2      | If submitted data are incomplete, a request is sent to council to rectify inconsistent input.   | Council/DNR systems, NCIT helpdesk                    | 1 min     |



|          |  |                                    |           |
|----------|--|------------------------------------|-----------|
| 3.3      | When all criteria for verification are validated by GEMEN and accepted in NARES, ID number is generated and automatically assigned by NARES. NARES inserts assigned ID into appropriate ID field in GEMEN. | Council/DNR systems, NCIT helpdesk | 1 min     |
| <b>4</b> | <b>Registration completed/ Issue birth certificate (6 hrs – 1 day)</b>   |                                    |           |
| 4.1      | Council data entry staff checks GEMEN to see if ID number is assigned and start process to issue birth registry and birth certificate.   | Council GEMEN data entry staff     | 5 min     |
| 4.2      | Council data entry staff checks all fields (birth date (Luna-hijree & Gregorian-meelaadhee), child, mother father, grandfather, house address, ID card number.   | Council GEMEN data entry staff     | 5 min     |
| 4.3      | Council data entry staff takes a print of the birth registry and birth certificates and takes to verification staff.   | Council GEMEN data entry staff     | 5 min     |
| 4.4      | Council verification staff checks all information and gives okay.  | Council staff (verifier)           | 5 min     |
| 4.5      | MCC senior staff (designated to sign birth registry and certificate) signs the certificate.  | Council Section Head               | 3-5 min   |
| 4.6      | Council data entry staff places council seal and revenue stamp.  | Council GEMEN data entry staff     | 10-15 min |
| 4.7      | Council data entry staff enters the date of completion on the application form.  | Council GEMEN data entry staff     | 3-5 min   |
| 4.8      | GEMEN system generates electronic notification to the household digital record to enter record of a new resident at the specified address.   | Council GEMEN data entry staff     | 30 sec    |
| 4.9      | One copies of the registry and certificate filed at Council's archive.   | Council GEMEN data entry staff     | 5 min     |
| 4.10     | Generate message/email to parents requesting to collect birth certificate.   | MCC data entry                     | 2 min     |
| 4.11     | If not already paid, family completes the payment and collects the pay slip.   | Family/ Council reception          | 5 min     |

|      |   |                                      |         |
|------|---|--------------------------------------|---------|
| 4.12 | Issue the birth registry and certificate to family. MCC reception staff issues the birth certificate to anyone who bring the fee payment slip at application. If slip is lost, issue the registry and certificate only if the come with mother or father's ID card. | Council<br>GEMEN data<br>entry staff | 3-5 min |
| 4.13 | Family collects the birth registry and certificate.   | Council<br>GEMEN data<br>entry staff | 3-5 min |
| 4.14 | Council reception staff records and attaches the slip of issuance of the birth registry and certificate.  | Council<br>GEMEN data<br>entry staff | 3-5 min |
| 4.15 | Council reception notes the date of issue on the original application and sent to council record keeping.   | Council<br>GEMEN data<br>entry staff | 1 min   |

### Redesigned death registration process

**Table 9: Redesigned death registration process**

(text highlighted in red points to the new elements of the process introduced as part of the process redesign)

|                        | Redesigned Process Description  | Who (name of unit/section, institution) | Time taken (days/hours/minutes) |
|------------------------|---|---|---------------------------------|
| <b>Name of process</b> | Death registration  |   |                                 |
| <b>Process actors</b>  | <p><b>Direct actors:</b> health facility, island council, Family members (Family), Department of National Registration (DNR).</p> <p><b>Indirect actors:</b> National Centre for Information Technology (NCIT), Local Government Authority (LGA), family court, gender ministry, embassies/Foreign ministry, Islamic ministry, National Bureau of Statistics (NBS), Ministry of Health (MoH), Maldives Police Services (MPS).</p> |   |                                 |
| <b>Process purpose</b> | To ensure that every death is declared, MCCOD completed and issued death form before burial process specified by law.   |   |                                 |
| <b>Triggers</b>        | Declaration of death by a medical practitioner  |   |                                 |



| 1    | Prepare death notification  |              |           |
|------|---|--------------|-----------|
| 1.1  | Doctor declares the death and record it on the medical record form (even if death occurs somewhere else such as home or on a boat, body is brought to health facility for declaration of death).  | Doctor       | 2 min     |
| 1.2  | After declaring death, nurse/doctor requests ID card of the deceased and that of informant from the family (Makes copy of the ID card/ or record the details on paper).   | Nurse/Doctor | 2 min     |
| 1.3  | Family provides identity documents and clarifies any questions nurse or doctor has on the identity details.   | Family       | 1-2 hours |
| 1.4  | Nurse/doctor make copy of the identity documents and/ or notes the details on paper.  | Nurse/Doctor | 2 min     |
| 1.5  | If identity is not known or police case, subprocess to fill in the medicolegal forms and reporting. For local health facility contacts DNR to see if they can verify identity based on available information. If can be verified by DNR regard as identity known. | Doctor       | 10 min    |
| 1.6  | Doctor/Nurse logs into the GEMEN portal and select Deceased tab from death records tab (user access controlled) - the user is different in different wards, health facilities - customised to their operational capacity.   | Nurse/Doctor | 3-5 min   |
| 1.7  | Refresh the date period and select "create death record".   | Nurse/Doctor | 10 sec    |
| 1.8  | Select "Death in the Maldives" (this is set as default), option to select also available in the system.   | Nurse/Doctor | 10 sec    |
| 1.9  | Select Yes or No to the question on "ID card produced". If no ID card/PP move to generate death registration number.  | Nurse/Doctor | 10 sec    |
| 1.10 | Select nationality and if Maldivian, enter ID card number.  | Nurse/Doctor | 10 sec    |
| 1.11 | Select fetch<br>a) the system fetches from DNR database, the date of birth, name and address.<br>b) If system doesn't fetch, enter these details from ID card).   | Nurse/Doctor | 1 min     |
| 1.12 | If deceased is a foreigner enter Nationality and Passport number, (system can fetch other details if in the system, if not enter date of birth, name, address).   | Nurse/Doctor | 2-3 min   |

|      |   |              |         |
|------|---|--------------|---------|
| 1.13 | Create death registration number (generated from the system – if using manual forms number is taken from the register at health facility and entered manually).   | Nurse/Doctor | 30 sec  |
| 1.14 | Enter the religion and marital status of the deceased and number of children.   | Nurse/Doctor | 2-3 min |
| 1.15 | Enter occupation (choose from a list in the system – can also add other and enter text) and place of work and move to next. If occupation not known move to next step.  | Nurse/Doctor | 2-3 min |
| 1.16 | Mark if identity of father is known or not.   | Nurse/Doctor | 3-5 min |
| 1.17 | If Maldivian,<br>a) select Yes or No to the question on "ID card produced"; and<br>b) if "No" mark identity not known and proceed to the step 1.21 to enter deceased's mother's details.                              | Nurse/Doctor | 3-5 min |
| 1.18 | If local, enter ID card number.   | Nurse/Doctor | 3-5 min |
| 1.19 | Click fetch to get the identify details, the date of birth, name and address from the DNR system. If not enter these details.   | Nurse/Doctor | 3-5 min |
| 1.20 | If father is a foreigner<br>a) enter Nationality; and<br>b) Passport number, (system should fetch other details from GEMEN/immigration/work permit database if available, if not enter date of birth, name, address). | Nurse/Doctor | 3-5 min |
| 1.21 | Mark if identity of mother is known or not  | Nurse/Doctor | 3-5 min |
| 1.22 | If Maldivian,<br>a) select Yes or No to the question on "ID card produced"; and<br>b) if "No" mark identity not known and proceed to the step 1.26  | Nurse/Doctor | 3-5 min |
| 1.23 | If local, enter ID card number.   | Nurse/Doctor | 3-5 min |
| 1.24 | Click fetch to get the identify details, the date of birth, name and address from the DNR system. If not enter these details.   | Nurse/Doctor | 3-5 min |



|          |  |              |         |
|----------|--|--------------|---------|
| 1.25     | If mother is a foreigner<br>a) enter Nationality; and<br>b) Passport number, (system should fetch other details from GEMEN/immigration/work permit database if available, if not enter date of birth, name, address).                          | Nurse/Doctor | 3-5 min |
| 1.26     | Enter the informant's information. Select informant's nationality.   | Nurse/Doctor | 3-5 min |
| 1.27     | If local, select Yes or No to the question on "ID card produced" and if No, go to next step - MCCOD).  | Nurse/Doctor | 3-5 min |
| 1.28     | If local, enter ID card number.  | Nurse/Doctor | 3-5 min |
| 1.29     | Click fetch to get the identify details the date of birth, name and address from the DNR system. If not enter these details.   | Nurse/Doctor | 3-5 min |
| 1.30     | If informant is a foreigner enter Nationality and Passport number, (system should fetch other details from GEMEN/immigration/work permit database if available, if not enter date of birth, name, address).                                    | Nurse/Doctor | 3-5 min |
| <b>2</b> | <b>Medical certification of cause of death (MCCOD)</b>   |              |         |
| 2.1      | Doctor who declared death enters death details in GEMEN. Select Death certification tab.   | Doctor       | 1 min   |
| 2.2      | Doctor enters date (English and Arabic dates) and time of death.   | Doctor       | 1 min   |
| 2.3      | Doctor chooses from the drop-down menu the category of death (infant, child, maternal, still birth, neonatal, other).  | Doctor       | 30 sec  |
| 2.4      | Doctor fills Part A of the cause of death certificate by choosing from the dropdown menu appropriate ICD 10 code for other significant conditions contributing to the death but not related to the disease or condition causing it.            | Doctor       | 1 min   |
| 2.5      | Doctor completes Part B of cause of death certificate by choosing from the dropdown menu appropriate ICD 10 code for other underlying conditions of the deceased not directly related to the leading cause of death contributing to the death. | Doctor       | 1 min   |

|      |   |        |         |
|------|---|--------|---------|
| 2.6  | Doctor fills Part C of the cause of death certificate (duration of each condition contributing to death)  | Doctor | 1 min   |
| 2.7  | Doctor enters other medical data (surgery in last month, if so, date and reason for surgery).   | Doctor | 3-5 min |
| 2.8  | Complete Yes or No for the question on "was autopsy requested", if yes, was the findings used in death certification - select yes or no.  | Doctor | 1 min   |
| 2.9  | Select Manner of death (disease, accident, assault...).   | Doctor | 1 min   |
| 2.10 | If external cause or poisoning, enter date of injury and specify cause or poisoning agent and place of occurrence.  | Doctor | 2 min   |
| 2.11 | If foetal or infant death, add type of pregnancy, hour survived, gestation, birth weight, age of mother.  | Doctor | 2 min   |
| 2.12 | If perinatal, enter condition of mother that affected the fetus.  | Doctor | 2 min   |
| 2.13 | If the deceased was female, enter if pregnant or not - yes, no or unknown.  | Doctor | 2 min   |
| 2.14 | If the deceased was pregnant complete the duration of pregnancy prior to death - pregnant within 24 days prior to death or at the time of death or prior to 43 days to 1 year prior to death. | Doctor | 2 min   |
| 2.15 | Doctor who declared death complete certifier 1 bio details – Select nationality.  | Doctor | 1-2 min |
| 2.16 | If local, enter ID card.  | Doctor | 1-2 min |
| 2.17 | Select fetch to get details from DNR records.   | Doctor | 1-2 min |
| 2.18 | If foreigner, enter work permit or passport and enter the identify document number and select fetch. If the details were previous entered in GEMEN, it is fetched. If not enter manually.     | Doctor | 1-2 min |
| 2.19 | Enter designation and place of work of Certifier 1.   | Doctor | 1-2 min |



|          |  |                        |           |
|----------|--|------------------------|-----------|
| 2.20     | <p>If there is a second certifier (in police cases) Complete certifier 2 bio details – Follow same steps as Certifier 1: Select nationality.</p> <p>If local, enter ID card. Select fetch to get details from DNR records.</p> <p>If foreigner, enter work permit or passport and enter the identify document number and select fetch. If the details were previous entered in GEMEN, it is fetched. If not enter manually</p> <p>Enter designation and place of work of Certifier 2.</p>      | Doctor                 | 1-2 min   |
| 2.21     | <p>If there is a third certifier (Not usually completed) Complete certifier 3 bio details – Follow same steps as Certifier 1: Select nationality.</p> <p>If local, enter ID card. Select fetch to get details from DNR records.</p> <p>If foreigner, enter work permit or passport and enter the identify document number and select fetch. If the details were previous entered in GEMEN, it is fetched. If not enter manually</p> <p>Enter designation and place of work of Certifier 3.</p> | Doctor                 | 1-2 min   |
| 2.22     | Take print of the Death certification form (Maru form).  | Doctor                 | 2-3 min   |
| 2.23     | All certifiers sign the document and apply hospital stamp.   | Doctor                 | 5 min     |
| 2.24     | Scan the death registration form and upload (GEMEN).   | Nurse                  | 3-5 min   |
| 2.25     | Take a copy and attach to the patient medical record.  | Nurse                  | 3-5 min   |
| 2.26     | The printed original of the death form is given to the family.   | Nurse                  | 2-3 min   |
| 2.27     | Family receives the Maru form.   | Family                 |           |
| <b>3</b> | <b>Produce burial record</b>   |                        |           |
| 3.1      | Family takes the Death registration form to the cemetery with the body and handover to cemetery staff (Cemetery first steps are recorded on the printed form) – Cemetery is managed by the council. On smaller islands it is the same staff that maintains records at cemetery and council.  | Cemetery record keeper | 1 min     |
| 3.2      | If medicolegal, police also grant permission for burial (also repatriated bodies of deaths outside Maldives).  | Police                 | 10-15 min |



|      |   |                              |           |
|------|---|------------------------------|-----------|
| 3.3  | If medicolegal - Record the details of the police officer granting permission (permission granted by, name, designation) and get signature.   | Police                       | 10-15 min |
| 3.4  | If routine, only council grants permission (in medicolegal, in addition to police, council also grants permission.  | Cemetery staff/Council staff | 1-2 min   |
| 3.5  | Record details of council person granting permission granted by, name, designation and get signature.   | Cemetery staff/Council staff | 1-2 min   |
| 3.6  | If the body is to be repatriated, subprocess to keep at mortuary and additional documentation required for international transport of dead body.  |                              |           |
| 3.7  | Cemetery record keeper enters burial details on the form burial registration number, from the register at cemetery (only in one cemetery system is available at cemetery and burial number is autogenerated).   | Cemetery staff/Council staff | 2-3 min   |
| 3.8  | Cemetery record keeper enters place of burial, burial registration number, burial date and time.  | Cemetery staff/Council staff | 2-3 min   |
| 3.9  | Cemetery record keeper enters undertaker name and address, burial date and time and signs.  | Cemetery staff/Council staff | 2-3 min   |
| 3.10 | a. If the cemetery has copying set up, apply council stamp and take a copy of the form and uploads to the GEMEN and date of upload entered.<br>b. In smaller islands, original is taken to the council office to apply stamp and take copy of the form and upload to GEMEN. | Cemetery staff/Council staff | 2-3 min   |
| 3.11 | Take the copy to the council office to enter into GEMEN (only one cemetery has the system – so entered there).  | Cemetery staff/Council staff | 5-10 min  |
| 3.12 | Original is given to the family and ask to sign receipt for receipt of the death form.  | Cemetery staff/Council staff | 5 min     |

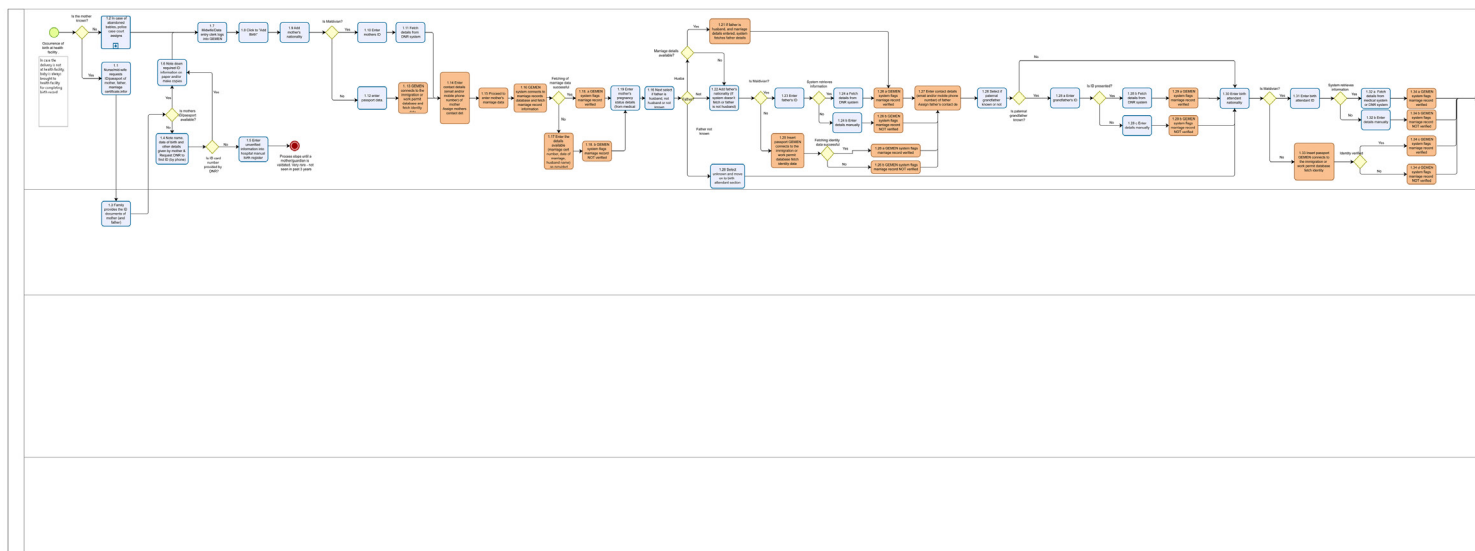


|          |   |                              |            |
|----------|---|------------------------------|------------|
| 3.13     | Family received the death form and signs receipt of issuance.   |                              |            |
| 3.14     | a. If at council, Council data entry staff logs into GEMEN and choose deceased - list of pending burials viewed.<br>b. If at cemetery, cemetery data entry staff logs into GEMEN and choose deceased - list of pending burials viewed.  | Cemetery staff/Council staff | 2 min      |
| 3.15     | Select burial tab GEMEN and enter burial details - permission granted by, name, designation, place of burial, registration number, undertaker name and address, burial date and time. (Burial registration number can be autogenerated, but usually entered from what is recorded on the printed form). | Cemetery staff/Council staff | 5-10 min   |
| 3.16     | Council data entry staff or cemetery staff scans and upload the copy of the signed form to GEMEN and enter date of upload.  | Council data entry staff     | 1 min      |
| 3.17     | Copy is filed in archive.   | Council data entry staff     | 1 min      |
| 3.18     | For Maldivians deceased outside Maldives, family brings the death certificate and burial record to council.   | Family                       | 1-4 months |
| 3.19     | Council data entry staff logs into GEMEN and select "death outside Maldives".   |                              |            |
| 3.20     | Council enters all the available information from the documents into GEMEN (identity details, death certification and burial).  | Council data entry staff     | 5 min      |
| 3.21     | Scans and uploads the death certificate and burial record brought by the family.  | Council data entry staff     | 3 min      |
| <b>4</b> | <b>Marking of deceased in the DNR system, NARES</b>   |                              |            |
| 4.1      | DNR data entry staff log into GEMEN and check for new death records.  | DNR data entry staff         | 1 min      |
| 4.2      | If new records in GEMEN DNR data entry staff checks ID details, Name, and permanent address is verified (cross check against ID card database NARES).   | DNR data entry staff         | 5 min      |
| 4.3      | DNR checks for upload of signed certification and burial document.  | DNR approver                 | 1 min      |

|                       |  |                      |           |
|-----------------------|--|----------------------|-----------|
| 4.4                   | If not uploaded, get printed copy from Council, asks council and health facility to update GEMEN.  | DNR data entry staff | 1-2 hours |
| 4.5                   | Crosscheck ID details on uploaded form with information in NARES.  | DNR data entry staff | 1 min     |
| 4.6                   | Scan and upload the copy received from council to GEMEN.   | DNR data entry staff | 2-3 min   |
| 4.7                   | Enter deceased status in NARES and upload copy of the death certification form in NARES.   | DNR data entry staff | 1 min     |
| 4.8                   | Save the record in NARES.  | DNR data entry staff | 10 sec    |
| 4.9                   | If death is not entered in GEMEN and hard copy is sent to DNR (also the case of deaths of Maldivians occurring outside Maldives).  |                      |           |
|                       | <p>Enter all the information in Death certificate form to DNR system – NARES;</p> <ul style="list-style-type: none"> <li>- Get Forms via post (if from islands) and health Facilities (if from Male') (have difficulties to get forms on time); and</li> <li>- Check the forms for any missing fields, if incomplete then call the health facility.</li> <li>- When Deceased ID Number and DOB are entered it will automatically fetch the details (Name and Permanent Address).</li> <li>- current address and date of death) (if ID card is not produced Foolhuma form serial number will be needed).</li> <li>- Enter the following Data.</li> <li>- Enter deceased (Death form Number / Occupation / place of work).</li> <li>- Father (Enter ID number if provided. If not enter name and address).</li> <li>- Mother (Enter ID if provided. If not enter name and address).</li> <li>- Informant (Enter ID, Information will provide existing system, DNR).</li> <li>- Details (Enter time of death and cause of death).</li> <li>- Certifier (Enter ID and Designation Official Address).</li> <li>- Upload signed Death certificate form (upload the physical form as it is), (if the copy is not clear get a clear copy from the health facilities, councils or family members).</li> </ul> | VRS Data entry staff | 11 mins   |
| <b>Process output</b> | Death certified and registered in the GEMEN system, copy handed over to the concerned person and updated in NARES.   |                      |           |
| <b>Date created</b>   | 02.06.2021   |                      |           |

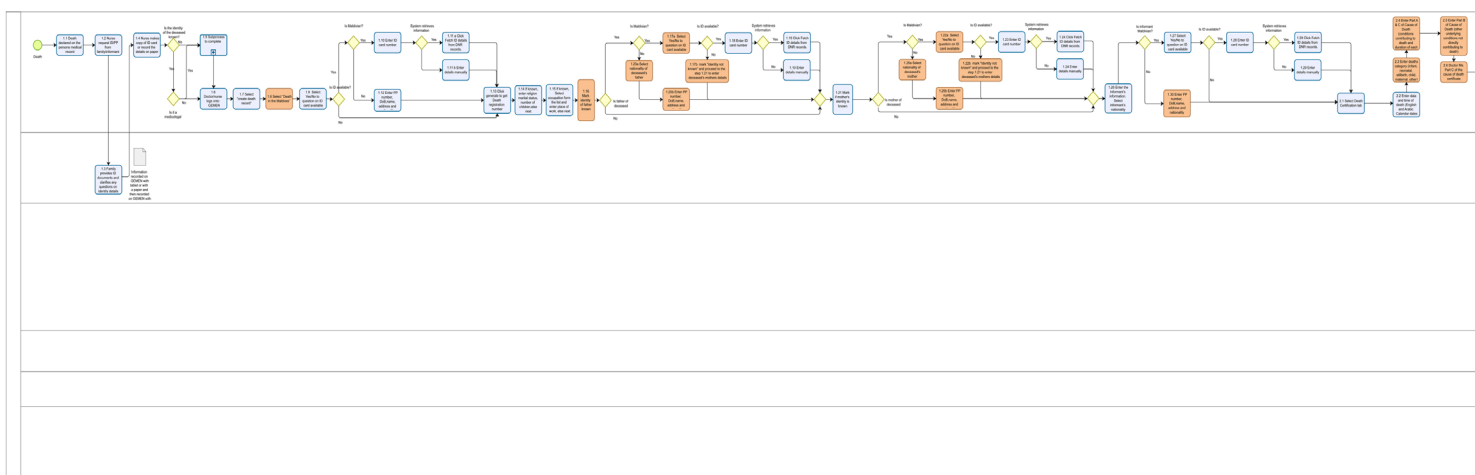


**Figure 3: Redesigned birth registration process map.**

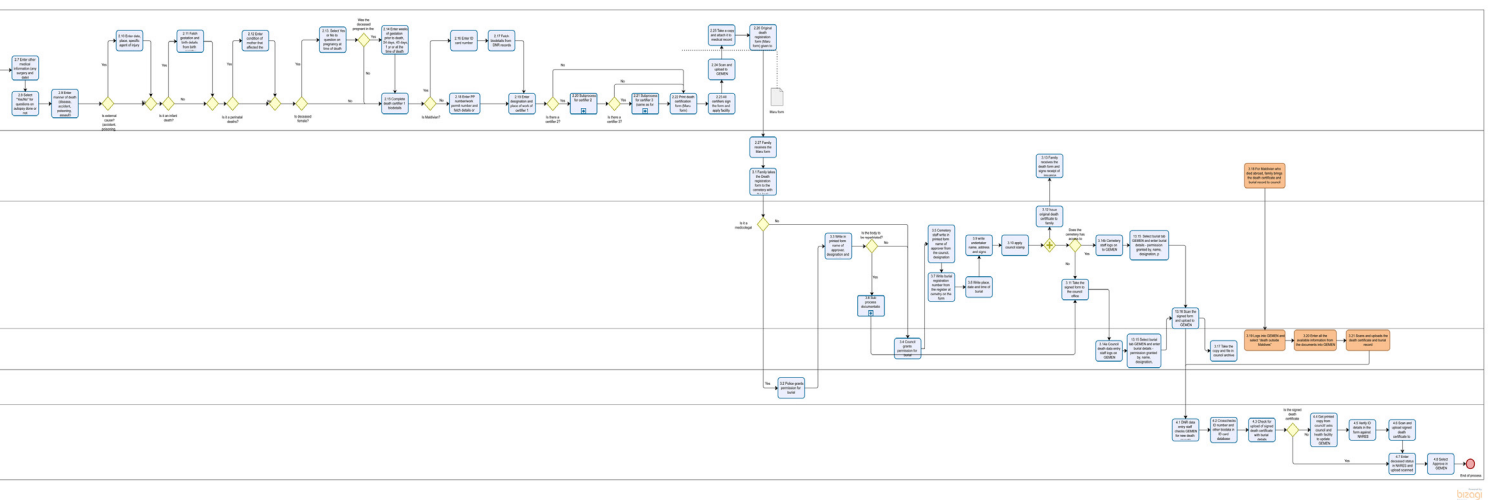
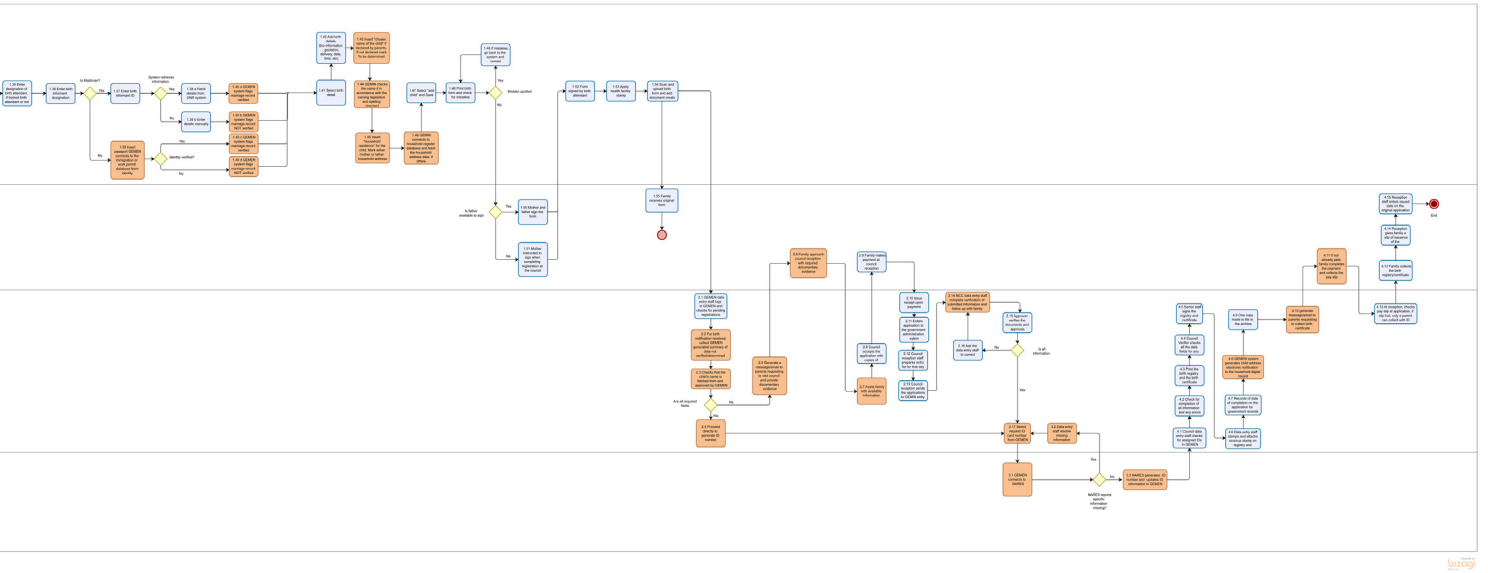


For a clearer view of the process, please consult **Attachment 3\_Birth registration process\_redesigned**.

**Figure 4: Redesigned death registration process map.**



For a clearer view of the process, please consult **Attachment 4\_Death registration process\_redesigned**.



# 6

## CONCLUSION

The assessment, analysis and redesign of the birth and death registration business processes presented in this report is a testimony to the excellent collaboration among stakeholders of Maldives' CRVS system. The report is the result of months of consultations and discussions on challenges and areas of improvements. The discussions were informed by a clear understanding of the entire birth and death registration processes, from the notification of the events to the delivery of the certificates. Indeed, CRVS systems, including the one of Maldives, are under the responsibility of multiple stakeholders. Getting an overall picture of the system is therefore essential for each stakeholder to see how its work contributed to the system.

The CRVS system of Maldives is a well-performing system, registering almost all births and deaths. Moreover, the recently implemented online birth and death platform, GEMEN, facilitates the work of stakeholders and allows for timely registration of births and deaths. Nevertheless, there remain areas of improvements to simplify the registration of births and deaths, both for the families and the government. Some of these improvement policies are more urgent or easier to implement than others. As a result, their implementation will vary based on their priority.

Fortunately, Maldives is in an excellent situation to implement the improvement policies listed in this report. Maldives can take advantage of the ongoing digitization of its CRVS system to modify its business processes with the GEMEN. It can also use the revision of the civil registration act to address some of the existing legal challenges. As a result, some of the improvement policies suggested in this report could be implemented relatively soon. Other improvement policies requiring a data sharing agreement between agencies or the establishment of other registers may be implemented as part of a longer term CRVS improvement strategy. There is therefore an opportunity to apply stage 2 and 3 of the CRVS Systems Improvement Framework.



# ANNEX 1

## Implementation CRVS Business Process Improvement Framework in Maldives Composition of team

### **Ali Salih**

State Minister  
National Centre for Information Technology

### **Mohamed Farish**

Senior Software Analyst  
National Centre for Information Technology

### **Nahza Ibrahim**

Assistant Helpdesk Officer  
National Centre for Information Technology

### **Mariyam Rasheeda**

Assistant Help Desk Officer  
National Centre for Information Technology

### **Moomina Abdullah**

Director  
Ministry of Health

### **Sofoora Kawsar Usman**

Assistant Director  
Ministry of Health

### **Fathimath Riyaza**

Deputy Statistician  
National Bureau of Statistics

### **Ikrisha Abdul Wahid**

Senior Statistical Officer  
National Bureau of Statistics

### **Aminath Ismail**

Assistant Director  
Male' City Council

### **Ameena Mohamed Ali**

Senior Administrative Officer  
Male' City Council

### **Aishath Rasheedha**

Senior Computer Programmer  
Department of National Registration

### **Aminath Shareef**

System Analyst Programmer  
Department of National Registration

### **Hassan Ismail**

Senior System Analyst  
Local Government Authority

### **Aishath Ali**

Project Officer  
Local Government Authority

## ANNEX 2

### List of meetings and consultations

As result of COVID-19 restrictions all groom meetings and majority of bilateral meetings were organized online. Country Coordinator was in daily online/in person contacts with the core team members. Other than consultations between Senior Adviser and Country Coordinator taking place on an ongoing basis, at the milestone points of the project implantation online consultations were held involving Core Team members as follows:

19 October 2020

Meeting with the Deputy Statistician on the composition of the Core Team (online)

10 November 2020

CRVS Business Processes Improvement in Maldives - Introductory meeting/webinar with the Core Team (online)

18 January 2021

Consultations of Key Performance Indicators and As-Is

29 March 2021

Improving birth and death registration business processes in Maldives – ideas for further improve efficiency of the process (online)

8 April 2021

Improving performance of CRVS system in Maldives - plenary meeting of the Core Team – Presentation of As-Is analysis, identified performance issues, business improvement policy discussions, preliminary discussion on the features of redesigned birth and death registration processes (online)

11 May 2021

Improving performance of CRVS system in Maldives - plenary meeting of the Core Team – Presentation and the discussion on redesigned business processes (online)



