DIGITAL BIRTH REGISTRATION IN MALAWI

Technical Analysis Study: strengthening CRVS in Malawi through the appropriate use of digital technologies

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<th>Description</th>
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<tbody>
<tr>
<td>2G</td>
<td>Second Generation of Mobile Technology</td>
</tr>
<tr>
<td>3G</td>
<td>Third Generation of mobile telephony technology</td>
</tr>
<tr>
<td>ADSL</td>
<td>Asymmetric Digital Subscriber Line</td>
</tr>
<tr>
<td>ANC</td>
<td>Antenatal Care</td>
</tr>
<tr>
<td>ACL</td>
<td>Access Communications Limited</td>
</tr>
<tr>
<td>APAI-CRV</td>
<td>Africa Program for the Accelerated Improvement of CRVS</td>
</tr>
<tr>
<td>API</td>
<td>Application Programming Interface</td>
</tr>
<tr>
<td>APN</td>
<td>Access Point Name</td>
</tr>
<tr>
<td>ART</td>
<td>Anti-Retroviral Therapy</td>
</tr>
<tr>
<td>ASC</td>
<td>Annual School Census</td>
</tr>
<tr>
<td>ASSD</td>
<td>Africa Symposium on Statistical Development</td>
</tr>
<tr>
<td>BHT</td>
<td>Baobab Health Trust</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
</tr>
<tr>
<td>CDMA</td>
<td>Code Division Multiple Access</td>
</tr>
<tr>
<td>CHAM</td>
<td>Christian Health Association of Malawi</td>
</tr>
<tr>
<td>CI</td>
<td>Confidence Interval</td>
</tr>
<tr>
<td>CPW</td>
<td>Child Protection Workers</td>
</tr>
<tr>
<td>CR</td>
<td>Civil registration</td>
</tr>
<tr>
<td>CRVS</td>
<td>Civil Registration and Vital Statistics</td>
</tr>
<tr>
<td>DBR</td>
<td>Digital Birth Registration</td>
</tr>
<tr>
<td>DGP</td>
<td>Democracy Governance Program</td>
</tr>
<tr>
<td>DHIS2</td>
<td>District Health information Software 2</td>
</tr>
<tr>
<td>DRO</td>
<td>District Registration Office</td>
</tr>
<tr>
<td>DSWO</td>
<td>District Social Welfare Office</td>
</tr>
<tr>
<td>eBRS</td>
<td>Electronic Birth Registration System</td>
</tr>
<tr>
<td>EDGE</td>
<td>Enhanced Data rates for GSM Evolution</td>
</tr>
<tr>
<td>eDRS</td>
<td>electronic Death Registration System</td>
</tr>
<tr>
<td>EMIS</td>
<td>Education Management Information System</td>
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<tr>
<td>EMR</td>
<td>Electronic Medical Reporting</td>
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<tr>
<td>eMRS</td>
<td>electronic Medical Registration System</td>
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<tr>
<td>EVDO</td>
<td>Evolution Data Optimized</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FGD</td>
<td>Focus Group Discussion</td>
</tr>
<tr>
<td>GHz</td>
<td>Giga hertz</td>
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<tr>
<td>GSM</td>
<td>Global System for Mobile</td>
</tr>
<tr>
<td>GVH</td>
<td>Group Village Headman</td>
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<tr>
<td>HMIS</td>
<td>Health Management Information System</td>
</tr>
<tr>
<td>HQ</td>
<td>Headquarters</td>
</tr>
<tr>
<td>HSA</td>
<td>Health Surveillance Assistant</td>
</tr>
<tr>
<td>HTC</td>
<td>HIV Testing and Counselling</td>
</tr>
<tr>
<td>HTTPS</td>
<td>Hypertext Transfer Protocol over Secure Socket Layer</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communications Technology</td>
</tr>
<tr>
<td>ID</td>
<td>Identification</td>
</tr>
<tr>
<td>IEC</td>
<td>Information, Education and Communication</td>
</tr>
<tr>
<td>iNGO</td>
<td>International Non-Governmental Organization</td>
</tr>
<tr>
<td>ISP</td>
<td>Internet service Provider</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>LAN</td>
<td>Local Area Network</td>
</tr>
<tr>
<td>MALTIS</td>
<td>Malawi Transport Information System</td>
</tr>
<tr>
<td>MASEDA</td>
<td>Malawi Socio-Economic Database</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Form</td>
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<tr>
<td>MEC</td>
<td>Malawi Electoral Commission</td>
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<tr>
<td>MB</td>
<td>Megabytes</td>
</tr>
<tr>
<td>MoH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MoU</td>
<td>Memorandum of Understanding</td>
</tr>
<tr>
<td>MPC</td>
<td>Malawi Postal Corporation</td>
</tr>
<tr>
<td>MTL</td>
<td>Malawi Telecommunications Limited</td>
</tr>
<tr>
<td>MTP</td>
<td>Medium Term Plan</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
</tr>
<tr>
<td>NRB</td>
<td>National Registration Bureau</td>
</tr>
<tr>
<td>NRIS</td>
<td>National Registration Information System</td>
</tr>
<tr>
<td>NSO</td>
<td>National Statistics Office</td>
</tr>
<tr>
<td>OMR</td>
<td>Optical Mark Recognition</td>
</tr>
<tr>
<td>OPC</td>
<td>Office of the President and Cabinet</td>
</tr>
<tr>
<td>OPD</td>
<td>Out Patients Department</td>
</tr>
<tr>
<td>PEPFAR</td>
<td>Presidential Emergency Plan for Aids Relief</td>
</tr>
<tr>
<td>PS</td>
<td>Principal Secretary</td>
</tr>
<tr>
<td>RACS</td>
<td>Remote Access Control System</td>
</tr>
<tr>
<td>Rx</td>
<td>Receiving</td>
</tr>
<tr>
<td>SMS</td>
<td>Short Message Service</td>
</tr>
<tr>
<td>TA</td>
<td>Technical Assistance</td>
</tr>
<tr>
<td>TA</td>
<td>Traditional Authority</td>
</tr>
<tr>
<td>TWG</td>
<td>Technical Working Group</td>
</tr>
<tr>
<td>Tx</td>
<td>Transmission</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNECA</td>
<td>United Nations Economic Commission for Africa</td>
</tr>
<tr>
<td>UNFPA</td>
<td>United Nations Population Fund</td>
</tr>
<tr>
<td>UNHCR</td>
<td>United Nations High Commissioner for Refugees</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Childrens’ Fund</td>
</tr>
<tr>
<td>USSD</td>
<td>Unstructured Supplementary Service Data</td>
</tr>
<tr>
<td>VPN</td>
<td>Virtual Private Network</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>WIFI</td>
<td>Wireless Fidelity</td>
</tr>
</tbody>
</table>
Acknowledgements

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Specialised knowledge of a distinguished reference group further enhanced the study. We would specifically like to acknowledge the contributions of Ms Sophie Kang’oma, Director National Registration Bureau (NRB) and Dr. Sethi Advisor to NRB. We would also like to acknowledge representative staff from stakeholder organisations on CRVS including specialised departments of the Ministry of Home Affairs and internal Security, specifically the NRB, along with Malawi Police Service and Immigration, Ministry of Health, Ministry of Gender, Children, Disability and Social Welfare, the Registrar General, National, the National Statistics Office, and our colleagues at Centre for Disease Control Malawi, Baobab Health, UNICEF, World Vision International, and St. Egidio for their inputs and valuable participation in review meetings. The participation and full involvement of all stakeholder organisations on CRVS reflects all parties’ commitment to strengthen CRVS services in Malawi.
Executive Summary

This report analyses the strengths and weaknesses of the current Civil Registration and Vital Statistics (CRVS) system in Malawi and proposes how digital technologies can be used to increase registration rates, provide legal documentation of all vital events and produce ensuing vital statistics that are complete and accurate.

Malawi has an incredibly low birth registration rate, with only 4.9% of respondents from the survey conducted as part of this study able to provide correct proof of registration (a birth certificate). Strengthening Malawi’s CRVS systems and achieving universal coverage is critically important so that individuals have a legal identity to ensure access to public services, social protection and human rights and so that statistical information and health indicators can be generated on a continuous basis and be used for policy planning, implementation, and monitoring.

The analysis of the current situation was conducted through a combination of consultation techniques including a desk review, semi-structured interviews, a household survey, and focus group discussions. This included an assessment of existing registration processes, capacity levels, supporting IT systems and legal and policy frameworks, which identified a number of key findings:

1. Low public awareness on civil registration and its importance
2. Unawareness of formal registration processes
3. Indirect costs associated with registration
4. Multi-step and time consuming registration process due to centralisation of responsibilities
5. Cultural challenges including the naming of a child some-time after birth, prevent registration
6. Lack of physical and human infrastructure to effectively support processes
7. The existing digital system, eBRS, would benefit from alternative architectures to support NRB to extend the digital process to lower level health facilities
8. Unavailability of civil registration data to other government systems
9. Vital statistics are not compiled from the civil registration data source
10. Comprehensive legislation for data security is required to support a digitised civil registration system

To respond to current system weaknesses and to further extend the positive steps that have already been made towards improving civil registration services through the use of technology, a Future State Technology Architecture for CRVS was developed which uses appropriate technology to simplify registration processes and make them accessible within the community.

This report proposes that digital solutions are implemented within an integrated Digital Birth Registration programme, recognising that technology alone cannot bring about a sustained impact. In addition to technology solutions, the programme ensures a comprehensive response to current system weaknesses with strategies that focus on both the demand for and supply of birth registration services. The programme strategies are as follows:

Process and Technology:

1. **eBRS at Lower Level Health Facilities**: Design, build, test and deploy an effective and efficient DBR system and process that supports health facility based birth registration.
2. **Late registration**:
- Support NRB register all children aged 0-16 (16+ will be covered by National ID drive due in 2017) in programme areas.
- Work with NRB and partners to develop innovative late registration models that can be used in other parts of the country.

3. **Birth Registration in Emergencies**: Support NRB to define appropriate SOPs (with required regulatory changes) for birth registration in emergency situations (refugee and natural disaster). These approaches will be tested to prove their effectiveness.

**Change Management**: Implement a change management programme that responds to the needs of all affected actors, ensuring that they have the skills required to use the new solution effectively and fully understand and accept the change to their day to day roles that the solution results in.

**Advocacy**: Advocate for legal and policy changes that support rights-based birth registration and the safe and correct use of digital technologies for birth registration.

**Behavioural Impact**: Create demand for birth registration by affecting a change in the behaviour of parents to make them choose to give birth in a health facility where their child will be registered with a digital birth registration system.

**Monitoring and Evaluation**: Robust monitoring mechanisms put in place to increase accountability & performance, continuously improve the solution and process, and ultimately document an evidence-based business case that demonstrates the potential for scalability & sustainability.

The proposal is to implement the Digital Birth Registration programme across 4 districts of Malawi at an approximate total cost of $2.1 million over 3 years. The scope of the Digital Birth Registration programme focuses on birth registration only but aims to demonstrate how the technologies and programming approach can be scaled nationally for other vital events.

It is now recommended that:

- Inter-ministerial Committee on National Registration adopts this report and incorporates the DBR Programme within the National Strategic Plan.
- Resource mobilisation efforts commence for the implementation of the DBR Programme.
Introduction

This study, the Digital Birth Registration (DBR) Technical Analysis, was commissioned by Plan International Malawi on behalf of the National Registration Bureau (NRB) to support CRVS system strengthening in Malawi and the achievement of the National Strategic Plan. The study reflects findings from 2015-16.

This study aims to assess the current state of CRVS in Malawi and specifically the feasibility of using digital technologies to strengthen CRVS systems. The DBR technical analysis was undertaken at a time when Malawi is making concerted efforts to strengthen its CRVS systems. A technical working group that brings together all CRVS stakeholders has been established to coordinate these efforts, operating within a wider public service reform agenda being led by the Government of Malawi, with the view to improving all service delivery.

Based on the assessment findings, the output of this study is a blueprint for an integrated programme specifically aimed at improving birth registration services in targeted areas across the country. The purpose of this programme is to prove the effectiveness and viability of the technology solution and programming approach, and to build the case for scale up to other vital events at a national level.

What is CRVS and why is it important?

A well-functioning CRVS system is the lifeblood of public administration. It provides essential legal, administrative and statistical functions and is crucial for upholding human rights and for supporting national development.

Civil Registration is “the continuous, permanent, compulsory and universal recording of the occurrence and characteristics of vital events pertaining to the population, as provided through decree or regulation in accordance with the legal requirements in each country.”

Vital statistics “constitute the collection of statistics on vital events in a lifetime of a person as well as relevant characteristics of the events themselves and of the person and persons concerned. Vital statistics provide crucial and critical information on the population in a country”

A well-functioning CRVS system aims to:

1. Secure individuals with recognition of their legal identity and ensure rights of access to public services, social protection and human rights.
2. Generate statistics on population dynamics and health indicators on a continuous basis for the country and at a local level for its administrative subdivisions.
3. Generate essential statistical information that decision-makers depend on for policy formulation, planning, implementation, and monitoring.
4. Permit the understanding of the prevalence, distribution and causes of mortality, as well as identify health inequalities and priorities².

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Plan International and CRVS

Plan International recognises birth registration as a fundamental right of every child and since 1997 has been working together with governments and development partners to increase birth registration rates in many countries around the world through advocacy campaigns and community based programmes. In Malawi, Plan International has:

- Provided technical support towards the implementation of electronic community registration targeting children under 16 years in all Plan impact areas i.e. in Mulanje, Kasungu, Lilongwe and Mzimba. Currently, the hardware/equipment has already been procured including a mobile registration van.
- Lobbied for child birth registration laws using the global Count Every Child campaign strategy.

Traditional approaches have however been unable to dramatically improve birth registration rates across the developing world. Recognising this, the Birth Registration Innovation Team (BRIT) has been established at Plan International Headquarters. This dedicated team of experienced private sector and development professionals are exploring innovative ways in which to support: national governments increase both the demand for and supply of birth registration services; regional CRVS bodies in developing best practice and standards for innovation and digitisation of CRVS systems; and global efforts to realise the SDGs and Data Revolution through the use of digitised CRVS systems.

The BRIT team continue to support global CRVS initiatives:

- Co-organiser of the Ministerial Conference on CRVS in Asia and the Pacific in November 2014.
- Co-organiser of the Third Conference of African Ministers responsible for Civil Registration in February 2015.
- Core Group Member of the Africa Programme for the Accelerated Improvement of CRVS (APAI-CRVS).
- Member of the Regional Steering Group for CRVS in Asia and the Pacific.
- Task-force leaders for the creation of the CRVS Digitisation Guidebook, on behalf of APAI-CRVS.
Methodology

The methodology for this study has been developed by Plan International’s BRIT Team\(^3\) and is split into three distinct stages.

**Stage 1: As-Is Analysis**

In this stage, a household survey, stakeholder consultations and an in-depth desk review are conducted to understand the existing CRVS landscape. Areas of weakness and potential opportunities for system strengthening are then identified using the UN definitions of Civil Registration and Vital Statistics as a guide (Figure 1). Perspectives are taken from all stakeholders including policy makers, system users and end beneficiaries. The scope for analysis has been limited to the birth and death registration processes in direct response to the low registration rates of these vital events in Malawi.

**Stage 2: Technical Feasibility Analysis**

In this stage an assessment will be made of all current capacity and relevant opportunities that may impact the feasibility and cost-effectiveness of digital solutions to strengthen CRVS. The aim will be to identify a technology solution that is appropriate to the country context and that fulfils the following characteristics as per the Principles for Digital Development\(^4\):

- Scalable
- Sustainable
- Flexible
- Interoperable
- Secure

**Stage 3: Programme Definition**

In this final stage of the DBR Technical Analysis, findings from the As-Is and Technical Feasibility Analyses will be used to propose a programme to bring about improved birth registration services and a strengthened CRVS system.

The programme will consist of a technology solution and additional complimentary components that together form a comprehensive response to current system weaknesses and maximise the effectiveness of deployed technology. This integrated approach aims to improve the demand for and supply of birth registration services, and the required supporting legal and policy environment.

Figure 2 below shows the areas of analysis included within each stage of the study. The three stages are designed to be conducted sequentially with checkpoints after each stage to confirm the findings with relevant stakeholders before commencing the next stage.

Further details of each assessment area are included in Annexe A: Technical Analysis Methodology.

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3 Description of areas of assessment in Plan Methodology can be found in Annex A
How was the study conducted in Malawi?

The study was an exploratory investigation of CRVS systems and processes. It was conducted using a combination of qualitative and quantitative research methods. The study was not aimed at generating an official baseline (at either national or district levels).

Research Techniques

A combination of consultation techniques were used to gather information about the CRVS landscape, systems, processes and barriers including a desk review, semi-structured interviews, a household survey, and focus group discussions.
<table>
<thead>
<tr>
<th>Technique</th>
<th>Description</th>
<th>Sources</th>
<th>Supporting Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desk Review</td>
<td>In-depth review of existing literature on CRVS in Malawi.</td>
<td>• Publications</td>
<td>Semi-structured and Stakeholders Questionnaire&lt;sup&gt;7&lt;/sup&gt; followed by discussion.</td>
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<tr>
<td></td>
<td></td>
<td>• Newspaper articles</td>
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<td></td>
<td></td>
<td>• Relevant internet sources relating to CRVS and technology</td>
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<td></td>
<td></td>
<td>• Statistical reports</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Government information and meeting minutes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• United Nations and other INGO publications&lt;sup&gt;1&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Semi-structured</td>
<td>Stakeholders were identified to provide qualitative data&lt;sup&gt;6&lt;/sup&gt;</td>
<td>• Ministry of Home Affairs</td>
<td></td>
</tr>
<tr>
<td>interviews</td>
<td></td>
<td>• National Registration Bureau (NRB)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Ministry Justice and Constitutional affairs</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Department of e-Government</td>
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<td></td>
<td></td>
<td>• National Statistics Office (NSO)</td>
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<td></td>
<td></td>
<td>• Ministry of Health</td>
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<td></td>
<td>• Ministry of Local Government</td>
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<tr>
<td></td>
<td></td>
<td>• District Hospitals (in sampled districts)</td>
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<tr>
<td></td>
<td></td>
<td>• Public Health Centres (in sampled districts)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• District Registration Offices (in sampled districts)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• CDC/Baobab Health Trust</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• UNICEF</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• District Registration Offices</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• World Vision Malawi</td>
<td></td>
</tr>
<tr>
<td>Household survey</td>
<td>Households were sampled to provide quantitative data</td>
<td>• 2400 Households sampled in the districts: Rumphi, Nkhatabay, Ntchisi,</td>
<td>Survey Questionnaire&lt;sup&gt;8&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lilongwe, Ntcheu, Mangochi, Chikwawa, Thyolo and Mwanza.</td>
<td></td>
</tr>
<tr>
<td>Focus Group</td>
<td>People with similar background or experiences were identified to deliberate</td>
<td>• 2 Focus Group Discussions (FGDs) in each of the sampled 9 districts</td>
<td>FGD Guideline&lt;sup&gt;9&lt;/sup&gt; followed by discussion.</td>
</tr>
<tr>
<td>Discussions (FGD)</td>
<td>on specific topics of interest regarding civil registration</td>
<td>targeting 6 to 12 fathers/mothers and caregivers</td>
<td></td>
</tr>
</tbody>
</table>

<sup>1</sup> See full list of References in Bibliography
<sup>6</sup> Annex B: List of consulted stakeholders
<sup>7</sup> Annex C: Sample Questionnaires used in stakeholder consultations
<sup>8</sup> Annex D: Household Survey Questionnaire
<sup>9</sup> Annex E: FGD Guide

Table 1. Research Techniques
Participant Selection

Participants were selected for inclusion in research activities to fulfil the below criteria, providing a diverse sample of people involved in and associated with CRVS processes.

<table>
<thead>
<tr>
<th>Participants</th>
<th>Area of Knowledge</th>
</tr>
</thead>
</table>
| Central Government                  | • NRB  
• Ministry of Health  
• Ministry of Justice and Constitutional Affairs  
• Department of eGovernment  
• Ministry of Local Government  
• National Statistics Office (NSO) | Able to share Government’s long-term vision on CRVS, existing legal and regulatory framework on CRVS, processes, bottlenecks, barriers, key CRVS partners |
| Government representatives at the District Level | • District Registration Officer  
• District Health Officer  
• Ward clerk | Able to share knowledge and understanding on processes, bottlenecks, barriers, key players, requirements within each of their operating units |
| Government representatives at community level | • Medical Assistant/Clinical Officer/Nurse  
• Group Village Head/Village Head | Able to share knowledge and understanding on processes, bottlenecks, barriers, key players, requirements within each of their operating units |
| Citizen                             | • Individuals who have registered a birth.  
• Individuals who have registered a death.  
• Individuals who have never registered a vital event. | Direct experience of registration process / barriers to registration |
| CRVS Partners                       | • UNICEF  
• CDC/Baobab Health Trust  
• World Vision Malawi  
• St. Egidio | Able to identify current initiatives aimed at improving/strengthening civil registration and vital statistics systems |

Table 2. Justification for Participant Selection

Research Locations

The household survey, which targeted a sample size of 2,400, was conducted in nine districts to gather quantitative data related to birth and death registration, as well as community perceptions on civil registration, exploring factors that hinder the registration processes. The selection of districts for the survey was both random and purposive. Households were randomly sampled through a household listing obtained from local leaders. Purposive sampling was attained by taking into consideration the regional and ethnic groups of the country. Among the sampled districts (see Table 3 below), only Lilongwe may be considered an urban location:

<table>
<thead>
<tr>
<th>Region</th>
<th>District</th>
<th>Characteristics</th>
</tr>
</thead>
</table>
| North  | Rumphi   | • Tumbuka ethnic group (majority group in the north)  
• Patrilineal system |}
|        | Nkhabaya | • Tonga ethnic group  
• Patrilineal system |}
| Centre | Ntchisi  | • Chewa ethnic group                    |
Characteristics of the Respondents

1. Distribution Across Districts
A total of 2,426 respondents were interviewed across the nine districts, 87.2% (2115/2426) of whom were females and 12.8% (311/2426) were males. The distribution of the respondents across the nine districts is presented in Table 14 below. Generally, male participation was lower than that of women. The lower male participation in the survey can be explained by the fact that females are more oftentimes the direct caretakers of children 0-16 years, and the women were mostly at home and therefore available to be interviewed and provide information to the field survey teams.

<table>
<thead>
<tr>
<th>District (n)</th>
<th>Sex of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
</tr>
<tr>
<td>Rumphi (n=267)</td>
<td>27.7</td>
</tr>
<tr>
<td>Nkhotaby (n=271)</td>
<td>19.9</td>
</tr>
<tr>
<td>Ntchisi (n=251)</td>
<td>21.1</td>
</tr>
<tr>
<td>Lilongwe (n=269)</td>
<td>10.4</td>
</tr>
<tr>
<td>Ntcheu (n=240)</td>
<td>15.4</td>
</tr>
<tr>
<td>Mangochi (n=278)</td>
<td>2.5</td>
</tr>
<tr>
<td>Mwanza (n=281)</td>
<td>11.0</td>
</tr>
<tr>
<td>Thyolo (n=288)</td>
<td>1.4</td>
</tr>
<tr>
<td>Chikwawa (n=281)</td>
<td>8.2</td>
</tr>
<tr>
<td>Total (N=2426)</td>
<td>12.8</td>
</tr>
</tbody>
</table>

Table 4: Distribution of the Survey Respondents by Gender and District

2. Education, Marital Status and Number of Children
Education is an important attribute that influences a better understanding by people towards the adoption of any new programmes including those introduced by the Government and development partners. It is generally expected that the more educated people become, the more likely they are to

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10 This survey did not have specific sample size allocation to male and female respondents or caretakers.
adopt and accept these new programmes. The educational levels of the participants of this survey were as follows: 76.2% (237/311) males and 64.2% (1358/2115) females would be considered literate after having attended and completed at least four years of primary school, considered the lowest threshold for the attainment of basic literacy and numeracy skills in Malawi.

The findings also seem to corroborate what other studies have reported about higher proportion of non-illiterate people among females (35.8%) than among males (23.8%) and higher proportion of educated people beyond lower secondary school among males (19.9%) compared to females (11.5%).

The majority of the survey respondents, both males and females, were married. However, comparatively, male respondents were statistically significantly more likely to be married at the time of the survey (89.7%; 95% CI 86.3-93.1) than the females respondents (76.3%; 95% CI: 74.5-78.1) and this trend was reversed among the divorcees and those widowed as there were more females than males. For statistical details, please refer to Table on Educational Levels and Marital Status in Annex G of this report.

The survey also established that approximately 98% of the households in the survey had 1-5 children aged 0-16 years, with an overall average of 2.6 children (95% CI: 2.52-2.63). Across the nine districts, the average number of children aged 0-16 ranged from 2.2 to 2.8 per household.

Additionally, two Focus Group Discussions (FGDs) were conducted in selected communities across the nine districts. The FGDs targeted fathers/mothers or care givers of children and young mothers likely or planning to have children.
As-Is Assessment

This chapter describes the current CRVS landscape, with a focus on birth and death, and identifies system weakness as well as gaps in the existing process and legislation.

CRVS Vision: What is the Government’s Vision for CRVS?

The Government of Malawi shows a commitment to strengthening their CRVS systems through both regional and national level commitments.

At the regional level, Malawi is a member of the Africa Program on Accelerated Improvement of CRVS (APAI-CRVS), an initiative under the United Nations Economic Commission for Africa, where African countries have committed to strengthen and/or implement civil registration and vital statistics systems to ensure rights of citizens, as part of good governance and for socio-economic development. Malawi is also a member of the African Symposium on Statistical Development (ASSD), a forum for African statisticians, with an initial objective of mobilizing all African countries to undertake improved performance population censuses.

Under the APAI-CRVS initiative, a Medium Term Plan (MTP) was developed, covering five years (2010 – 2015), as a guiding tool for countries, regional and international organisations to manage interventions and monitor achievements in strengthening CRVS systems in Africa. As a member state, there are eight specific objectives defined in the MTP:

- Improve coverage of civil registration;
- Improve completeness of birth and death registration;
- Improve completeness of marriage and divorce registration;
- Improve completeness of birth and death vital statistics;
- Improve completeness of marriage and divorce vital statistics;
- Improve timeliness, quality and use of vital statistics;
- Improve accessibility and use of civil registration records in promoting good governance; and
- Establish integrated population registers/database.

In keeping with commitments made at the regional level, Malawi, through the NRB, which implements, coordinates, manages and maintains the National Registration Information System (NRIS), has developed a five-year Strategic Plan (2013-2018), whose vision is “to become a quality hub in population registration, identification and production of vital statistics for socio-economic development.”

The strategic plan identifies five strategic outcomes, each with specific targets and outputs, based on the Bureau’s key result areas as highlighted below:

<table>
<thead>
<tr>
<th>Key Result Area</th>
<th>Strategic Outcome</th>
<th>Targets</th>
</tr>
</thead>
</table>
| Registration of births, deaths, marriages, adults and resident foreigners | 1. Improved national population registration and vital statistics management | • 100% of Malawians and resident foreigners registered by 2017  
• National register established by 2017  
• Marriage registration rolled out in all 28 districts by 2017  
• Birth, death registers established in all 28 districts by 2017 |
<table>
<thead>
<tr>
<th>Key Result Area</th>
<th>Strategic Outcome</th>
<th>Targets</th>
</tr>
</thead>
</table>
| Production and issuance of IDs and certificates     | 2. Improved identification of Malawians and resident foreigners                     | • 80% of Malawians aged 16 and above issued with national ID cards by 2017  
• 80% of Malawians below the age of 16 issued with birth certificates by 2017  
• 100% of resident foreigners issued with IDs by 2017                                                                                                                                                                                                                       |
| Civic education on National Registration Information System (NRIS) | 3. Improved public awareness on national registration                              | • NRIS communication strategy developed and disseminated by 2014  
• Linkages established with 100% key stakeholders on civic education by 2017  
• Five annual vital statistics reports published by 2018                                                                                                                                                                                                                       |
| Development and maintenance of NRIS Database        | 4. Improved NRIS data management services                                            | • NRIS database in place by 2014  
• Connectivity established in 100% of districts by 2016  
• Interface with other relevant Government systems in place by 2017  
• NRB ICT team instituted by 2014                                                                                                                                                                                                                                              |
| Institutional strengthening and management          | 5. Strengthened institutional and management capacity of the Bureau                | • 100% of NRB staff and other stakeholders trained on work processes by 2016  
• 80% of vacant posts filled by 2014  
• Operational and training manuals to be in place by 2014  
• Relevant workplace policies developed by 2014  
• M & E System developed by 2014  
• Technical Advisor in place by 2014  
• NRB offices constructed by 2017  
• 80% of office equipment procured by 2014  
• Steering committee and technical working groups established and institutionalized by 2014  
• Strategic Implementation Plans reviewed annually                                                                                                                                                                                                                     |

**Table 5. Malawi CRVS Strategic Outcomes**

The general observation among CRVS stakeholders interviewed is that the Strategic Plan is overly ambitious and unlikely to be achieved in the given timeframe.\(^{12}\) Evidence of this exists already with regards to birth registration where the target for the implementation of the electronic birth registration system (eBRS) by the NRB was due to be in 18 district hospitals by August 2015, but is currently only operational in 3. Rollout to the remaining 25 districts is planned to be complete by June 2016, an ambitious timeframe due to its reliance on the availability of funding\(^{13}\), a challenge

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11 NRIS is national system that integrates civil registration and national identification

12 Stakeholder consultations, UNICEF, CDC and Baobab Health Trust

13 Stakeholder consultations, NRB
which is widely acknowledged by NRB management. There is a need to review the set targets to reflect realities and challenges on the ground.

Presented below are some of the achievements made to date by the NRB and the identified challenges that the NRB recognises should overcome to realise the CRVS long-term vision:

<table>
<thead>
<tr>
<th>Achievements to date</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Enactment of the National Registration Act of 2010 gazetted under Notice No. 18 of 2015 [Contributes toward Strategic Outcome 1]</td>
<td>▪ Inadequate office infrastructure and material resources such as vehicles, office equipment, office furniture for implementation of NRIS</td>
</tr>
<tr>
<td>▪ Orientation of all chiefs, at various levels, on NRIS [Contributes toward Strategic Outcome 3]</td>
<td>▪ Delay in engaging a contractor for the supply and implementation of computerized NRIS</td>
</tr>
<tr>
<td>▪ Orientation of Group Village Heads and Village Heads on how to carry out registration for births, adults and deaths at village level [Contributes toward Strategic Outcome 3]</td>
<td>▪ High illiteracy levels of traditional leaders which has greatly affected population data capture into hard copy village registers at village level</td>
</tr>
<tr>
<td>▪ Production and distribution of hardcopy Village Registers and registration of citizens in all districts [Contributes toward Strategic Outcome 1]</td>
<td>▪ Inadequate Human and ICT capacity</td>
</tr>
<tr>
<td>▪ Introduction of birth registration and issuance of birth reports in health facilities in four districts of Lilongwe, Ntcheu, Chitipa and Blantyre [Contributes toward Strategic Outcome 1]</td>
<td>▪ Inconsistent power supply</td>
</tr>
<tr>
<td>▪ Development of Information, Education and Communication (IEC) materials for public awareness and sensitization on NRIS [Contributes toward Strategic Outcome 3]</td>
<td>▪ Inadequate public awareness and civic education on NRIS and lack of Communication Strategy</td>
</tr>
<tr>
<td>▪ Conducting public civic education on NRIS through the media. [Contributes toward Strategic Outcome 3]</td>
<td>▪ Village Register data loss due to poor quality of the hardcopy Village Registers</td>
</tr>
<tr>
<td>▪ Establishment of district registration offices [Contributes toward Strategic Outcome 5]</td>
<td></td>
</tr>
</tbody>
</table>

Table 6. Achievements & Challenges in CRVS Strengthening in Malawi

The above challenges, acknowledged by the NRB, have been further explained and analysed in subsequent parts of this study.
Current Status of CRVS in Malawi

The population of Malawi is approximately 16.4 million\(^{14}\) and the crude birth and death rates are 41.8/1,000 and 8.74/1,000\(^{15}\) respectively. There are approximately 3 million children under the age of five (5), with a further approximately 639,000 more born each year. There are currently no statistics for birth, death and certification rates. Table 7 below presents the available data for three (3) high-level CRVS goals, adopted from the Asia Pacific Regional Action Framework:

<table>
<thead>
<tr>
<th>Regional Action Framework Goal</th>
<th>Malawi Current Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal civil registration of births, deaths and other vital events</td>
<td>▪ Birth Registration rate: Not available</td>
</tr>
<tr>
<td>▪ Death registration rate: Not available</td>
<td></td>
</tr>
<tr>
<td>All individuals are provided with legal documentation of civil registration of births, death and other vital events, as necessary, in order to claim identity, civil status and ensuing rights</td>
<td>▪ Certification rate: Not available</td>
</tr>
<tr>
<td>Accurate, complete and timely vital statistics (including on causes of death), based on registration records, are produced and disseminated</td>
<td>None.</td>
</tr>
<tr>
<td></td>
<td>▪ The last population and housing census was conducted in 2008</td>
</tr>
<tr>
<td></td>
<td>▪ Malawi Demographic and Health Survey was conducted in 2010</td>
</tr>
<tr>
<td></td>
<td>▪ Extrapolated estimates are used.</td>
</tr>
</tbody>
</table>

Table 7: Current performance against Regional Action Framework

Previous assessments on the state of CRVS in Malawi

As part of a preparatory process advocated through the MTP under the APAI-CRVS initiative, Malawi carried out a Rapid Assessment of the CRVS system. The Rapid Assessment is a framework developed by the University of Queensland and the World Health Organisation (WHO)\(^{16}\), its goal is to:

▪ Evaluate the status of the existing CRVS system;
▪ Promote dialogue and understanding across the varying partner organizations of the CRVS systems.

The findings of the rapid assessment are presented below in Figure 3. Key findings from the Malawi Rapid Assessment.

\(^{14}\) UNDP. Human Development Report 2014.

\(^{16}\) OPC- NRB, MoH, "Rapid Assessment of Malawi’s National CRVS System.,” Workshop Report 2013. This was carried out in 2012 through the Office of the President and Cabinet (OPC), NRB and the Ministry of Health, with financial assistance from the CDC under the Presidential Emergency Plan for Aids Relief (PEPFAR) initiative
Based on the rapid assessment, observed from the graph above, the overall score rating established a dysfunctional CRVS system for Malawi requiring substantial improvement in all of the areas assessed. The specific recommendations arising from the rapid assessment to ensure improvement of the Malawi CRVS system have been included in Annex F of this report.

Who are the main CRVS actors in Malawi?

Malawi has a unitary system of government. The country has twenty-eight districts spread across three administrative regions of southern, central and northern regions. The legislative and executive powers relating to civil registration have mandated the NRB, a Government Department under the Ministry of Home Affairs and Internal Security, as responsible for the National Registration and Identification System (NRIS) in Malawi, comprising of 2 main components – civil registration and National ID. The NRB implements its mandate at national and district levels. The other CRVS actors include the Ministry of Health and the NSO. Ministry of Health facilities within the districts undertake birth and death reporting which are submitted to the administrative district office. Each administrative district office is the appointed District Registration Officer (DRO). The National Statistics Office (NSO), a government department, is responsible for compilation, abstraction and dissemination of vital statistics.

To ensure coordinated efforts towards the achievement of the set CRVS goals for Malawi by all relevant actors, a governance structure has been put in place to effectively support the main actors towards the defined strategic direction and provide the necessary oversight. At the executive level, Inter-Ministerial and Steering (PS) Committees on CRVS exist. Within the legislature, a Parliamentary Committee on Defence and Internal Security is also in place. At the technical level, the Ministry of Home Affairs has established a Technical Working Group (TWG) on CRVS. Table 8 below
shows the various committees/bodies responsible for civil registration and vital statistics activities in Malawi.

<table>
<thead>
<tr>
<th>Name of Actor</th>
<th>Description of role</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Executive</strong></td>
<td></td>
</tr>
<tr>
<td>Inter-ministerial Committee on National Registration</td>
<td>Platform for resolving cross-cutting issues by all relevant ministries involved in the implementation of national registration system. Membership includes Ministry of Home Affairs, Ministry of Health, Ministry of Justice, and Ministry of Finance and Economic Planning. This committee interfaces directly with the Presidency.</td>
</tr>
<tr>
<td>Steering Committee (Principal Secretary (PS) on National Registration)</td>
<td>This committee comprises Ministries of Home Affairs, Finance, Health and Local Government. Initially the committee comprised NRB, Malawi Electoral Commission (MEC), and UNDP with few co-opted members. The committee is chaired by the Ministry of Home Affairs and co-chaired by the UN Res Rep. Main functions of the committee are resource mobilisation, overseeing strategic priorities and progress of the NRIS project, and provide a forum for high-level decision-making and oversight. Co-opted membership include Road Traffic Directorate, Public Reforms Management Unit, Vice President’s Office, Immigration Department, Police Service, Ministry of Justice, Ministry of Finance, Administrator General, Registrar General, NSO, Ministry of Information, Ministry of Health, Ministry of Education and Ministry of Agriculture. Ideally, this committee reports to the Inter-ministerial committee on national registration.</td>
</tr>
<tr>
<td><strong>Legislative</strong></td>
<td></td>
</tr>
<tr>
<td>Parliamentary Committee on Defence and Internal Security</td>
<td>Oversight body under Parliament on defence and internal security including aspects of civil registration. All aspects relating to changes in legislation regarding CRVS are referred and lobbied with this committee.</td>
</tr>
<tr>
<td><strong>Technical/Operations</strong></td>
<td></td>
</tr>
</tbody>
</table>
| National Registration Bureau (NRB) | The NRB is a government department within the Ministry of Home Affairs that is specifically mandated to:  
  - Register & Issue birth certificates  
  - Register & Issue national identity cards to bona fide Malawians  
  - Register & Issue identity cards to foreigners  
  - Register & Issue certificate of registration of marriage  
  - Register & issue death certificates  
  Its general mandate is to implement, co-ordinate, manage and maintain the NRIS. |
| CRVS Technical Working Group | Established under the Ministry of Home Affairs with NRB as the Chair, with aim to promote coordination and collaboration in the establishment of implementation structures and promotion of NRIS services. Various taskforces exist under this TWG including:  
  - Birth Registration  
  - Death Registration  
  - Marriage and Divorce Registration  
  - Identification Registration  
  - IT Services  
  Membership of the various taskforces is drawn from a number of government and non-governmental actors’ with a special interest in the development or strengthening of CRVS system in Malawi. |

17 Annexe H, List of Members from which CRVS Taskforces are Drawn
### Table 8. CRVS Actors in Malawi

<table>
<thead>
<tr>
<th>Name of Actor</th>
<th>Description of role</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Administrative Actors</strong></td>
<td></td>
</tr>
<tr>
<td>District Registration Office (DRO)</td>
<td>An administrative unit of the NRB, as per the National Registration Act. The DRO performs duties of the district registrar, which include registering of births and deaths. Citizens collect birth and death certificates from the DROs. These certificates are produced at central level. The DRO also submits monthly returns on births and deaths to NRB central office.</td>
</tr>
<tr>
<td><strong>Other Agency Actors</strong></td>
<td></td>
</tr>
<tr>
<td>Ministry of Health</td>
<td>All health facilities under the Ministry of Health are responsible for reporting vital events i.e. births and deaths to the district administrative office. In February 2016, NRB was piloting both manual and electronic birth registration processes at health facilities in 4 districts, with a plan to extend this across the country in the future. This effort responds to the high rate of health facility births in the country, 73%(^{18}) recorded in the last Demographic Health Survey, conducted in 2010.</td>
</tr>
</tbody>
</table>
| National Statistics Office (NSO) | Established under the National Statistics Act of 2013 this is a government department that is responsible for the collection, compilation, analysis, abstraction, publication and dissemination of statistical information. The NSO is mandated to periodically undertake:  
  - Population and Housing census  
  - National surveys including Malawi Demographic and health Survey |

Through semi-structured interviews with the CRVS actors\(^{19}\) the following has been established:

- Though scheduled to meet quarterly, the Inter-Ministerial Committee is very active and meets regularly. However the primary focus for this committee is on the ID component of the NRIS;
- The Steering Committee is not as active as it should be evidenced by the irregularity of its meetings. Other actors, specifically Malawi Electoral Commission (MEC), feel that they have been left out;
- The TWG meetings were very frequent during the initial stages of designing and developing the electronic Birth Registration System (eBRS) being piloted in the three districts plus Bwaila Hospital. The momentum of these meetings has since slowed down with the most recent last of these meetings being held in December, 2015. Previous meetings were in May and September of 2014.

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\(^{18}\) Malawi DHS, 2010

\(^{19}\) Stakeholder consultations, NRB, CDC, Baobab Health Trust, MEC
**CRVS Legal Framework**

**What current legislation exists in Malawi that supports CRVS?**

A variety of different laws support CRVS in Malawi. The laws that provide the foundations of CRVS in the country are outlined below:

<table>
<thead>
<tr>
<th>Law</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Registration Act, 2010</td>
<td>The Act provides for the registration of persons and registration of births, marriages and deaths of persons; it creates the Office of National Registration headed by a Director. The Office has the mandate to oversee the national register.</td>
</tr>
<tr>
<td>Citizenship Act, 1966</td>
<td>The Act provides for acquisition of citizenship of Malawi by birth or descent, or by registration in certain cases; to regulate the manner and circumstances in which foreigners may be naturalized as citizens of Malawi and in which citizens of Malawi may renounce or be deprived of their citizenship.</td>
</tr>
<tr>
<td>Immigration Act, 1963</td>
<td>The Act regulates the entry of persons into Malawi, to prohibit the entry into Malawi of undesirable persons. [These undesirable persons are those who have been declared prohibited immigrants because a) they have insufficient economic means to sustain themselves, b) a person who is unable to read and write one of the prescribed languages under the Act, c) a person who may become a public charge, d) a person with mental disabilities, e) a person suffering from a prescribed disease, and f) a prostitute or homosexual. The Act is related to the National Registration Act regarding the permits that may be issued to persons under immigration and the requirement to register persons under the National Registration Act.</td>
</tr>
<tr>
<td>Local Government Act, 1999</td>
<td>The Act consolidates the law on the administration and management of local government authorities; including the registration of births and deaths, and participation in the delivery of essential local services.</td>
</tr>
<tr>
<td>Statistics Act, 2013</td>
<td>The Act provides for the better collection, compilation, analysis, publication and dissemination of statistical information. All information collected under the authority of the Act shall be used for statistical purposes only.</td>
</tr>
<tr>
<td>The Constitution, 1994</td>
<td>The Constitution provides for the rights of persons; and the acquisition or loss of citizenship.</td>
</tr>
</tbody>
</table>

*Table 7, General CRVS Laws, Malawi*

**What gaps exist in current CRVS legislation?**

The Table below demonstrates the extent to which Malawi’s current legislative provisions reflect UN recommendations for CRVS and Plan International’s Key Principles and Standards on Birth Registration:

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<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Compulsory registration</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Legislation needs to be in place to oblige the registration of vital events. | - The National Registration Act provides that the registration of births and deaths in Malawi is mandatory. Failure to register is a crime.  
- Without a well-defined reporting and tracking system, along with resources to support these activities, requiring registration by law does not result in active citizen participation in vital event registration activities. |
| No penalties should be imposed for non-compliance with compulsory registration. | - Provisions made in National Registration Act for penalties in case of non-registration of birth of a child. Under the Act, failure to register the birth of a child is a crime. A perpetrator is liable pay a fine of up to K1 million (about USD1, 600) or imprisonment for up to five years.  
- Absence of robust oversight mechanism to determine whether registrations are taking place means that these penalties are often not enforced. |
| Establish positive incentives to stimulate and encourage compliance with the compulsory registration law without restricting access to other rights. | - No policy nor law in Malawi provides for such incentives |
| **Universal registration** |  |
| All vital events should be registered on the basis of non-discrimination. | - The National Registration Act applies to the entire population.  
- Sections 15 and 20 of the Constitution states that all citizens are equal before the law and are entitled to equal protection of the law; and that no person shall be discriminated against because of, among others, their status.  
- The National Registration Act provides for the registration of children born within or outside wedlock; abandoned (exposed) children, and adopted children.  
- The National Registration Act does not mention anything specifically on required nationality of the parent(s) for registration. The draft National Registration Regulations (2015) however, under the verification process, states that non-Malawian citizens must provide certified copies of the relevant Permanent Residence Permit, Business Residence Permit or Temporary Employment Permit with their registration application. For individuals living in Malawi informally (without permission and legal documentation), this will act as a barrier to registration.  
- Beyond the Constitution, no specific anti-discrimination law exist regarding CRVS  
- Provisions for the registration of marginalised persons (those not eligible to register under existing legislation) are made in the Refugees Act or Trafficking in Persons Act, based on their situation. |
| Special procedures may be established when there are significant variations in the level of social and economic development in different parts of the country. | - Local government authorities have the power to define their own CRVS by-laws, allowing them to respond to different contexts.  
- No specific procedures currently exist to account for variations in the level of socio-economic development in different parts of the country e. g. in low-income, rural areas. |
| Vital events occurring to a country’s residents abroad should also be registered. | - No law in Malawi makes this requirement mandatory. However, under the National Registration Act, the Minister may appoint a diplomatic or consular officer or other Government representative to be a district registrar in respect of a district outside Malawi. Such registrar may perform the duties of a registrar in relation to the registration of births and deaths in the usual manner. |
| **Continuity and Permanence** |  |
A permanent, administratively stable agency is required to support the registration system and its processes. The permanence of this authority is contingent upon the authority given to it through the enactment of a civil registration law.

- The National Registration Act establishes the Office of National Registration. The Office is under a legal duty under the Act to maintain a national register.

A permanent system is required to support and facilitate continuity of registration and vital statistics data.

- The National Registration Act serves the purpose. The Act requires the Office of National Registration to maintain a national register; the Act allows updating of records including any material changes that may be discovered by the Office.

A strong legal framework should ensure the efficient use of information collected; clearly defining the administrative structure, role of different agencies and timelines for use of data.

- The existing legal framework does not support coordination or sharing of civil registration or vital statistics data between different agencies or define the administrative structure that will support such activities.

Registration forms should include a range of fields to support national policy and programme development, and to promote the regional and global comparability of data.

- The Birth Certificate complies with 25 out of 31 characteristics under the UN Guidelines on CRVS, 2014. The missing fields for birth registration are: assigned personal identification number of the child, attendant at birth, place of birth of the mother, place of birth of the father and space for remarks.
- The Death Certificate complies with 17 out of 23 characteristics under the UN Guidelines on CRVS, 2014. For death registration, the missing fields are: place of birth of the decedent/deceased, marital status of the decedent/deceased, type of certification and certifier of death, names and individual identification numbers of witnesses and space for remarks.

Confidentiality & Safeguarding of Documentation

- The National Registration Act does not provide for data security and privacy.
- There is also no law in Malawi on data protection generally.

Provisions for confidentiality of information and individual privacy should be made part of civil registration law.

- No law provides for confidentiality of information and individual privacy.

Cost and time of registration

- Registration is free under the National Registration Act.

- There is a time allowance for registration of births, deaths and marriages respectively under the National Registration Act. The birth of a child born alive must be done within six weeks from the birth; registration of a marriage must be done within three months from the officiation of the marriage; and the registration of death must be done within six weeks from the death.

- Under the National Registration Act, late registration is allowed after payment of appropriate fees.

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21 Annexe I: List of Birth and Death Registration Fields Compliant with UN/WHO Standard
CRVS Processes

What are the current processes for birth and death registration in Malawi?
Documented below are the generic processes for birth and death registration in Malawi (including certification). The diagrams below captures the birth and death registration processes, respectively, as per the existing legislation and regulations. All the civil registration forms\textsuperscript{22} are contained in Annexe J.

\textsuperscript{22} Annexe J: Various civil registration forms
Malawi: As-Is Birth Registration Process

1. Village Chief documents birth details in village register (Form NRB/1)

2. Village Chief takes register to DRO when full

3. Complete certification of home birth section on NRB form

4. Keep record of late registration fee

5. Submit application to DRO

6. Request late registration fee

7. Provide acknowledgement of receipt to Informant

8. Form details entered into Remote Access Control System (RACS) & supporting docs emailed

9. Contact Informant to notify them of rejected application and reasons why

10. Make required updates to form and/or arrange required supporting documentation

11. Authorise application and issue birth certificate

12. Details of adopted children logged in register

13. Dispatch certificates and rejected applications to DRO

14. Contact Informant to notify them of rejected application and reasons why

15. Travel to DRO to collect birth certificate

16. Collect certificate

Where does birth take place?

Home & Health Facility

Village Chief

Home

Village register stored at DRO

Health Facility

DRO

Informant

Director's Office (NRB HQ)

Existing knowledge of BR process

Yes

No

Yes

No
Notes on the birth registration process

The below notes are based on the Draft National Registration Regulations, 2015, prepared by the Ministry of Justice and interviews with various CRVS stakeholders.

<table>
<thead>
<tr>
<th>Step</th>
<th>Notes</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Existing Knowledge of BR Process</strong></td>
<td>• Parent/Guardian;</td>
</tr>
<tr>
<td></td>
<td>Citizens are expected to know of the need to register births and what the process involves, including what supporting documents are required, associated fees and the time it takes for a birth certificate to be issued. From the survey we found this to be untrue as only 28.7% of respondents knew about the need to register births.</td>
<td>• Chief/village elder or religious leader;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Foster Parent/Social welfare Officer;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Health facility personnel</td>
</tr>
<tr>
<td>1.a)</td>
<td>Details documented in village register (Form NRB/1) upon registration of a birth are: Village, Traditional Authority, District, Full Name of child; sex; Date of birth; Place of Birth; Names of Parents and their national identification numbers (often incomplete); Principal place of Residence; and other useful information. Note: Village registers are not only used for keeping a record of child births, they are also used for keeping a record of all village members as well as deaths.</td>
<td><strong>Village Chief</strong></td>
</tr>
<tr>
<td>1.b)</td>
<td>Village Register is only taken to the DRO when the book is full.</td>
<td><strong>Village Chief</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Village registers stored at DRO</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data from the village registers is not transferred into any central records, it remains only in the register at the DRO and is not used again.</td>
<td></td>
</tr>
<tr>
<td>2.b)</td>
<td>2b. The applicant/informant completes Form NR8 (also referred to as a Birth Report) and must travel back to their home village to get confirmation of home birth from village chief/headman, senior village member or a cleric of a religious institution in which the parents or one of the parents is a member.</td>
<td>• Parent/Guardian;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Chief/village elder or religious leader;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Foster Parent/Social welfare Officer</td>
</tr>
<tr>
<td>2.c)</td>
<td>Home birth confirmed by written, signed and/or stamped confirmation on the form NR8 by appropriate village elder (as defined in step 2b.). For those who are illiterate, they can provide a thumb print as certification. Form requirements: • Where a child is born in wedlock, both father and mother sign the birth report, provided that any one of the parents sign the form where the other is not available; • Where the child is born out of wedlock, the form may be signed by the mother only. Where the father does not deny paternity both mother and father sign; • In the case of an abandoned child, the birth report is signed by the social welfare officer of the district in which the child is found to be abandoned; and • A relative or guardian of the child in 1 or 2 above, signs the form subject to providing verified proof of the required particulars • A social welfare officer who gives a notice of birth provides a name and surname to an abandoned child if the name and surname of the child is not known. • For adoptions, the foster parent/social welfare officer completes the applicant details on the form.</td>
<td><strong>As defined in step 2.b)</strong></td>
</tr>
</tbody>
</table>

*Note:*
For births in transit, the application is made at the next port of entry.

3.b) Informants are often illiterate and unable to complete form themselves; in these cases hospital staff will help them to complete the form.

3.c) Supporting documentation:
- In the case of Malawian citizens who are naturalized citizens or citizens by registration in accordance with the Malawi Citizenship Act, **[Supporting documents: certified copies of their passports and Malawi Citizenship Registration Certificate],** accompany the application;
- In the case of an abandoned child, the social welfare officer of the district in which the child was found exposed and **[Supporting Document: a letter from such social welfare officer supporting the application]** accompanies the birth report;
- In the case of an adopted child, **[Supporting document: a certified copy of an adoption order, issued by a court],** accompanies the birth report;
- In the case of an adopted child whose adopting parents are non-Malawian citizens, **[Supporting documents: certified copies of an adoption order issued by a court, and the relevant immigration permit of the adopting parents authorizing their stay in Malawi],** accompany the birth report;
- In the case of non-Malawian citizens, **[Supporting documents: certified copies of the relevant permanent residence permit or business resident permit or temporary employment permit],** accompany the application;

**Question:** Are reasons for late registration valid?
While it is mandated in NRB’s registration regulations that valid reasons for late registration will result in the waiving of the late registration fee, these are not defined and DRO Officers exercise their discretion at what is a “valid” reason for late registration e.g. unawareness of need to register.

4. • No official fee for late registration is defined in NRB’s registration regulations – this is at the discretion of the DRO Officer.

NB. The NRB have recently requested that no fees be charged for late registration to encourage all parents/caregivers to register.

5. • The DRO checks the application and supporting documentation for completeness.
• Supporting documentation for late registration is not defined in regulations, however citizens are expected to bring an affidavit proving proof of birth; any Commissioner for Oaths can provide this.

6. Where the information provided is not complete/adequate, the applicant(s) is contacted using the details captured on the form NR8 to provide required information and/or supporting documents.

7. The NR8 form includes a section at the bottom that is torn off and provided to the Informant as receipt of application.

8. • Remote Access Control System links directly with the central NRB database.
• Supporting documents are scanned into system and emailed separately to the submitted form.
### Step 9.
The Office of the Director of National Registration reviews applications for completeness, duplications and eligibility. This check focuses on establishing the legitimacy of supporting documentation to prevent non-Malawians from registering as Malawians; this is of increased importance due to the growing number of immigrants in the country.

**Responsible**: Director of NRB

### Step 10.
If the office of the Director rejects an application e.g. if there is reasonable doubt that the applicant is ineligible, they will provide a reason for the rejection along with the returned form.

**Responsible**: Director of NRB

### Step 11.
The Director of National Registration personally signs every birth certificate (this is also called Form NR9).

**Responsible**: Director of NRB

### Step 12.
Where the birth certificate is issued for an adopted child, an Officer enters the name and surname indicated in the Adopted Children Register; this is supported by an adoption order issued by a court.

**Responsible**: Officer

### Step 13.
- Issued birth certificates and rejected applications are dispatched to their respective DROs.
- Rejected applications include a note to the DRO to explain the reason for rejection.
- How these documents are delivered is ad hoc i.e. as and when there is transport available but the office is contemplating subcontracting courier services.

**Responsible**: District Registration Officer

### Step 14.
- DRO contacts informant using contact details noted on the Form NR8.
- DRO tells the Informant what information and/or documentation must be provided.

**Responsible**: District Registration Officer; Parent/Guardian; Chief or village elder; Foster Parent/Social welfare Officer

### Step 15.
- The Informant provides the DRO with the receipt of application in order to collect the certificate.
- The Informant does not know when the birth certificate is ready for collection so might have to travel multiple times to the DRO until it is there.

**Responsible**: Parent/Guardian; Chief or village elder; Foster Parent/Social welfare Officer

**Table 9. Notes on birth registration process**

**NB. Since documenting the as-is process above, health facilities in the districts of Lilongwe, Zomba and Mzimba have begun to conduct manual registration using the NR8 form onsite. At regular intervals the completed forms are transported to the nearest DRO for processing (same process from step 3.c above); once the certificate is printed at NRB HQ, it is then transported back to the DRO for onward distribution.**
Malawi: As-Is Death Registration Process

1. Village Chief documents birth details in village register (Form NRB 1)
2. Village Chief takes register to DRO when full
3. Village register stored at DRO
4. Chief/Village elder completes certification of home death section on NR10 form
5. Complete NR10 form
6. Travel to District Commissioner’s Office to get official acknowledgement of death
7. Review application details and supporting documentation
8. Stamp form & tell informant to submit application at Director’s Office
9. Review application
10. Authorise application and issue death certificate
11. Authorise application and issue death certificate
12. Travel to Director’s Office to collect death certificate
13. Make required updates to form and/or arrange required supporting documentation
14. Collect death certificate

Was application successful?

Was application successful?

Did all data complete/documentation provided?

Is certificate ready?

Is certificate ready?
Notes on the death registration process

<table>
<thead>
<tr>
<th>Step</th>
<th>Notes</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.a)</td>
<td>Only the deaths of people who are logged in a village register (Form NRB/1) are captured by the Village Chief; the Village Chief will add Date of Death to an existing record in the register. For the deaths of those whose births were not logged in a register, these are not captured.</td>
<td>Village Chief</td>
</tr>
<tr>
<td>2.b)</td>
<td>The Informant completes Forms NR10 &amp; NR11 (also referred to as a Death and Burial Report respectively) and must travel back to the location of where the deceased died to get written confirmation (on the Form NR10) of death outside a health facility.</td>
<td>Close relative present at time of death/illness or authorized person (not clearly defined in NRB regulations); Chief/village elder or religious leader; District Registration Officer</td>
</tr>
<tr>
<td>2.c)</td>
<td>Chief/village elder or religious leader completes the appropriate section on the Form NR10 and duly signs/stamps the form. For those who are illiterate, they can provide a thumb print as certification. *Note: In the case where the death occurred as a result of a road accident, violent physical act or any other unnatural cause, the report is accompanied by a [Supporting document: police report];</td>
<td>Close relative present at time of death/illness or authorized person (not clearly defined in NRB regulations); Chief/village elder or religious leader; District Registration Officer</td>
</tr>
<tr>
<td>3.a)</td>
<td>Hospital Death Report in Form NR12, is issued by a medical personnel of the said hospital or health facility.</td>
<td>Close relative present at time of death/illness or authorized person; Health facility personnel; District Registration Officer</td>
</tr>
<tr>
<td>3.c)</td>
<td>The District Commissioner and the DRO operate out of the same location. The Informant must get the NR10 form stamped by the District Commissioner to acknowledge the death before taking to the DRO.</td>
<td>Close relative present at time of death/illness or authorized person; Health facility personnel; District Registration Officer</td>
</tr>
<tr>
<td>3.d)</td>
<td>Supporting Documentation: Every person reporting the death of a person, together with the death report (NR10), surrenders the identity card of the deceased person. <em>For deaths that occurred in a health facility:</em> Burial report in Form NR11; Hospital Death Report in Form NR12. <em>For deaths that occurred outside a health facility:</em> Burial report in Form NR11; Note: In the case where the death occurred as a result of a road accident, violent physical act or any other unnatural cause, the report is accompanied by a [Supporting document: police report].</td>
<td>Close relative present at time of death/illness or authorized person; Health facility personnel; District Registration Officer</td>
</tr>
<tr>
<td>4.</td>
<td>Details on the death report are verified for completeness of application and supporting documents</td>
<td>District Registration Officer;</td>
</tr>
<tr>
<td>5.</td>
<td>Where the information provided is not complete/adequate, the applicants are requested to provide additional information/supporting documents.</td>
<td>District Registration Officer; Close relative present at time of death/illness or authorized person;</td>
</tr>
<tr>
<td>Step</td>
<td>Notes</td>
<td>Responsible</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>6.</td>
<td>Application form stamped by DRO to acknowledge initial review of office.</td>
<td>District Registration Officer;</td>
</tr>
<tr>
<td>8</td>
<td>The NR10 form includes a section at the bottom that is torn off and provided to the informant as receipt of application.</td>
<td>Director of NRB</td>
</tr>
<tr>
<td>9</td>
<td>Same notes as step 9 birth registration process notes</td>
<td>Director of NRB</td>
</tr>
<tr>
<td>10.</td>
<td>Same notes as step 10 birth registration process notes</td>
<td>Director of NRB</td>
</tr>
<tr>
<td>11.</td>
<td>Same notes as step 11 in birth registration process notes</td>
<td>Officer</td>
</tr>
</tbody>
</table>
| 12.  | • Informants must travel to the Director’s Office to find out about the status of the application.  
• Informants must bring their receipt of acknowledgement to collect their certificate. | District Registration Officer; |

**Table 10. Notes on death registration process**

**Key Actors in CRVS Process**

The table below shows the key actors involved in the registration processes, the capacity challenges that they face, and the opportunities that their skills might provide:

<table>
<thead>
<tr>
<th>Actor</th>
<th>Profile</th>
<th>Challenges / Opportunities</th>
</tr>
</thead>
</table>
| Informant/Applicant | **For Birth Registration:** Responsible for declaring the vital event, providing the necessary information, supporting documents and fees (if applicable) and following-up on birth certificate:  
• Parent or Guardian.  
• Social welfare officer, foster parents *(for adoptions and abandonments)*.  

**For Death Registration:** Responsible for declaring the vital event, providing the necessary information, supporting documents and fees (if applicable) and following-up on death certificate:  
• Relative of the deceased or any authorized person. | • May be unaware of registration processes and procedures;  
• Basic literacy is essential to complete forms |
| Village headman / Senior member of village / Cleric of religious organization | Responsible for providing supporting evidence of eligibility for home births (and late registration) | • May be unaware of registration processes and procedures;  
• Low levels of literacy |
| Health Facility Personnel | **For Birth/Death Registration:**  
• *Current process:* Responsible for providing registration forms to Informants after birth/death.  
• Often help parents to complete registration form due to low literacy rates of parents.  
• *New process:* Responsible for completing NR8 forms and providing | • Inadequate health facility staff;  
• Inadequate resources including stationery, transport;  
• Health care staff knowledgeable of registration processes. |
### Key Actors in CRVS Process

#### Table 11

<table>
<thead>
<tr>
<th>Actor</th>
<th>Profile</th>
<th>Challenges / Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Registration Bureau – District Registration Office</td>
<td>Responsible for receiving and reviewing applications, returning and advising applicants, verifying applications and submitting applications to Director’s Office.  - District Registrar’s Office;  - Grades: Clerical to Executive officers</td>
<td>▪ Well versed in registration process, requirements and certification activities (based on training and experience)  ▪ Inadequate resources including stationery, transport;  ▪ Low levels of computer literacy;  ▪ Underfunded</td>
</tr>
<tr>
<td>National Registration Bureau – HQ</td>
<td>Responsible for authorizing/rejecting and issuing certificates.  - Directorate of National Registration;  - Grades: Professional officer to Director.</td>
<td>▪ Well versed in registration process, requirements and certification activities (based on training and experience)  ▪ Underfunded  ▪ Dependence on Director’s involvement for the issuance of every certificate.</td>
</tr>
</tbody>
</table>

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### What variations occur in birth and death registration practices in Malawi?

The process notes above explain the generic birth and death registration process across the country, however informal process variations exist on the ground. Consulted stakeholders provided some insights into informal practices as follows:

<table>
<thead>
<tr>
<th>Practice</th>
<th>Root Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village Chiefs do not take registers to the DRO regularly due to the distances required to travel</td>
<td>Village Chiefs do not have transport or resources to travel to DRO to submit village registers</td>
</tr>
<tr>
<td>District Registration Officers do not check whether the forms are submitted within 6 weeks or charge any late registration fees. NRB HQ have requested this to encourage increased participation in registration. This was observed and confirmed to be the current practice in the DROs of Lilongwe and Chikwawa.</td>
<td>Low registration rates and a desire from the NRB to remove barriers to registration.</td>
</tr>
<tr>
<td>Stakeholder consultations at the district level established that most citizens prefer to access public services (including civil registration) through relatives, friends and acquaintances who work or are linked in some way to the facility providing the service. 23</td>
<td>Informal community networks exist among locals and are perpetuated by the lack of client service charters, standardised processes and documentation on registration processes.</td>
</tr>
<tr>
<td>Birth certificates which are meant to be collected through the DROs are in some instances collected directly from the NRB headquarters.</td>
<td>Slow processing of birth certificates at the Director’s Office due to the need for the Director to sign each certificate personally.</td>
</tr>
<tr>
<td>Full supporting documentation required to undertake registration is not always (strictly) demanded24</td>
<td>Familiarity of applicants with officials who in turn do not demand the legally required documentation perpetuates this practice.</td>
</tr>
</tbody>
</table>

---

23 Stakeholder consultation, DRO, Lilongwe District

24 Stakeholder consultation, DRO, Chikwawa District
Payment e.g. for late registration, is currently not being demanded from applicants by the District Registrars’ Offices. Requesting payment will result in applicants not engaging with the process and would discourage the required uptake for civil registration.

Applicants often do not collect birth certificates from the DRO so the DRO will deliver certificates of births that occurred in health facilities to these locations.

- Majority of citizens do not understand the end to end birth registration process, and the reasons, value and purpose of a birth certificate.
- Applicants do not know when the birth certificate is ready as there is no mechanism to inform them.

| Table 12. Local variations to the registration process |

**Process Bottlenecks: What are the weaknesses in the registration processes?**

Detailed in the table below are identified general weaknesses in the civil registration process:

<table>
<thead>
<tr>
<th>Weakness</th>
<th>Outcome</th>
</tr>
</thead>
</table>
| Inadequate infrastructure to support business processes including quality and existence of offices, equipment and furniture. | • Unreliable, slow and ineffective registration processes.  
• Quality of service for citizens is low which acts as a deterrent from completing it and/or participating in it again.  
• Lengthy registration process which has a detrimental effect on both citizen’s participation and perception of the process.  
• Registration staff unable to operate in buildings where there is no power. |
| Inadequate human capacity and ICT capacity. The establishment of the DRO provides for 4 staff members, including 1x Assistant District Registration Officer, 1x Logistics Officer and 2x Data Preparation Clerks. None of the 9 DROs visited during the survey had all positions filled. | Citizens unaware of how, where and why to engage in the registration processes resulting in extremely low rates of registration. |
| Inconsistent and erratic power supply and internet connectivity | |
| Lack of documentation available on the registration process (client service charters) for Citizens. | |
| Procedural documentation (regulations and instruction manuals) have only recently been defined; standardisation of the implementation of these regulations has not yet been realised. | Creates ambiguity in the way that processes are executed. Informal practices have developed over time which further confuse citizens and act as a deterrent to their participation in the process. |

Detailed in the table below are identified process-specific weaknesses in the registration process:

<table>
<thead>
<tr>
<th>Step</th>
<th>Process Weakness</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.a)</td>
<td>Not all deaths are captured in the village registers; only those whose births had been originally captured in a register are documented.</td>
<td>Incomplete death data – data for planning purposes.</td>
</tr>
</tbody>
</table>
| 1.  | Data captured in village registers not transferred to central data store or further used.  
Citizens not informed that they must also travel to the DRO to formally register the birth/death. | Data captured in village registers is not available at the National level for planning purposes.  
Citizens who are registered in these registers think that they are formally registered when this is not the case. |
| 2.a) | Home Births: Informants must travel to the DRO twice to register a birth – once to collect | Increase in the indirect costs for Informants which can act as a deterrent to engaging in the |

25 Stakeholder consultation, DRO, Chikwawa District
<table>
<thead>
<tr>
<th>Step</th>
<th>Process Weakness</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.c)</td>
<td>For those village elders who are illiterate and must certify home births, they can provide a thumb print as certification – this cannot be officially authenticated</td>
<td>Risk that fraudulent registration applications are received and approved</td>
</tr>
<tr>
<td>2, 3.</td>
<td>Stock-outs of civil registration forms</td>
<td>Process stalls resulting in a protracted end-to-end process and decreases the likelihood of citizens to complete the process.</td>
</tr>
<tr>
<td></td>
<td>Low literacy levels among the applicants/informants; this is evident in the data capture forms completed.</td>
<td>Garbage In Garbage Out. Information of low quality raises data integrity issues.</td>
</tr>
<tr>
<td>3.b)</td>
<td>Birth registration form demands a solid level of literacy from the Informant; adult literacy rates in Malawi around 61.3%26.</td>
<td>Quality of data on forms is low and citizens are often required to update and resubmit forms due to a lack of understanding.</td>
</tr>
<tr>
<td>3.d)</td>
<td>Multiple forms required to register a death</td>
<td>Increased effort and workload due to complexity of process for both Informant and staff</td>
</tr>
<tr>
<td>4.</td>
<td>Procedures for late registration are poorly defined and DROs are able to exercise discretion over how they deal with each application</td>
<td>Inconsistency in how the process is executed, putting citizens at risk of receiving unfair treatment</td>
</tr>
<tr>
<td>5.</td>
<td>▪ DRO Officers only review completeness of form, they do not review validity of supporting documentation.</td>
<td>▪ An application can be rejected by the Director’s office and require additional inputs and visits to the DRO by Informants to resolve it. This results in further indirect costs for Informants and decreases the likelihood of completing the process.</td>
</tr>
<tr>
<td></td>
<td>▪ Verification of supporting documentation does not always take place.</td>
<td>▪ Information recorded can be inaccurate, leading to a reduction in data quality and integrity.</td>
</tr>
<tr>
<td>6.</td>
<td>Not all forms are reviewed when the Informant is at the DRO; when an application requires further information the Informant may have to visit the DRO again.</td>
<td>Increase in indirect costs for citizens which can deter them from continuing to participate in the process.</td>
</tr>
<tr>
<td>7.</td>
<td>Officer unable to enter data into RACS if there is not network connection.</td>
<td>Delay in processing of birth registration, resulting in delayed provision of certificate for applicant.</td>
</tr>
<tr>
<td>7.</td>
<td>▪ RACS not used to transfer data on death – application forms sent manually to HQ.</td>
<td>▪ Delay in sending forms extends the length of the process.</td>
</tr>
<tr>
<td></td>
<td>▪ No copy of death registration forms stored at DRO.</td>
<td>▪ DRO unable to search for death applications at the DRO when applications are queried.</td>
</tr>
<tr>
<td></td>
<td>▪ Informant required to go to 3 separate offices to submit the death registration application.</td>
<td>▪ Indirect costs for informants high as travel required to multiple offices.</td>
</tr>
<tr>
<td>10.</td>
<td>Director must manually sign all birth &amp; death certificates and has final say on any questions of authorisation.</td>
<td>Delay in processing birth and death certificates. The more applications there are, the bigger bottleneck this becomes.</td>
</tr>
<tr>
<td>11, 12.</td>
<td>Lack of a systematic and regularised transportation mechanism to move civil registration forms between DRO and NRB HQ.</td>
<td>Late turnaround time between application and delivery of certificates, resulting in protracted end-to-end process.</td>
</tr>
</tbody>
</table>

26 UNICEF Statistics, Total adult literacy rate (%) 2008-2012
**Table 13. Registration process weaknesses**

<table>
<thead>
<tr>
<th>Step</th>
<th>Process Weakness</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.</td>
<td><strong>Death</strong> Informant must travel to DRO/Director’s Office to find out the status of their birth/death application, this can result in multiple trips to complete the application.</td>
<td>Indirect costs to Informants increase and they may be unable to complete the process.</td>
</tr>
<tr>
<td>15.</td>
<td><strong>Birth</strong></td>
<td></td>
</tr>
</tbody>
</table>

Registration Barriers and Incentives: What prevents people from registering births and deaths in Malawi and how can they be encouraged to engage in the process?

Despite the registration for births and deaths being compulsory and free in Malawi, there are a number of reasons why people do not engage in the process. These barriers to registration, as well as potential ways in which people may engage in the process were identified through analysis of the existing process and through the research conducted (survey, focus group discussions and interviews with key CRVS stakeholders).

**Low Public Awareness on Civil Registration and Its Importance**

Based on the survey conducted, only 28.7% and 19.7% of respondents had heard about birth and death registration respectively.

- Out of the 28.7% of respondents who knew about birth registration, very few understood its value and purpose: 50.3% believed that birth registration is for government planning purposes; 49.3% thought that its purpose is to acquire national identification for the child; 17.5% to access health care; 3% to access education; and 3% to obtain a passport. Only 4.7% of respondents were able to identify more than 1 benefit of birth registration.
- Out of the 19.7% of respondents who knew about death registration even fewer people understood its value and purpose: 40% of respondents said that death registration is for inheritance purposes; 40% said it is for government planning; and 20% believed it is for insurance purposes.
- Of those respondents who knew about civil registration, participants had heard about it from various sources: 41% from health facilities; 40% via community and national radio announcements; and 14% from information provided by Village Chiefs/Leaders.

Despite the lack of awareness, out of the respondents who were aware of birth registration, 79% of respondents said that they would register their child (82% male and 76% female). This figure suggests that people would engage in the process if they were aware of registration and how to engage in the process.

Participants of the FGDs were asked about any registration activities that they were aware of (not specifically birth and death), interestingly they revealed knowledge of other forms of “registration” including registration for:

- The Government-led farm input subsidy programme through which qualified households are given coupons to buy fertilizer and seed at subsidized rates.
- Social protection programmes and microloans.
- Registration for elections.
All of these registration activities offer some form of incentive or benefit to the citizen for participating, this suggests that incentives, either in kind or that contribute to indirect personal benefit, encourage citizens to engage in formal registration processes.

FGD participants also had a limited knowledge of the need for national identification registration. On average only 1 to 4 people out of the 12 to 15 people who took part in the sessions reported to have heard about national identification. Despite not knowing about national IDs, participants welcomed the idea of registration for the following reasons:

- Registration would help the government and chiefs to have more accurate estimates of their populations;
- An ID would be helpful for identification purposes e.g. if involved in accidents;
- An ID would be helpful in prioritizing certain jobs for local Malawians;
- An ID would help to reduce congestion in health facilities along the borders; and
- The status of having a national ID.

Unawareness of Formal Civil Registration Processes

Of those citizens who were aware of the need to register births and deaths, there is a clear misunderstanding of what the formal registration processes are (as defined in CRVS Processes). Without a clear understanding of the process, citizens cannot properly participate.

- Of the respondents who knew about birth registration, less than half cited locations where registration takes place: 49.1% cited health facilities; 32% cited government/DROs.
- Of the respondents who knew about death registration, the following were locations cited as registration sites: 40% health facilities; 33% government offices; 21% chiefs.
- FGD participants who claimed to know about birth and death registration cited the Village Registration process (using village registers as documented in CRVS processes) as the registration process – they were not aware of the formal process as documented in CRVS processes.
- No FGD participants knew that a birth certificate was the formal documentation provided as a result of completing the birth registration process.

For all children aged 0-16 years living with the respondents, data was also collected regarding their registration status. According to information provided by the respondents, 71.0% (4499/6333) of children who were living in the households of the survey respondents had been registered by some registration of entity.

- Of the children aged 0-16 years whose birth information was reported registered by some registration entity: 82.0% said that they had registered at a health facility; 13.0% by Village Chiefs; 5% by a Health Surveillance Assistant and less than 1% had been registered at an NRB/District Commissioner’s office.
- Respondents were asked to show the registration document which proved that their child had been registered: 69.8% produced child health passbooks which are provided for growth monitoring and health tracking at a hospital; 23.4% had no certificate to show; and 4.9% had an official NRB certificate.

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27 This proportion includes birth certificates that were issued under the Birth and Death Registration Act, administered by the Registrar General. The percentage of birth certificates issued under the current National Registration Act is less. Current
It is clear from the survey findings that citizens do not fully understand the official registration process and think that enrolment in other programmes, specifically health-based tracking, is the equivalent of birth registration. As a result of this misunderstanding, no tentative registration rate can be drawn from the survey results due to the lack of clarity around who was and wasn’t officially registered.

**Cultural Considerations**

There are a number of cultural practices across the country that can have an effect on people’s willingness/ability to engage in registration processes. Cultural reasons were the least often mentioned reasons for not engaging in registration activities.

**For Birth Registration:**

- The practice of not naming a newly born child at time of birth (or within a few days), makes it difficult for the child to be registered as the name is a mandatory field required to complete the NR8 form. Currently, the word ‘Baby’ is entered in the first name field to ensure birth registration takes place. Parents are encouraged to return to the DRO, to effect changes to the name field once the child has been named. Despite this workaround, some mothers still leave the health facility without registering the child, opting to return at a later date when the child has been named and finalise the child birth registration process.
- When a child is born with a physical disability or shows signs of sickness, parents often choose not to register the birth, fearing that the child may likely die.

**For Death Registration**

- Most deaths occur outside health facilities\(^\text{28}\). These deaths are often not reported for various social, cultural and religious reasons. Culturally, death is not openly discussed due to the secrecy and emotional aspects surrounding the subject and may be considered a difficult subject to engage in or in fact considered a taboo, in some Malawian societies: “...death legislation became effective on 1st August, 2015. As at November 2015, the NRB has received over 12,000 birth registration application and has printed 9,000 certificates).

\(^{28}\) Source: NRB
registration is not done here because we believe that once one is gone, that’s it, so why register them?...” (FGD participant from T/A Chapananga in Chikwawa district)

- Some participants of the focus groups were of the view that there was no need to register deaths as it would mean losing twice, a relative and money to go and register at the District Commissioner’s office

Religious and Spiritual Beliefs

- Some religions e.g. Jehovah’s Witness, Zionists, Apostles etc do not allow their members to take part in any formal registration processes including participation in elections and accessing health care. Such groupings are likely to discourage their members and may undermine the universal coverage target.

- Captured in three districts of Ntchisi, Thyolo and Mangochi, is an alleged biblical belief called “666/mark of the beast”, which says that when the world comes to an end strange and unexpected things will happen, there will be many false prophets and some people will be registered for unknown reasons. As a result, formal registration activities were likened to the “mark of the beast”: “...when the registration was announced on the radio, people gossiped in the vernacular ‘wamva 666 uja ndi ameneyu, ife sitipitako kumeneko’ literary meaning “...have you heard, this is the 666 issue, we will not go to register (FGD participant from TA Kalumo, Ntchisi district)

- A participant in one of the FGDs in Ntchisi district, stated that there is a belief associating child registration with a looming death i.e. if a child is registered it means that child is earmarked for death in next couple of days.

Indirect Costs

Due to the complexity of the registration processes and the need to visit the DRO, District Commissioner, and/or Director’s Office multiple times to complete the application, costs associated with registration can act as a barrier to engaging in the process.

- Even though the current practice in obtaining a birth or death certificate does not attract any fees, despite provisions made in the law to charge fees particularly for late registrations, applicants have to bear the cost of engaging in the process. This includes travel costs (potentially for multiple trips), loss of earnings, and sometimes the provision of gifts to registering entities.

- The survey established that 31.5% of those who participated in the birth registration process spent an average of MK130 (maximum K3,500); while 0.2% made a non-monetary payment in the form of gifts to the registering entity.

- When discussing death registration in the FGDs, most participants were of the view that should government want to register deaths, the process should be free and the people reporting deaths should be compensated for travel and other related costs. Other participants also suggested that chiefs and HSAs, who were already registering deaths locally, should be charged with the responsibility of reporting deaths at the District Commissioner’s office for issuance of death certificates.

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[29] This view was captured in FGDs in Thyolo, Ntchisi, Lilongwe, Mangochi and Rumphi districts suggesting how widespread this belief is across the country.
• In Mangochi and Ntcheu districts, participants in FGDs complained that in most cases, registrations are conducted in sites that are far and difficult to reach. Longer distances to registration points coupled with seasonal agricultural demands (farming or harvesting) are barriers to participating in any registration exercise.

**IT System Landscape: What IT systems are used to support CRVS processes?**

Prior to August 1st 2015 there was no IT system supporting CRVS processes in Malawi. On August 1st, the NRB launched a pilot programme for the electronic Birth Registration System (eBRS), a system developed by the CDC and Baobab Health Trust. The eBRS is currently being piloted in four district hospitals of Chitipa, Ntcheu and Blantyre, and Bwaila Hospital in Lilongwe with a view to scale-up across the country upon successfully proving the model. All births captured in the eBRS system are ultimately stored in a central database housed in the data centre at NRB headquarters in Lilongwe district. While this system is being piloted, a temporary measure has been put in place to ensure that all births and deaths registered through the existing process are also recorded in the central database. To support this CDC and Baobab have developed a temporary solution, the Remote Access Control System (RACS), to allow DROs to enter records directly into the central database.

The system architecture, both temporary and pilot model, is further detailed below.

1. The eBRS application runs on a touch screen dummy terminal\(^{30}\) that connects to a non-relational database that is onsite.

   The application allows Health Facility staff to: (i) submit birth registration applications (replicating the NR8 form) electronically to the DRO for verification; (ii) access existing birth records from the health facility.

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\(^{30}\) A dummy terminal is a computer terminal that consists mostly of just a display monitor and a keyboard (in this case only a touchscreen monitor). It has no internal CPU (central processing unit), and thus has little or no processing power
Data on the health facility database is synchronized with the DRO database periodically when connectivity is available (one-way sync). This setup supports offline data capture in the absence of connectivity. The existing hardware has an initial capacity of two million records; this can be upgraded if necessary.

2. The eBRS application runs on a computer at the DRO. There is an application server at each site that supports the application and links to a relational database; these operate in a Local Area Network (LAN) environment.

   The application allows DRO staff to: (i) verify birth registration applications received from health facilities; (ii) submit birth registration applications directly to the Director’s office for authorisation (offline submission supported if connectivity is down); (iii) access and update birth records pertaining to their respective DROs already stored in the system.

   As per the health facility, data on the DRO database is synchronized with the central NRB database periodically when connectivity is available (one-way). This setup supports offline data capture in the absence of connectivity. The hardware is capable of handling more records than the estimated number of citizens in each district; this can be upgraded if necessary.

3. The eBRS application at NRB HQ allows officers to: (i) review submitted applications received from DROs; (ii) allows the Director to authorise or reject applications; (iii) print birth and death certificates directly from the system.

   The central NRB database operates out of the data centre at NRB headquarters in Lilongwe and is the only relational database as it facilitates required querying of data. Central servers are hosted here, including the eBRS application and database servers, both operating in a LAN environment.

   The hardware is capable of handling more records than the estimated number of citizens in the country; this can be upgraded if necessary. Data controlled centrally is synchronized with all other databases periodically when connectivity is available.

   The LANs at the three levels are connected through Hypertext Transfer Protocol on Secure Socket Layer (HTTPS) using a combination of 3G, VPN and point-to-point line of sight technologies. The connectivity option used depends on existing infrastructure available and appropriate for each site.

   Non-relational databases have been used to reduce storage and processing requirements as they will only update the main database with new data rather than syncing all data every time.

   Application servers onsite at health facilities are also used to support other health related applications including eMRS.

4. The web-based monitoring dashboard can be accessed by NRB staff at HQ only. The dashboard shows connectivity levels between each facility and the number of births registered at each registration location, providing key data to allow for targeted operational improvement measures.

   While the eBRS is currently being piloted in the districts only for birth registration, the intention is that a similar system (eDRS) will be used for death registration once the model is proven and scaled.
5. **eDRS runs on a computer in the NRB Data Centre.** The eDRS application allows data entry clerks to directly access the database to: (i) create a new death record directly in the database; (ii) edit details of a death record; (iii) print a death certificate.

6. **Temporary Solution:** RACS works by supporting remote access to the central database via computers at each DRO using Virtual Private Networks (VPNs). These VPNs connect computers on DRO Local Area Networks (LANs) to the main database using Access Point Names (APNs) on a local mobile phone providers’ 3G network. Upon connecting and accessing the central database, DRO computers access data capture forms which data preparation clerks use to input verified application forms (Form NR8), immediately updating the main database. Connectivity between the LAN and the main database server is required to access the data capture forms and enter data therefore data cannot be captured if there is no connectivity. If supporting documents are required, these are scanned and emailed to the Director’s Office separately.

**NB.** The RACS is currently available only for child birth registration in DROs. Death registration records are input by entry clerks in the data centre at headquarters.

Hardware onsite at health facilities and DROs is powered through battery packs which are in turn powered by a solar panel. In the event of any issues with this power source, the battery packs can support the setup for up to 3 days.

The below table describes the level of automation that the eBRS system provides relating to CRVS functions derived from the UN Principles and Recommendations for a Vital Statistics System\(^\text{31}\)

<table>
<thead>
<tr>
<th>CRVS Function</th>
<th>State of Automation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Civil Registration</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collect</td>
<td>Semi-Automated</td>
<td>• Informants must visit the DRO/Health Facility in-person and complete a paper application form</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Staff then input form fields into the eBRS application</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Details can be edited in the application</td>
</tr>
<tr>
<td>Validate</td>
<td>Semi-automated</td>
<td>Client-side validation occurs to reduce data input errors. Supporting documents are validated manually</td>
</tr>
<tr>
<td>Store</td>
<td>Automated</td>
<td>Data stored locally and uploaded into the central database online in real time.</td>
</tr>
<tr>
<td>Certify</td>
<td>Automated</td>
<td>eBRS is able to produce birth certificates upon authorization by the director of the NRB</td>
</tr>
<tr>
<td><strong>Vital Statistics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compile</td>
<td>N/A</td>
<td>Vital statistics not collected through civil registration process</td>
</tr>
<tr>
<td>Process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disseminate</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring and Reporting</td>
<td>Not automated</td>
<td>Not available</td>
</tr>
<tr>
<td>Data Sharing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

System Analysis (eBRS)

The eBRS system uses low power consuming equipment and considerably improves the current birth registration process by digitising key steps in the process that currently prevent registrations from taking place and/or act as a bottleneck (as identified in Process Bottlenecks). It does this specifically by:

- Addressing accessibility of services by providing the service at health facilities.
- Reducing the time required to complete the process by processing applications electronically.
- Allowing the DRO to search for and edit records from one central database, reducing the need to engage in time-consuming paper-based processes.
- Being able to print a birth certificate from the application, potentially reducing the dependence on the Director’s Office if this task is decentralised.
- Maintaining data that is up-to-date and of considerable integrity through the use of non-relational databases and auto-synchronization.
- Providing a power back-up for up to 3 days through utilisation of battery packs.

This architectural approach does however have some potential drawbacks:

- Setup costs are high compared to web-based applications that operate via a thin client (approx. US$12,000 per health facility); this may have an impact on scalability of the solution.
- Locally installed applications, servers and distributed databases require local support if there are any issues, this will results in more complex maintenance requirements and higher maintenance costs.
- Use of Ubuntu Operating System (OS):
  - Relies on external maintenance if there are any issues – this will cause delays in resolving problems and increase maintenance costs.
  - Trivial maintenance activities requires knowledge of Linux commands e.g. adding printers.
- Local databases (in DROs and Health Facilities) only hold data for that location. If a birth is registered in one district, the parent/caregiver can only access their record from one DRO.
Notes on the eBRS Process

<table>
<thead>
<tr>
<th>Step</th>
<th>Notes</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>For Home Births: birth registration process begins as per existing process, see CRVS processes.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Applicant completes Form NR8 with assistance from the health care worker.</td>
<td></td>
</tr>
</tbody>
</table>
  - Parent/Guardian;  
  - Health facility personnel |
| 3.   | Health Facility staff enter data from the completed Form NR8 into the touchscreen terminal. Upon saving the record the information is electronically sent to the DRO (birth notification). |  
  - Health facility clerk |
| 4/7. | Receipt of notification printed on a sticker with unique barcode. The NR8 form includes a section at the bottom that is torn off and provided to the Informant as receipt of application. |  
  - District Registration Officer |
| 5.   | Ambulances regularly travel to locations where DROs are located, for supplies; Health Facility Staff provide forms to ambulance drivers to drop off at the DRO for processing |  
  - Health Facility Staff |
| 6.   | Data from NR8 form inputted into local application on computer in DRO. |  
  - District Registration Officer; |
| 8.   | Alert on application notifies DRO of received applications from health facilities. The DRO reviews inputted data for completeness. No supporting documentation is provided from applications from health facilities. |  
  - District Registration Officer; |
| 9.   | If data is missing from the application the DRO will contact the Informant via the contact details provided on the NRB. |  
  - District Registration Officer; |
| 10.  | Application is saved and sent electronically to the Director’s Office |  
  - District Registration Officer; |
| 11.  | For applications of home births, supporting documentation is manually scanned and emailed to the Director’s Office for verification as per the existing process, see CRVS Processes |  
  - District Registration Officer; |
| 12.  | Application is reviewed for completeness, duplications and eligibility. This check focuses on establishing the legitimacy of the application and eligibility of the child to be registered (parents must be Malawian) |  
  - Office of the Director of NRB |
| 15.  | The Director of the NRB authorizes the issuance of each birth certificate. A certificate is printed for dispatch; it has security features including the coat of arms, watermark and barcode |  
  - Director of NRB; |

Highlights from the eBRS Evaluation

The eBRS Evaluation of February 2016 highlighted the following resource challenges within health facilities and logistical challenges with the delivery and collection of forms and certificates. Specifically from the perspective of the NRB Hq and DROs;

- Generally the inflow of information from districts is slow;
- Inability to monitor movement of records at each level i.e. health facility to DRO and DRO to headquarters;
- Non-submission of NR8 forms to the DRO after verification by the village head. Some people will collect forms but never bring them back after verification of village head and/or senior member of village;
- Signed forms by the village head unstamped because of lack of a date stamp;
Most certificates (especially on-demand) are collected from the headquarters as opposed to the DRO;

- Inadequate storage space in the districts;
- Delivery of birth certificates from NRB headquarters to districts and ultimately to applicants remains a challenge;
- DRO’s are understaffed and inadequately financed.

From the health facilities, the following challenges were highlighted;

- There is too much workload on health care workers due to inadequate staffing. The high illiteracy rates among informants results into health care workers having to complete the forms;
- Unavailability of NR8 forms results into children being discharged without being registered. Similarly there are shortages in stationery including writing materials;
- The practice of temporarily naming a child at the health facility for purposes of completing the registration process who is later changed after being discharged from the facility, implies a registration that requires amendment.

Current CRVS Initiatives: What existing programmes and projects aim to strengthen CRVS systems in Malawi?

There are a number of ongoing CRVS initiatives aimed at improving the current CRVS processes in Malawi. Processes to procure a national registration system are underway and it is hoped that the system supplier will be contracted at the beginning of 2016.

Ongoing Initiatives

The table below highlights other on-going initiatives and identifies potential opportunities presented by each of these initiatives:

<table>
<thead>
<tr>
<th>Description</th>
<th>Opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public Sector Reform Programme under the Office of the Vice President</strong></td>
<td>• Get a champion for CRVS improvements at the highest level of the executive. • Define performance indicators for CRVS within this programme.</td>
</tr>
<tr>
<td>Government of Malawi is implementing a wider public sector reform programme with a view to improving service delivery. Reform areas have been targeted, including the introduction of national identity cards, and responsible public sector ministries/departments/agencies are assessed, on a quarterly basis, against defined and agreed performance indicators by the Office of the Vice President.</td>
<td></td>
</tr>
<tr>
<td><strong>Implementation of village-based vital registration in a rural setting</strong></td>
<td>• If the model is proven as successful, review the solutions ability to scale across the country. • Extend the application to include all required fields in form NR8. • Formalise the role of Community Actors as Notification Agents in law/regulations.</td>
</tr>
<tr>
<td>Baobab Health Trust, with financial assistance from the International Union against TB and Lung Diseases, has developed and is currently piloting an electronic village register within the Traditional Area (TA) Mtema in Lilongwe district with a plan to deploy the solution to over 70 villages by the end of March 2016. Village headmen capture information, through Point-of-Sale Terminals, on current demographics of the resident population including new births and deaths. This information is</td>
<td></td>
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</table>
periodically transmitted, over a mesh network, to the Traditional Authority for onward transmission to the DRO for inclusion in the national register. The Point-of-Sale terminal is also fed with daily news stories from Global, National and Local news to provide the Village Head Man (and his Villagers) with useful information. This functionality may include dissemination of other valuable information such as weather and farming reports in the future, making the terminal multi-purpose.

The user interface of the system has been developed in the local language, Chichewa, and the entire system is powered by a deep-cycle battery that is charged by solar energy which also provides lighting to the village heads’ house. The approximate cost for each Point of Sale Terminal and associated hardware is $2000 per village.

<table>
<thead>
<tr>
<th>Plan Malawi: Mobile Registration Van</th>
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<tbody>
<tr>
<td><strong>As a child rights organization, Plan Malawi has developed a proposal to assist the NRB towards the implementation of an electronic community registration project, targeting children under 16 years in three districts.</strong></td>
</tr>
<tr>
<td><strong>In order to reach communities Plan Malawi has procured a van equipped with hardware/equipment to undertake mobile registration activities.</strong></td>
</tr>
<tr>
<td><strong>Plan Malawi: Mobile Registration Van</strong></td>
</tr>
<tr>
<td>Use the mobile registration van for registration drives in rural areas where distance (and the subsequent costs) is a barrier to registration.</td>
</tr>
</tbody>
</table>

**Partnership Boost: Additional partners joining the national registration exercise**

| **The Community of Saint Egidio, established in Rome in 1968, since 1990 has been involved in national registration exercises around the world including in countries of Mozambique and Burkina Faso under the BRAVO programme (Birth registration for all versus oblivion). BRAVO is currently supporting the NRB with birth registration activities in the district of Balaka; providing training to civil registration officers on birth registration and supporting community awareness raising and sensitisation activities. It will also support in the deployment of the eBRS system in a number of health facilities from April 2016.** |
| **Partnership Boost: Additional partners joining the national registration exercise** |
| Learn from BRAVO’s registration experience in other countries and replicate successful activities appropriate for Malawi. |
| Extend successful components of BRAVO’s community awareness and sensitisation activities to other areas of Malawi. |

<table>
<thead>
<tr>
<th><strong>National ID System</strong></th>
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<tbody>
<tr>
<td><strong>The NRB, with assistance from the UNDP, is in the process of implementing a national ID system. The government has set aside funds for the identification of a contractor to assist with the implementation of the system. UNDP will also provide technical and financial assistance over the next five years through pilot exercise of proof of concept up to mass registration exercise. The project will, among other objectives, seek to:</strong></td>
</tr>
<tr>
<td><strong>National ID System</strong></td>
</tr>
<tr>
<td>Establish a unified population register for the country</td>
</tr>
<tr>
<td>Consolidation of ICT infrastructure within the national data centre</td>
</tr>
<tr>
<td>Establishment of national ID registration centres i.e. DROs, proposal to use post offices</td>
</tr>
<tr>
<td>Promote the development of an interoperable system that can integrate with eBRS/CRVS software/data capture tools.</td>
</tr>
<tr>
<td>Promote the linkage of National ID with birth and other vital event registration.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Awareness and Civic Education</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic Outcome 3 of the NRB Strategic Plan is Improved Public Awareness on National Registration, and a target of this outcome is the development of an NRIS Communication</strong></td>
</tr>
<tr>
<td><strong>Awareness and Civic Education</strong></td>
</tr>
<tr>
<td>Continue to increase awareness on birth registration and to encourage citizens to participate in the process.</td>
</tr>
</tbody>
</table>
Addressing As-Is Assessment Issues of CRVS in Malawi

The following issues, identified during the DBR as-is assessment stage, along with the identified interventions to potentially resolve the issues will further be explored during the technical analysis stage of this analysis.

<table>
<thead>
<tr>
<th>As-Is-Issue</th>
<th>Potential to Resolve/Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vital Statistics</strong></td>
<td></td>
</tr>
<tr>
<td>1. Vital statistics are not compiled from civil registration sources.</td>
<td>Add vital statistics fields to civil registration forms. Link eBRS to the National Statistics system and/or provide a means of access to the eBRS for the NSO. Advocate for vital statistics to be compiled from civil registration source.</td>
</tr>
<tr>
<td><strong>Legal Framework</strong></td>
<td></td>
</tr>
<tr>
<td>2. Vital event registration form (NR8) does not reflect all fields as recommended by UN/WHO.</td>
<td>Review and update birth registration form to include mandatory recommended fields. Legal/policy reform: reflect minimum field requirements in appropriate regulations.</td>
</tr>
<tr>
<td>3. Current legal framework does not support coordination of or sharing of civil registration or vital statistics data between different government agencies.</td>
<td>Legal/policy reform: establish appropriate provisions for data sharing mechanisms and data protection measures to support the safe and effective sharing of civil registration data.</td>
</tr>
<tr>
<td>4. Legal framework does not make provisions for data protection and privacy of individuals.</td>
<td>Legal/policy reform: establish provisions for the protection of personal data from unofficial CRVS use.</td>
</tr>
<tr>
<td>5. Legal framework not comprehensive e.g. The Act is silent on registration of a child whose parents are not Malawian, although the draft Regulations provide some indication</td>
<td>Legal/policy reform: establish provisions that support the registration of all children in spite of any issues of nationality and status of residence i.e. non-Malawians</td>
</tr>
<tr>
<td><strong>Registration Bottlenecks</strong></td>
<td></td>
</tr>
<tr>
<td>6. Inadequate physical infrastructure.</td>
<td>Infrastructure: support provision of required office space to fulfil civil registration function.</td>
</tr>
<tr>
<td>8. Inconsistent and erratic power supply and availability of internet connectivity</td>
<td>Infrastructure: provide alternative sources of power e.g. solar or generators in all service points. Infrastructure: provide dedicated internet connectivity links to all DROs.</td>
</tr>
<tr>
<td>9. Lack of Client Service Charters</td>
<td>Process: develop client service charters in local language and display these in all service points. Capacity: provide training to NRB staff to ensure that client service charters are effectively utilised and observed.</td>
</tr>
<tr>
<td>10. Stock-outs of civil registration forms</td>
<td>Process: develop efficient SOPs to ensure that civil registration forms (and other materials) are available in all registration sites.</td>
</tr>
<tr>
<td>11. Low literacy levels among the</td>
<td>Communication: create accessible information on civil registration</td>
</tr>
</tbody>
</table>

Table 14. Existing CRVS strengthening projects and programmes
<table>
<thead>
<tr>
<th>As-Is-Issue</th>
<th>Potential to Resolve/Interventions</th>
</tr>
</thead>
</table>
| applicants/informants. | processes and disseminate through interactive methods to engage with citizens with low literacy levels.  
  ▪ Capacity: train registration agents to support illiterate informants complete registration forms. |
| 12. Verification of supporting documentation does not always take place. | ▪ Process: develop strict SOPs to encourage adherence to registration regulations and procedures.  
  ▪ Capacity: provide training to registration resources to ensure that they complete registration as per SOPs.  
  ▪ Capacity: complete random checks for SOP adherence at all registration sites as appropriate. |
| 13. Erratic availability of transport to deliver certificates to applicants | ▪ Strengthen logistics through sub-contracting of courier services.  
  ▪ Legal/policy reform: advocate for decentralisation of printing of certificates (using eBRS) at the DRO  
  ▪ Process: redefine SOPs to reflect printing of certificate at registration site.  
  ▪ Process: provide “on-demand” certificate services to reduce cost and resource requirements of certificate delivery function. |
| 14. Information collected in village registers not being utilised | ▪ Technology: provide official community registration services supported by appropriate mobile technology  
  ▪ Technology: integrate population register with CRVS data |

**Barriers to Registration**

1. Low awareness on civil registration and its importance  
   ▪ Communication: mobilise intensified public awareness and civic education campaign via mixed communications methods, with the aim to change behaviours and increase participation in the birth registration process.  
   ▪ Communication: Develop clear, simple and accessible information on registration processes and make readily available in health facilities, DROs, and other public service outlets. This must include information on what is and isn’t the registration process e.g. not health passbook.  
   ▪ Communication: Use relevant community actors to educate citizens on civil registration and its importance within the community.  
   ▪ Communication: Provide incentives to people to participate in the process (must be sustainable)  

2. Cultural Considerations  
   ▪ Communication: intensified public awareness and civic education campaign  
   ▪ Communication: Engagement of culturally relevant registration agents e.g. village chiefs, to promote civil registration  
   ▪ Communication: Encourage registration by establishing the possession of a birth certificate as a status symbol  

3. Indirect Costs  
   ▪ Technology & Process: provide civil registration services within the community, closer to the people e.g. mobile-based civil registration services.  
   ▪ Technology & Process: extend eBRS system to all health facilities to ensure that all health facilities births are registered.  
   ▪ Technology: notify informants via sms that their application has been processed and the certificate is ready for collection.  
   ▪ Process: provide “on-demand” certificate services to reduce cost and resource requirements of certificate delivery function.  
   ▪ Process: reduce duplication of effort by combining business processes where possible e.g. registration of birth in village register and registration of birth at DRO.  

**CRVS Operations**

1. Numerous CRVS initiatives  
   ▪ Coordination: partner with existing initiatives to learn from each other and scale-up and strengthen successful models
Technical Feasibility Assessment

In this chapter an assessment of current capacity and relevant opportunities that may impact the feasibility and cost-effectiveness of digital solutions is detailed. This assessment forms the basis of a recommended technical solution which will be the foundation of the DBR Programme in Malawi.

What capabilities does Malawi have to support digital solutions for CRVS?

Infrastructure

The Table below presents the current infrastructure capacity in place across Malawi, along with the opportunities this capacity creates for strengthening CRVS systems:

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connectivity and Access</td>
<td></td>
</tr>
<tr>
<td>Proportion of households with internet access by geographic location: National – 6.5%; Urban – 29.4%; and Rural – 3.4%(^{32}).</td>
<td>For data transfer over the mobile network, 2G/EDGE services can be used.</td>
</tr>
<tr>
<td>Proportion of individuals who access internet by geographic location: National – 5.3%; Urban – 23.7%; Rural – 2.9%(^{33}).</td>
<td>For expansion, utilize existing towers where permissible.</td>
</tr>
<tr>
<td>High cost has been cited as reason for low access and usage of internet. Internet used predominantly for sending/receiving emails and participating in social networks(^{34}).</td>
<td></td>
</tr>
<tr>
<td>Proportion of households with internet access by type of connection and geographical location is highlighted below(^{35}):</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Connection</th>
<th>National (%)</th>
<th>Urban (%)</th>
<th>Rural (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile Broadband</td>
<td>79.3</td>
<td>69.4</td>
<td>90.7</td>
</tr>
<tr>
<td>Wireless Broadband</td>
<td>1.1</td>
<td>1.7</td>
<td>0.5</td>
</tr>
<tr>
<td>Modem</td>
<td>1.8</td>
<td>1.9</td>
<td>1.6</td>
</tr>
<tr>
<td>ADSL</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Dongle</td>
<td>17.2</td>
<td>26.6</td>
<td>6.6</td>
</tr>
</tbody>
</table>

- 2G connectivity widely available across the country; EDGE available in high density urban areas.
- A few service providers offering 4G services, though not currently widely available\(^{36}\).
- Increasing market share of wireless internet players
- Fixed line internet: Low due to the high costs associated with fixed infrastructure in reaching the last mile; most operators focus offering on high density urban areas.
- Existence of 22 licensed Internet Service Providers (ISPs) though limited availability and high costs of international bandwidth has held back growth and kept broadband access prices among the highest in the region\(^{37}\). These are concentrated in urban areas.
- There are currently a number of service providers and institutions (including state security organizations) utilizing line-of-sight connectivity across the country.

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## Mobile phone access and usage

- Proportion of households with mobile phones by geographic location: National – 45%; Urban – 85.1%; and Rural 42%.
- Proportion of individuals with mobile phones by geographic location: National – 36%; Urban – 71.8%; and Rural – 30.6%.
- Geographical coverage of mobile service (GSM): 90%.
- Two major cellular service providers, Airtel and Telekom Network Malawi (TNM) have a combined total of 957 cell towers spread across the country in both urban and rural areas.
- To encourage competition, Government of Malawi has introduced a converged licensing regime allowing the two-fixed line operators, Malawi Telecommunications Limited (MTL) and Access Communications Limited (ACL) to enter the mobile market as well. Both operate CDMA-based fixed wireless networks that support full mobility and broadband access using EVDO technology.
- Proportion of individuals who ever use mobile money/banking by geographic location: National – 7.7%; Urban - 26.5%; and Rural – 4.8%.

## Data Centres

- With support from CDC/BHT and Plan Malawi, NRB has established its own data centre that supports the various systems and applications including the e-Birth Registration and the e-Death Registration deployed by the NRB;
- Data centre is located at Capital Hill, within NRB Offices, and is equipped to handle data collection, processing, networking, and security to ensure smooth operations for all DROs across Malawi;
- The data centre at NRB is technically supported by a systems administrator engaged by CDC/BHT but deployed to the NRB. An ICT team also exists within NRB comprising: 3 officers from e-Government Department and 1 ADR from Kasungu acting as a data manager;
- Other government institutions e.g. Ministry of Transport and Public Works, Ministry of Finance (Accountant General’s Department), Department of Immigration under the Ministry of Home Affairs etc. have developed their own small scale infrastructure setups that support their respective applications/data management needs.

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36 Stakeholder Consultations with Airtel and TNM
38 Stakeholder Consultations with MACRA Officials
39 Stakeholder Consultations with MACRA Officials
42 Stakeholder Consultations with Baobab Health Trust Officials
43 Stakeholder Consultations with Baobab Health Trust Officials
44 Stakeholder Consultations with Baobab Health Trust Officials
**NRB Physical Infrastructure**

- Based on a recent NRB internal capacity assessment conducted in 14 of the 28 DROs which rudimentary touched on ICT infrastructure, it was established that all the 14 DROs had a computer, only 4 had a working printer, 12 had power backup facilities and only 5 had working internet connectivity. The NRB intends to conduct a detailed ICT infrastructure assessment in all the DROs;
- The recent capacity assessment conducted in 14 DROs, most offices are housed in dilapidated infrastructure, office space is limited often sharing space with staff from other government ministries/departments. Most DROs have computing facilities with power back-up though printing facilities and internet connectivity remains a challenge.  

**Existing Health Infrastructure**

- The eBRS is currently being piloted in 4 districts. However BHT has also implemented a number of electronic medical record systems such as the ART, OPD, HTC, in 26 out of 28 district hospitals. Plans are there to implement these systems in the remaining 2 districts during the 2016/2017 financial year. These applications are supported by the BHT core network (wireless line of sight) which spans from Dowa to Blantyre and has a frequency range of 2.4 to 5 GHz with throughput ranging from 24MB to 54MB for both transmission (TX) and receiving (RX). Connectivity beyond the core network is provided through new VPNs and third party service providers’ APNs (Airtel Malawi);
- BHT technologies are currently operating in 71 health facilities in Malawi supporting ART delivery. Each health facility uses a different type of connectivity depending on the location.

> There is an opportunity to build on the existing infrastructure.

> The eBRS roll-out can piggyback on the existing infrastructure and learn from previous implementations.

**Table 15. Current infrastructure capacity**

There are 3 levels of public health care service delivery in the Malawi, and these are;

- **Primary level**, comprising community initiatives, including health posts, dispensaries, maternity facilities, health centres and community/rural hospitals. Service delivery at this level is done mostly by community-based cadres such as health surveillance assistants (HSAs), community-based distributing agents, village health committees and other volunteers. At primary level, clinics, dispensaries and health posts complementarily cover catchment populations of the other relatively larger facilities. In addition, some health centres provide maternity services;
- **Secondary level**, where services are delivered by district hospitals. These are referral facilities for primary level care and provide both in-patient and out-patient service; and
- **Tertiary level services** which are delivered by the central hospitals. Central hospitals act as referrals for district hospitals while providing services in their regions (central hospitals).

The Table below is extracted from the Malawi Service Provision Assessment 2013-14 and presents the availability of maternal health services by detailing percentages of facilities providing maternal health services by facility type, managing authority and region.

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45. Stakeholder Consultations with NRB Officials

46. Malawi Service Provision Assessment (SPA) 2013-14, Ministry of Health Lilongwe Malawi and ICF International Rockville, Maryland USA, November 2014
### Background characteristics

<table>
<thead>
<tr>
<th>Facility type</th>
<th>Antenatal care (ANC)</th>
<th>Normal delivery service</th>
<th>Caesarean delivery</th>
<th>ANC &amp; normal delivery service</th>
<th>ANC, normal delivery service &amp; caesarean delivery</th>
<th>Number of facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>91</td>
<td>84</td>
<td>57</td>
<td>84</td>
<td>56</td>
<td>113</td>
</tr>
<tr>
<td>Health centre</td>
<td>96</td>
<td>89</td>
<td>0</td>
<td>89</td>
<td>0</td>
<td>466</td>
</tr>
<tr>
<td>Dispensary</td>
<td>37</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>48</td>
</tr>
<tr>
<td>Clinic</td>
<td>20</td>
<td>6</td>
<td>1</td>
<td>6</td>
<td>1</td>
<td>327</td>
</tr>
<tr>
<td>Health post</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>23</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Managing Authority</th>
<th>Antenatal care (ANC)</th>
<th>Normal delivery service</th>
<th>Caesarean delivery</th>
<th>ANC &amp; normal delivery service</th>
<th>ANC, normal delivery service &amp; caesarean delivery</th>
<th>Number of facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>85</td>
<td>73</td>
<td>7</td>
<td>73</td>
<td>7</td>
<td>472</td>
</tr>
<tr>
<td>CHAM</td>
<td>91</td>
<td>87</td>
<td>16</td>
<td>87</td>
<td>16</td>
<td>163</td>
</tr>
<tr>
<td>Private</td>
<td>21</td>
<td>11</td>
<td>5</td>
<td>11</td>
<td>4</td>
<td>214</td>
</tr>
<tr>
<td>NGO</td>
<td>17</td>
<td>5</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>58</td>
</tr>
<tr>
<td>Company</td>
<td>41</td>
<td>19</td>
<td>0</td>
<td>19</td>
<td>0</td>
<td>69</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Antenatal care (ANC)</th>
<th>Normal delivery service</th>
<th>Caesarean delivery</th>
<th>ANC &amp; normal delivery service</th>
<th>ANC, normal delivery service &amp; caesarean delivery</th>
<th>Number of facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern</td>
<td>71</td>
<td>62</td>
<td>7</td>
<td>62</td>
<td>7</td>
<td>165</td>
</tr>
<tr>
<td>Central</td>
<td>65</td>
<td>55</td>
<td>8</td>
<td>55</td>
<td>7</td>
<td>362</td>
</tr>
<tr>
<td>Southern</td>
<td>62</td>
<td>50</td>
<td>7</td>
<td>50</td>
<td>6</td>
<td>450</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>977</strong></td>
</tr>
</tbody>
</table>

### Human Capacity

**What capabilities do existing CRVS actors have?**

<table>
<thead>
<tr>
<th>Actor</th>
<th>Capacity</th>
<th>Opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRB</td>
<td>- 27 staff(^{47}) at the NRB headquarters spread across dedicated sections including National Identity Cards, Finger Printing</td>
<td>- Use and enhance existing technical capacity to develop</td>
</tr>
</tbody>
</table>

\(^{47}\) NRB Communication Strategy and Implementation Plan, 2015-2019
<table>
<thead>
<tr>
<th>Actor</th>
<th>Capacity</th>
<th>Opportunity</th>
</tr>
</thead>
</table>
|       | Identity, Civil and Population Registration, Public and Civic Education, and Administration and General. | ▪ CDC has provided further technical assistance to the NRB through the appointment of a Technical Advisor to the NRB.  
▪ The e-Government Department deploys ICT staff to Government Ministries/Departments, including the NRB, who are knowledgeable and trained in technology development, Information Security & Networking, Data Warehousing and Project Management. Existing e-Birth and e-Death Registration Systems have been jointly developed by NRB and BHT.  
▪ Existing civil registration system is supported by BHT (service provider) staff along with ICT staff within NRB. The ICT team is technically competent to modify, upgrade and customise the system and associated applications as required. |
| DROs  | 28 DROs spread across the country with the District Commissioners acting as the District Registrars (in line with Section 5 of the National Registration Act). A total 129 posts exist in all districts. However from stakeholder consultations, it was established that not all DROs are fully staffed.  
▪ Interviews with Assistant District Registration Officers showed that staff is proficient in the use of computers including operationalisation of the e-birth registration system where it has been installed  
▪ With the 36% mobile penetration for individuals, DRO staff is also proficient in use of mobile phones. | ▪ Continue train DRO staff in use of computer-based technology solutions including mobile-based technology solutions. |
| District Social Welfare Officers (DSWOs) | District Social Welfare Officers (DSWO) have the legal mandate on matters to do with child protection as enshrined in the Child Care protection and Justice Act of 2010 (Laws of Malawi). District Social Welfare Officers are immediate supervisors of Child Protection Workers.  
▪ They are charged with the responsibility of registered abandoned and adopted children by the National Registration Regulations.  
▪ Each district has at least two, at most three, DSWOs | ▪ As per existing birth registration regulations, if educated adequately on their mandate, they could become a very effective source of birth registration data not only for adopted and abandoned children. |
| Traditional Authorities (TAs), Sub-TA and Group Village Heads (GVH) | There are 255 TAs and Sub-TAs, and 22,500 GVH spread across the country. These chiefs are the custodians of customary law who assist in general administration of the district, carry out and/or enforce any lawful directions of the District Commissioner, and dispense justice (have no criminal jurisdiction), in conjunction with the DC, at the community level. To avert data integrity that may emanate from illiteracy among chiefs, clerks are being identified within the communities to undertake the tasks under close supervision from the chiefs. | ▪ Just as the chiefs at TA Mpama, in Lilongwe, have been trained to use technology-based solutions for implementation of e-village register, the chiefs across the country can be trained to use other technology-based solutions including use of mobile-based solutions, in line with the mobile phone penetration |

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48 NRB Communication Strategy and Implementation Plan, 2015-2019  
49 Consultations with Ministry of Gender official  
50 NRB Communication Strategy and Implementation Plan, 2015 - 2019  
51 Chiefs Act, 1967
Most health facilities (public and private), at the two levels i.e. secondary and tertiary, have IT resources to maintain basic system inventories, scheduling, accounting etc. Staff is proficient in the use of computers, mobiles and other technologies.

On a monthly basis, antenatal clinics and post-natal clinics for vaccinations etc. are conducted by skilled health personnel in community/rural hospitals and health centres across the country. The antenatal coverage rate is 94.7% and vaccination rates of over 90%\(^{52}\);

In addition, information sourced from the current staff report of the Ministry of Health indicates that there are 973 medical assistants covering the 3 levels of health care, including the 346 Government health centres across the country, mostly located in remote areas. Cascading down, there are 2649 health surveillance assistants (HSAs) affiliated to these health centres. The number of HSAs affiliated to a facility varies depending on the catchment population. According to an evaluation and feedback report compiled by the NRB\(^{53}\), the additional responsibility to undertake registration activities by the health workers was cited as a challenge as it has increased their workload.

As per existing e-birth registration initiative, if trained effectively and equipped with the right tools, the data entry clerks could become a primary source of birth notification and/or registration data in health facilities.

Similarly, if trained and properly equipped, the health personnel including medical assistants, nurse midwives, nurses could become a primary source of birth notification and/or registration data;

Some of the temporary clerks to be used for mass registration can be retained to undertake registration activities in health facilities.

### Table 16. Current human capacity

<table>
<thead>
<tr>
<th>Actor</th>
<th>Capacity</th>
<th>Opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Facility Staff</td>
<td>▪ Most health facilities (public and private), at the two levels i.e.</td>
<td>▪ As per existing e-birth registration initiative, if trained effectively and equipped with the right tools, the data entry clerks could become a primary source of birth notification and/or registration data in health facilities.</td>
</tr>
<tr>
<td></td>
<td>secondary and tertiary, have IT resources to maintain basic system inventories, scheduling, accounting etc. Staff is proficient in the use of computers, mobiles and other technologies.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ On a monthly basis, antenatal clinics and post-natal clinics for</td>
<td></td>
</tr>
<tr>
<td></td>
<td>vaccinations etc. are conducted by skilled health personnel in community/rural hospitals and health centres across the country. The antenatal coverage rate is 94.7% and vaccination rates of over 90%(^{52});</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ In addition, information sourced from the current staff report of the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ministry of Health indicates that there are 973 medical assistants</td>
<td></td>
</tr>
<tr>
<td></td>
<td>covering the 3 levels of health care, including the 346 Government health</td>
<td></td>
</tr>
<tr>
<td></td>
<td>centres across the country, mostly located in remote areas. Cascading</td>
<td></td>
</tr>
<tr>
<td></td>
<td>down, there are 2649 health surveillance assistants (HSAs) affiliated to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>these health centres. The number of HSAs affiliated to a facility varies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>depending on the catchment population. According to an evaluation and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>feedback report compiled by the NRB(^{53}), the additional responsibility</td>
<td></td>
</tr>
<tr>
<td></td>
<td>to undertake registration activities by the health workers was cited as a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>challenge as it has increased their workload.</td>
<td></td>
</tr>
</tbody>
</table>

**What capabilities do other potential CRVS actors have?**

The timeline of early childhood and identification of common touchpoints that Parents/Caregivers will encounter with their child within the first 6 months of a child’s life, provides an insight into potential registration actors and service points.

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\(^{52}\) UNDP Human Development Report, 2014.

As identified above, the Parent/Caregiver will encounter a number of different people and service points in the first 6 months of a child’s life. From the touchpoints identified above, the regular visits to post-natal clinics, either within the village or at a local health facility (dependent on location) provide the most common interaction with child and parent. Visits to post-natal clinics are taken for the purpose of vaccinations, primary health care, and the updating of the health passbook. The regularity of these visits is further evident in the high vaccination rates in Malawi (over 90%\(^{54}\)), and the high coverage of pregnant women who attend ante-natal clinics (94.7%\(^{55}\)).

### Actor Description

<table>
<thead>
<tr>
<th>Ministry of Health: Health Surveillance Assistants (HSAs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSAs are a cadre of health workers, affiliated to a health centre/clinic, but operate in the communities implementing outreach programmes including providing primary healthcare services to village populations (mostly children, mothers and the vulnerable e.g. elderly). They conduct scheduled visits to villages in their catchment areas and offer advisory services on a range of basic health issues. Since they are community-based, they have strong relationships with the village populations. The HSAs have basic literacy and are able to use mobile phones. The number of HSAs affiliated to health facilities varies</td>
</tr>
<tr>
<td>If trained effectively and equipped with the right tools, HSAs could become a primary source of birth notification and/or registration data especially in rural communities. As community-based health workers, they can freely engage with mothers/female caregivers on registration issues. Their frequent contact with mothers and their babies during outreach programmes e.g. for vaccinations, makes HSAs good candidates for</td>
</tr>
</tbody>
</table>

---

\(^{54}\) 2014, UNDP Human Development Report

\(^{55}\) 2014, UNDP Human Development Report
<table>
<thead>
<tr>
<th>Actor Description</th>
<th>Opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td>from facility to facility based on the size of the facility’s catchment area.</td>
<td>capturing birth data in a timely manner at source.</td>
</tr>
<tr>
<td>Currently HSAs use a mobile phone-based application to order/re-order health commodities required for the village clinics.</td>
<td></td>
</tr>
</tbody>
</table>

**Child Protection Workers (CPWs)**

| In all districts where Government is implementing the Social Cash Transfer program, currently in 18 of the 28 districts, there is at least two (maximum three) Social Protection Workers. Plans are underway to scale up the social cash transfer program to the remaining ten districts, implying that these officers will also be deployed in these districts. | This personnel resource can be used for IEC campaigns and community mobilisation on child birth notification/registration. |
| The workers’ are tasked with raising awareness of the need to safeguard children and promote their welfare within communities by; | |
| • Explaining to the wider community how they can contribute to child protection; | |
| • Identifying cases of children in need of protection and keeping an inventory of the children as well as that of their families; | |
| • Reporting cases of child abuse to the government officials and other related agencies in the area of child protection; and | |
| • Working together with other agencies to identify children in need of special protection, among others. | |

**Police Officer (Victim Support Unit)**

| Victim support units exist in all police stations in all 28 districts. These units are manned by an officer and their core function is to protect victimized citizens specifically women and children. | This personnel resource can be used for IEC campaigns and community mobilisation on child birth notification/registration. |

**Traditional Healers**

| Dependent on peoples’ beliefs, culture and location, traditional healers and/or herbalists play an important role in their lives. These practitioners are consulted by their believers for advice, direction and action on such important aspects as protection of new born children against evil spirits. | This personnel resource can also be used for IEC campaigns and community mobilisation on child birth notification/registration |

**Religious Leaders**
<table>
<thead>
<tr>
<th>Actor Description</th>
<th>Opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depending on peoples’ faith and beliefs, religion plays a major role in their livelihoods. Believers will ensure that a new born child is presented to the religious leaders for blessing within a certain timeframe. This can be in form of baptism, consecration etc.</td>
<td>This personnel resource can also be used for IEC campaigns and community mobilisation on child birth notification/registration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technology/Software Houses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Malawi has a developing IT sector which has a number of private sector-based software houses and others in the NGO sector e.g. BHT that have the capacity, skills, and local expertise to design and implement technology solutions, as well as maintain these solutions once live.</td>
<td>Could be engaged in the development of customised systems/applications that support/integrate with core civil registration system.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tele-centres</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MACRA is championing the establishment of tele-centers across the country. Tele-centers are based in rural growing areas (trading centers). These provide services, to the general public, including internet browsing, secretarial services, hiring of conference facilities, and computer tutorials. To date, four tele-centers are operational in districts of Karonga, Kasungu, Mwanza and Thyolo. Ten more tele-centers are about to be launched in several districts across the country including Likoma, Rumphi, Phalombe, Lilongwe, Ntcheu, Balntyre, Machinga and Balaka56.</td>
<td>▪ NRB could permanently or schedule periodic posting of staff in Post Office outlets to provide civil registration services, both ad-hoc and on-demand ▪ ICT infrastructure in tele-centers can also be used to support civil registration applications and system</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post Offices</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The Malawi Postal Corporation (MPC) has a network of 260 post offices spread across the country. The MPC is strategically positioning the post offices to become one-stop service centers providing such services as payment points for utilities, passport application etc.</td>
<td>▪ NRB could permanently or schedule periodic posting of staff in Post Office outlets to provide civil registration services, both ad-hoc and on-demand ▪ ICT infrastructure in post offices may also be used to support civil registration applications and/or system</td>
</tr>
</tbody>
</table>

Table 17. Capacity of potential CRVS actors

System Integration

By integrating systems, authorities can benefit from enhanced capabilities by sharing data and communicating with one another. In the case of CRVS this means:

▪ Improved data collection from a variety of sources.
▪ Increased access to vital statistics data for policy and planning activities.
▪ Shared access to civil registration records for authorised authorities.

56 Stakeholder Consultations with MACRA Officials
The following is a list of systems that each gather and store data but which are currently operating in isolation, providing an opportunity to integrate them with CRVS systems.

1. **National Registration and Identification System (NRIS):**

The National Registration and Identification System (NRIS) has 2 components; national identification (currently under procurement) and civil registration (birth and death). National identity cards will be issued to Malawians of age 16 and above from this system.

Before the age of 16, citizens have the option to apply for a Birth Certificate through the electronic Birth Registration System (eBRS) either at birth or on demand. Integration between the eBRS and national identity system will not only update the population register/database but will provide an opportunity to link the first legal record of a child’s existence (birth certificate) with the later national identification document; providing a continuous and permanent record of a person’s existence.

Similarly, integrating with the electronic death registration system (eDRS), which facilitates the issuance of death certificates will update the population register of a citizens’ death, thereby deactivating the citizen’s status.

2. **Health Management Information System (HMIS)**

The Ministry of Health (MoH) has been implementing a comprehensive and decentralized routine Health Management Information System (HMIS) in Malawi since 2002. The objective of the HMIS is to address the major challenges of lack of reliable data and inadequate appreciation and use of available information in decision-making, planning and management.

Opportunities for integration with the HMIS and related eMRS modules including the EMR ART, etc, are crucial not only because more and more births occurrences are within health facilities/systems (currently estimated to be 80%), but more importantly because health facilities are regularly visited by citizens and are accessible to all citizens.

There is potential to integrate systems that capture patient data, including birth-giving mothers, to auto-populate the eBRS record immediately after the vital event, and in future, potential to integrate all systems so that one system completes all functions using the same infrastructure.

3. **Passport Issuance System**

The Passport Issuance System is a biometric based registration and enrollment system. It is a platform which connects to Fingerprint Scanner, Webcam, Document Scanner and signature grabber and manages multimodal biometric processes of enrollment, identification and verification. This system can be integrated with other similar systems including: the Border Control Management System, Malawi Transport Information System (Driver’s License), Voter Registration System, National ID System etc.

Integrating with the passport issuance system, which facilitates the issuance of the Malawi passport to eligible citizens will enable the validation of the applicant details through the applicants’ birth certificate.

4. **Malawi Voter Registration System**

The current system of Voter Registration uses the Optical Mark Recognition (OMR) System which entails that forms are filled in the field and then captured using Optical Mark Recognition Scanners at a central point. The scanner in addition to text data also picks up the photograph and paper based fingerprint of the voter.
The Electoral Commission is however moving away from this type of mass data capture as it is prone to many errors that have a negative impact on the final product. The Commission therefore wishes to have a data base based on the Biometric Registration which can either be tapped from the National Population register or indeed the Commission's own registration.

Integrating with the voter registration system will enable the validation of the voter details through their birth certificate.

5. Malawi Socio-Economic Database (MASEDA)

The Malawi Socio-Economic Database (MASEDA) is the first comprehensive and up-to-date socio-economic database on the situation of human development in Malawi for use by government institutions, the donor community and civil society counterparts. It was developed to enable the civil society organisations, international organisation, government departments, academic institutions as well as policy makers to have access to the information for their own purposes pertaining to socio-economic development in Malawi. The web portal contains information on each sector of the economy that is critical to Malawi's socio-economic development and poverty reduction.

6. Education Systems e.g. Education Management Information System (EMIS).

The Education Management Information System (EMIS) collects, manages and provides Education Sector statistics for sector management and decision making. One of the main activities through which this is done is the Annual School Census (ASC) which covers all education institutions in Malawi. The EMIS also has several other activities which include the School mapping and the Cohort tracking program. It also periodically takes the lead in Education Surveys.

The EMIS could be a complementary source of CRVS data typically in cases of late registration when children access education services for the first time and/or are not registered. Data validation for school entry and examinations could be simplified through this integration.


The Malawi Transport Information System (MALTIS) is a system that collects biometric information of applicants for the Malawi Drivers Licences. The system operates in a wide area networking environment across the country. This system is entity-based and maps all entity relationships. Typically, all vehicles belonging to an individual are mapped/related to that individual’s record in the system.

Integrating with the MALTIS, which facilitates the issuance of the Malawi driver’s license to eligible citizens will enable the validation of the applicant details through the applicants’ birth certificate.

Legal Assessment of Digitisation

Recognition of Electronic Records

Electronic records are recognized as documents under the General Interpretation Act (Cap. 1:01, Laws of Malawi) Criminal Procedure and Evidence Code (Cap. 8:01, Laws of Malawi). In this regard, electronic records are recognized in the same way as paper records.
To the extent that electronic records may be recognized as documents under the General Interpretation Act and the Criminal Procedure and Evidence Code, the existing legislation does not prevent cloud hosted solutions even those that are outside Malawi borders.

**Data Protection**

The National Registration Act (Act Number 13 of 2010) has aspects of data protection (section 42 – on offences and penalties; section 43 – on forgery, provision of false information and undue influence; and section 44 – on secrecy). There is no other comprehensive law on data protection in Malawi. The provisions under the National Registration Act are yet to be measured for their effectiveness since the National Register is not yet in place. The provisions under the National Registration Act provide for punishment for breaches of sections 42, 43 and 44 of the Act. The Act provides for fines of up to MWK1 million or terms of imprisonment of up to 5 years.

**Law Reform**

There is an urgent need for a comprehensive law reform that deals with standards and procedure for electronic registration for CRVS and digitization generally. While the National Registration Act does have aspects of data protection, these are not comprehensive to address new and emerging innovation under information and communication technology generally. The lack of a comprehensive law on the subject matter has serious negative implications for electronic registration especially in the unfortunate cases of breaches of electronic records.

Law reform may be conducted through the Malawi Law Commission or through a line Government agency, department of Ministry. The Law Commission process can be time and capital intensive. However, a proposed law gains greater legitimacy through this route because the process is highly consultative. The process can take between 9 and 36 months.

Where a Government agency, department or Ministry is taking the lead in the law reform process, they must produce a ‘layman’s draft’ of the proposed law which is submitted to the Legislative Drafting section of the Ministry of Justice. The ‘layman’s draft’ may be developed with the technical assistance of a private legislative drafter. Once a ‘layman’s draft’ has been submitted to the Ministry of Justice, the Ministry develops a Government Bill for adoption by Cabinet. Once a Bill has been adopted by Cabinet, it is presented to the National Assembly for possible enactment into an Act of Parliament. This process can take between 6 to 24 months. It is less time and capital intensive. However, the process is not as consultative and a law risks meeting resistance once it is presented to the National Assembly.

**Malawi as a Common Law System**

There are no negative implications for a law on electronic records on the basis of Malawi being a common law system.

**Future State Process Options**

The key functions of the civil registration process are the following:

1. Capturing of declared vital event - this is the first step where the registration agent collects birth record data from caregiver. This data is submitted to the registration centre or database;
2. Validation of information relating to the vital event - the received registration information is validated and if valid, the information is logged, thereby completing the registration;
3. Storage of information of the vital event – data is stored with trusted parties; and

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57 CRVS Digitisation Guidebook Version 0.10, APAI-CRVS.
4. Generation of legal documentation of the vital event - birth certificate is issued, caregivers and other eligible agencies can query, check or correct data.

Due to the high health facility-based births occurring in the country, health facilities are best suited for birth registration. Presented below are the proposed future state civil registration process options for Malawi. Note that the presented table below consolidates the key functions of validation and storage.

<table>
<thead>
<tr>
<th>Capture of Vital Event Information</th>
<th>Validation and Storage</th>
<th>Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process options:</strong></td>
<td><strong>Process options:</strong></td>
<td><strong>Process options:</strong></td>
</tr>
<tr>
<td>1. Full declaration for validation: Using a web-based application running on a terminal, health facility staff enters all mandatory NR8 fields and submits to DRO for validation.</td>
<td>1. Full declaration validation: DRO views applications in queue in eBRS &amp; validates information. If information is queried, DRO calls informant to query information.</td>
<td>1. DRO prints and signs certificate and dispatches to defined registration location for collection.</td>
</tr>
<tr>
<td>2. Basic notification for follow-up: Using a basic phone, Agent enters basic notification details and sends via SMS/USSD to DRO.</td>
<td>2. Notification follow-up: DRO monitors notifications, and schedules registration days at defined registration points based on number of notifications / at defined intervals i.e monthly.</td>
<td>2. DRO prints and signs certificate and takes to next registration day for collection.</td>
</tr>
<tr>
<td>3. Manual process for follow-up: Additional page added to health passbook that includes all required NR8 fields. Agent inputs data and informs Parent/Caregiver of next registration day.</td>
<td>2a. Notification/Manual follow-up: DRO visits registration point e.g. Health Centre. Using a tablet, DRO enters fields, checks supporting documentation, and submits data to central system.</td>
<td>3. Certificate printed on demand at agreed registration locations incl. DRO &amp; Post Office.</td>
</tr>
<tr>
<td>4. Full declaration for validation: Using mobile device or Point of Sale Terminal, Agent enters all mandatory NR8 fields and sends to DRO for validation.</td>
<td>2b. Notification/Manual follow-up: DRO visits registration point on a scheduled day e.g. Post Office. Using web-based application, DRO enters fields, checks supporting documentation, and submits data to central system.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Data entry clerk</td>
<td>1. DRO staff</td>
<td>1. DRO staff</td>
</tr>
<tr>
<td>2. Health Centre Staff at Health Centre</td>
<td>2. Post Office/Telecentre Staff</td>
<td>2. Post Office/Telecentre Staff</td>
</tr>
<tr>
<td>3. Health Surveillance Assistant in community/HC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Village Head/Group Village Head in community</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potential Technology Options:</th>
<th>Potential Technology Options:</th>
<th>Potential Technology Options:</th>
</tr>
</thead>
</table>

65
1. Laptop/Desktop Computer
2. Basic phone: SMS / USSD
3. Smartphone: Mobile Data / SMS
4. Tablet: Mobile Data / SMS
5. Point of Sale Terminal: Mesh Network / Mobile Data

<table>
<thead>
<tr>
<th>1. Local application</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Web-Based application</td>
</tr>
<tr>
<td>3. Notification monitoring</td>
</tr>
</tbody>
</table>

Presented below is a summary of the technology options that can be deployed in health facilities to assist with the registration process:
<table>
<thead>
<tr>
<th>Technology</th>
<th>Description</th>
<th>Pros</th>
<th>Cons</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Device Options</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Mobile Device: Basic| Application runs on a basic GSM mobile phone to send one-way data (SMS) or two-way data (USSD) to the registration database. | ▪ Long battery life.  
▪ Low cost.  
▪ Low training requirements as most individuals are familiar with how to use the device.  
▪ GSM coverage is 90% | ▪ Limited features available in app development.  
▪ Unreliability: SMS message delivery is not guaranteed; mechanisms not always available to determine where SMS has been delivered in a timely manner.  
▪ SMS messages treated as lower priority than voice – 1% to 5% of messages are lost entirely.  
▪ Security vulnerabilities  
▪ SMS spoofing | ▪ Application development cost: US$100,000  
▪ Annual maintenance cost: US$10,000  
▪ Handset cost: MK 20,000;  
▪ SMS: MK 14;  
▪ USSD is dependent on whether client or user is paying and volumes involved. Varies between MK 8 and MK15. |
| Mobile Device: Smartphone/Tablet | Application is installed and runs on a smartphone or tablet. Requires internet connection. | ▪ Client-side validation can be done to reduce data input errors.  
▪ Easier to view and review inputted data.  
▪ GSM coverage is 90% (for 3G & Wifi enabled) | ▪ High training requirements as less people are familiar with smartphone in Malawi.  
▪ High theft rate on such devices  
▪ Short battery life  
▪ High cost  
▪ Requires access to internet | ▪ Application development cost: US$100,000  
▪ Annual maintenance cost: US$20,000  
▪ Handset cost: MK 80,000; |
| Laptop | Application is installed and runs on a laptop computer. Requires internet connection. | ▪ Client-side validation can be done to reduce data input errors.  
▪ Easier to view and review inputted data. | ▪ High training requirements as less people are familiar with smartphone in Malawi.  
▪ High theft rate on such devices  
▪ Short battery life  
▪ High cost  
▪ Requires access to internet | ▪ Application development cost: US$100,000  
▪ Annual maintenance cost: US$20,000  
▪ Laptop computer cost: MK 200,000; |
| **Applications**     |                                                                              |                                                                      |                                                                                                                                                                                                     |                                                                                        |
| Web-based application | Application delivered to a local device over the internet from a remote server. | ▪ Fast development cycle.  
▪ Deployment of application onsite not | ▪ Requires access to internet.  
▪ Can be slower than native desktop apps. | ▪ Application development cost: US$100,000 |
<table>
<thead>
<tr>
<th>Local application</th>
<th>Desktop application that runs locally on a computer device e.g. desktop/laptop.</th>
<th>Ability to access at anytime, whether on or offline.</th>
<th>Upgrade process is time-consuming, resource dependent and costly.</th>
<th>Application development cost: US$100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Greater control of how the app works in development.</td>
<td>Must be developed and installed on a particular operating system (OS).</td>
<td>Annual maintenance cost: US$20,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Faster response time for the end-user.</td>
<td>Updates must be applied by users directly &amp; may require hardware upgrades.</td>
<td>Desktop Computer Cost: MK 150,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No requirements for third party server to host data.</td>
<td>Maintenance requirements high.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private by default.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connectivity</td>
<td>Physical connection delivered via phone line or provider’s network of cables. Access to standard ADSL or fibre optic. Connection via a</td>
<td>More reliable connection, lower latency.</td>
<td>To provide connections to multiple devices a wireless router is required, limiting how far you can move from this connection.</td>
<td>Setup cost: MK100,000;</td>
</tr>
<tr>
<td>Fixed Line Internet</td>
<td></td>
<td>Often faster than mobile broadband connections.</td>
<td></td>
<td>Monthly subscription: MK 100,000</td>
</tr>
<tr>
<td>Technology Options</td>
<td>Description</td>
<td>Pros</td>
<td>Cons</td>
<td>Setup Cost</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------------</td>
<td>------</td>
<td>------</td>
<td>------------</td>
</tr>
<tr>
<td><strong>Point to Point (Line of sight)</strong></td>
<td>Type of propagation that can transmit and receive data only where transmit and receive stations are in view of each other without any sort of an obstacle between them.</td>
<td>- Multiple channels available</td>
<td>- Line-of-sight will be disrupted if any obstacle, such as new buildings, are in the way</td>
<td>Setup cost: MK100,000;</td>
</tr>
<tr>
<td><strong>Mobile Broadband</strong></td>
<td>Works by connecting to a mobile network with a SIM card, accessing available services e.g. 2G, 3G, 4G. Connect using a dongle, portable wi-fi hotspot, sim-card in device.</td>
<td>- Portable. - Good alternative to fixed line internet in hard to reach areas. - No line rental costs. - Payment plans often flexible incl. pay-as-you-go options. - Start-up costs low.</td>
<td>- Availability is reliant on mobile signal, in an area with poor mobile signal the service won’t work. - Signal strength dependent on location and coverage. - Congestion can occur when many people are using the same broadband connection.</td>
<td>Setup cost: MK80,000;</td>
</tr>
<tr>
<td><strong>router to which all devices can be connected through wi-fi or an Ethernet cable.</strong></td>
<td></td>
<td>- Costs lower than mobile broadband. - Reliable, dependable, and stable connections because it is in the same location.</td>
<td>- High setup costs. - If the physical line is damaged, connection is lost and it can take time to fix.</td>
<td></td>
</tr>
</tbody>
</table>
The Future State Technology Architecture is a view of what the CRVS technology architecture could look like in the future. Delivery of each of the components of the architecture will take different periods of time to implement. The architecture’s key features are detailed below, aligning with the numbers identifying each component in the diagram above. Each of these key features responds directly to findings from the as-is and technical feasibility analyses.

1. **Web Based Application at the District Registration Office/Health Facility:**

   *At the District Registration Office:* a web-based eBRS application is accessed on a desktop computer to allow direct entry of the NR8 form into the application. Due to the multiple functions of the District Registration Office, utilising a multi-function device such as a desktop computer/laptop is beneficial to allow the DRO to use the device for multiple functions.

   The application supports the creation of new NR8 entries in the system, provides search capability of records from across the country, the ability to update records, and validation of records created by other sources. The DRO has a work queue of birth notifications received from the eBRS application in a health facility as well as those which were submitted through other sources using the Vital Events API. The DRO is able to validate each one in turn and as this is done, the life event is registered in the central eBRS system. The amount of data transferred to and from the DRO eBRS application is minimised through pre-populating fields when the data is initially sent to the central database; this data is viewed by the DRO and the status of the application is updated in the central database (e.g. pending, registered, rejected).
When a request for a certificate is made, the application allows the DRO to print a certificate onsite.

At a health facility: a web-based eBRS application will be accessed on a point-of-sale terminal/desktop computer depending on what other systems are used in the health facility. Where possible, existing hardware will be utilised to host the eBRS application. If no hardware is available, tablets will be considered for use to minimise procurement of hardware for only one function.

The application supports the creation of new NR8 entries, minor updates to existing records, and provides search capability of records in its district.

The application will have an offline capability to allow for entries to be completed even when connectivity is not available. Each site will utilise different modes of connectivity depending on what is available at each site; an assessment of options will be conducted to identify appropriate infrastructure. Where possible, fixed line internet will be installed in DROs. Transmission of encrypted data to the central eBRS system will happen in different ways depending on the availability of connectivity. This might include the use of fixed line internet, point of sight technology, mobile network, and/or the use of a dongle.

2. Health System Application: Existing health information systems that capture and store patient data to share common data for the purposes of civil registration.

In locations where health systems are already in place e.g. eMRS, DHIS2, these systems will feed civil registration data into the eBRS system, auto-populating known fields of the NR8 form to reduce duplication of effort by health facility staff. Staff will register details of a Mother (and Father if relevant) during ante-natal visits, all key information required for the NR8 form will be auto populated in the backend. Once the baby is born, Health Facility Staff will be able to add additional required fields e.g. weight of birth and save the record, in so doing this information is sent to the central eBRS system in the NR8 format for validation and processing.

3. Registration Drive Application: Digital data capture form that allows all form fields of the NR8 form to be inputted and stored locally on a laptop/desktop computer. This application can be used for mass registration of children aged 0-16. The NR8 form will be filled in by hand and signed by the Informant. The data entry clerk will then input all details into the digital data capture form and save the details locally. Once the registration drive is complete, the data will be uploaded to the central eBRS system either at the DRO or NRB HQ.

When printing facilities are available during a registration drive, the application supports printing of certificates on the spot. If a certificate is provided, the status of the application will be updated to reflect that a certificate has been printed and provided to the Informant.

4. Vital events application programming interface (API): This is an interface that allows any authorised agency to declare occurrences of vital events by providing the information as per the application form. For example, this allows health information systems that capture and store patient data to share common data for the purposes of civil registration.
5. **Central CRVS Database:** Once central CRVS database that holds all data for each vital event - birth, death, marriage and divorce.

6. **Integration with National ID System:** integration with the national id system has the potential to support:

- Validation of vital event records with National ID data.
- Generation of one unique ID by the national id system to be used from birth throughout life.
- Prompt and accurate updating of birth and death records in the national id system, preventing false applications for National ID.
- Validation of details for other systems with civil registration records e.g. Passport, Education, Voter Registration etc.

7. **Applicant feedback messaging:** As the vital event record is received by the central eBRS system at HQ, the Informant is sent an SMS message containing details of the processing status. This message contains the registration ID number, the status of the application, and details of how to collect the birth certificate (e.g. application successful, birth registration complete, collect your certificate from XXX, ID: 12345678).

8. **CRVS web-based reporting dashboard:** This web-based application provides monitoring and reporting functionality for Local and National Government offices so that officials are able to check the number of vital events registered across their jurisdictions. This allows government officials to identify registration sites that are performing well and those that may need additional support to attain registration targets. This provides an accountability mechanism and helps prevent over- and under-reporting of vital events.

   This dashboard also provides other departments with the facility to create reports on relevant vital statistics. The dashboard allows customized views, analytics, trends and spatial dimensions to be created. This secure dashboard can be made accessible, through login credentials, to relevant stakeholders e.g. Local Government, Health, Planning and Development and Statistics Departments.

The descriptions above provide a high-level vision only. Full functional and technical detailing with be the subject of solution design, one of the early project implementation phases.

**Assumptions**

The following list of assumptions underpin the proposed civil registration process and technical architecture. If any of these assumptions are inaccurate or cannot be realised by time of implementation, then the proposed process and technical architecture that supports it may need to be modified to fit the country context.

1. Key civil registration activities are decentralized, allowing District Registration Offices to be responsible for final validation of applications, as well as printing and signing of certificates without the need for intervention from NRB HQ.

2. Existence of supporting documents can be verified by registration agents.

3. Additional data clerk is posted at each health facility to support with administrative duties.
4. CRVS system is able to receive civil registration data from multiple sources e.g. registration drive application, health systems.

5. Process is supported by government regulations.

6. CRVS database is integrated with the national id system.
Malawi: To-Be Birth Registration Process

**Informant**

- Birth occurs

**Traditional Authorities**

- 1. Village Head Man certifies home birth on NR8 form

**Health Facility**

- 2. Village Head Man documents birth details in village register

**DRO**

- 3. Input NR8 form fields directly into eBRS application
- 4. Confirm details are correct with informant

**eBRS System**

- 5. Sign digital application form electronically
- 6. Print sticker containing barcode and key application details & stick in health passbook

**Figure 5. Future State Birth Registration Process**
The proposed to-be process aims to prove that the following features of the process will improve the effectiveness and efficiency of birth registration in Malawi:

1. Remove the need for paper forms (and with it, logistical challenges) through direct data entry into the system and the use of an electronic signature.
2. Decentralise validation and printing functions from HQ to the DRO level to reduce bottlenecks.
3. Communicate with citizens via SMS to inform them of both the status of their application and how to collect their certificate.
4. Reduce logistical and resource challenges by providing certificates on-demand.

<table>
<thead>
<tr>
<th>Step</th>
<th>Notes</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2.</td>
<td>For births that occur at home, certification of this fact must still be acknowledged on the NR8 form. Paper forms will be provided at Health Facilities (or DROs) only to those who need to get formal written certification from the Village Headman/relevant authority.</td>
<td>Village Head Man</td>
</tr>
</tbody>
</table>
| 3. | ▪ Health staff will input all fields directly into the eBRS application, removing the need for paper forms.  
▪ Additional information gathered: mobile phone number of Informant (Parent/Caregiver).  
▪ Client-side validation completed to reduce effort of Health staff.  
▪ Mandatory fields reduced to ensure that applications can be submitted with key information.  
The paper form process should continue in parallel for a defined period of time in order to provide a set of data to compare with data captured in system. | Health staff |
| 4. | Verbally confirm / show completed fields in system to Informant and confirm that details are correct. | Health staff |
| 5. | Informant will be requested to sign the application electronically.  
While the parallel paper process is being completed, the signatures can be compared for operational monitoring purposes. | Informant |
| 10. | A random sample of entries in the village register will be checked every 6 months/year to check that details captured in the village register have also been captured in eBRS. | DRO |
| 13. | Contact the identified contact person via telephone to query information.  
If no contact is provided, note made in system so that on next post-natal visit, the health facility can update information/contact DRO with required information. | District Registration Officer |
| 16. | If contact information is provided, automatic SMS generated from central system and sent to Applicant to notify them of the status of their application and how and where to collect their certificate. | System |
| 17. | On-demand printing services available at DROs and Post Offices (after 2017 National ID mass registration drive). Informant required to show Health Passbook with registration sticker in order to collect certificate.  
Alternative village distribution mechanisms will be used when late registration drives are completed. | DRO |
DBR Programme Blueprint

Programme Overview

The key findings from the technical analysis clearly highlight the need for further efforts to increase and improve both the demand for and supply of birth registration services in Malawi. Also evident is the importance of providing this service for newborns within health facilities (2010 MDHS figures show 73% of births occurring at health facilities, this figure is widely understood to have increased over recent years) and integrating it with other maternal and newborn child health services (vaccination rates and ante-natal care both over 90%). By offering birth registration services at a range of health facility levels, the effort required to register a birth is reduced and existing interactions between Mothers, babies and their families with MNCH services can be leveraged.

Responding directly to the findings of the Technical Analysis, the Digital Birth Registration programme aims to prove an innovative model for birth registration that is scalable and sustainable so that all boys and girls in Malawi are registered through a rights-based national CRVS system. This integrated programme will:

1. Improve birth registration service provision through extending the reach of the existing eBRS system to lower level health facilities, increasing the availability and accessibility of birth registration services.
2. Address the backlog of children who remain unregistered (aged 0-16) by supporting the NRB to register all children in programme areas using Plan’s mobile van, and through supporting the NRB to develop other effective and efficient late registration methods that can be used throughout the country.
3. Develop SOPs for birth registration in emergency situations (refugee and natural disaster), ensuring that these are effectively documented and tested in defined locations.
4. Manage the process and technology changes through the affected institutions to ensure that all individuals recognise the value of the change and the importance of CRVS, and are adequately skilled to provide the services.
5. Increase the demand for registration through an integrated marketing and communications campaign that focuses on behavioural impact.
6. Advocate for legal and policy changes that support the safe use of a digital rights-based registration system.
7. Monitor and evaluate each component of the programme on an ongoing basis to continuously improve the model, building a case for nationwide use at the end of the programme.
Programme Scope

Integrated Programme: Key Strategies

The DBR programme is comprised of five key strategic interventions, which collectively will contribute to an increase in the demand for and improvement in the supply of birth registration services, subsequently increasing birth registration rates across Malawi. Plan’s extensive experience in birth registration programming demonstrates the importance and interdependency of each of these strategic interventions in order to effectively increase birth registration rates in a scalable and sustainable way. These strategic interventions also define the workstreams under which activities will be delivered in the project (also defined as outputs in the current results framework).

Process and Technology:

4. **eBRS at Lower Level Health Facilities**: Design, build, test and deploy an effective and efficient DBR system and process that supports health facility based birth registration.
5. **Late registration**:
- Support NRB register all children aged 0-16 (16+ will be covered by National ID drive due in 2017) in programme areas.
- Work with NRB and partners to develop innovative late registration models that can be used in other parts of the country.

6. **Birth Registration in Emergencies**
   Support NRB to define appropriate SOPs (with required regulatory changes) for birth registration in emergency situations (refugee and natural disaster). These approaches will be tested to prove their effectiveness.

**Change Management**: Implement a change management programme that responds to the needs of all affected actors, ensuring that they have the skills required to use the new solution effectively and fully understand and accept the change to their day to day roles that the solution results in.

**Advocacy**: Advocate for legal and policy changes that support rights-based birth registration and the safe and correct use of digital technologies for birth registration.

**Behavioural Impact**: Create demand for birth registration by affecting a change in the behaviour of parents to make them choose to give birth in a health facility where their child will be registered with a digital birth registration system.

**Monitoring and Evaluation**: Robust monitoring mechanisms put in place to increase accountability & performance, continuously improve the solution and process, and ultimately document an evidence-based business case that demonstrates the potential for scalability & sustainability.
Programme Strategies
Process & Technology

**System Design**

Due to the presence of an existing birth registration system, eBRS developed by CDC and BHT, the programme will first begin by conducting a detailed design assessment of the existing system environment to identify ways in which to enhance and extend the reach of eBRS to lower level health facilities. The design assessment will directly inform system design decisions to reflect the potential for:

1. Integration with exiting health systems that gather data that matches registration information requirements.
2. Alternative architectures that provide a cost-effective way in which to scale the system to health facilities across the country.
3. Alternative architectures that reflect infrastructure challenges in hard to reach locations e.g. weak connectivity & regular power outages.
4. User experience features that reduce the effort required by system users and improve the overall system-user interaction.

**eBRS at Lower Level Health Facilities (Rural Hospitals & Health Centres)**

Recognising that rates for ante-natal care are 94.7%, health facility births almost 80%, and vaccination over 90%, the provision of digital birth registration services within health facilities provides a clear opportunity to increase birth registration rates and reach the most marginalised. While the existing eBRS system will be deployed to all District Hospitals (28 facilities) in 2016, the proposed solution for the DBR programme will enhance the existing eBRS system in order to make birth registration services available and cost-effective across lower level health facilities including rural hospitals and health centres, where infrastructure and capacity demands can be additionally complex.

The proposed process and solution provide the opportunity to:

5. Increase accessibility of birth registration services by offering the service in rural hospitals and health centres in hard to reach areas.
6. Increase accountability of DROs and Health Facilities in providing accurate and timely registration information through the use of a Quality Assurance resource dispatched from the DRO to all district health facilities operating the eBRS system on a monthly basis.
7. Reduce the costs associated with travel to the DRO for registration of births and/or collection of certificates.
8. Reduce process bottlenecks by decentralising validation and printing functions from HQ to the DRO level.
9. Remove the need to manage a complex supply chain required for the delivery and collection of forms and certificates by providing a facility for electronic signature and an on-demand certification process. NB. Paperless registration is going to be tested during the ongoing National ID programme.
10. Reduce the amount of space required to support birth registration in DROs by removing the need to store paper forms.
11. Reduce the need for multiple trips to DROs to collect the certificate through the provision of required connectivity and hardware.
12. Provide NRB with operational and monitoring data that can support operational improvement measures
13. Produce vital statistics that are sourced through the birth registration process.

The diagram and description below explain how the extended version of eBRS and future birth registration process would work (to be further elaborated during detailed design).

![Diagram of Future Birth Registration Process](image)

**Figure 7. Future Birth Registration Process**

1. Parent/Caregiver provides NR8 form details to health facility registration agent and birth registration data is input directly into the eBRS application and the Parent/Caregiver digitally signs the application.

The parent is able to declare the birth shortly after delivery and characteristics of the child can be captured accurately by professional staff. Most of the information required for birth registration is already gathered for health systems purposes.

Health facilities are equipped with a touchscreen point-of-sale terminal/tablet with internet access so that the staff member can complete the birth declaration directly into the eBRS application. When internet access is not available, data can be input in offline mode and is synced with the central database as and when connectivity is re-established. The parent will be asked to digitally sign the form using the touchscreen terminal. For ongoing communication purposes, parents will identify which health centre (if not the same one as birth) that they will use for post-natal visits and vaccinations. Parents can also provide a mobile phone number if they wish to be kept directly informed of the registration status. The staff member prints a proof of registration sticker (which includes all key information) and sticks it in the health passbook.
Once all mandatory data is collected, the birth details are submitted directly to the eBRS Central System for validation.

In order to ensure that the data entered into the system is accurate and recognising that staff may not have time to input data into the system immediately, health facility staff will first complete the information required on a paper form; these will be validated by the Quality Assurance Agent (next step).

2. The application is processed and validated by the DRO, with updates on the status of the application sent to the post-natal care clinic and parents/caregivers.

The District Registration office receives a notification in the eBRS application notifying them that a health facility birth has been declared. The Officer opens the application, reviews details and either commits the application as “registered” to the central system, or rejects the application for further processing. If the parent/caregiver has provided a mobile phone number for tracking purposes, at this point the registered mobile phone will receive an SMS confirming the status of the application, the Birth ID number (if successful) and instructions on how to collect a certificate or how to resolve the issue. If a phone number was not provided, the clinic that is used by the Mother for post-natal care and vaccinations will be informed to pass on the message and next steps.

Throughout the period of the project, the Assistant District Registration Officer will take on the role of Quality Assurance Agent. This resource will travel to each of the health facilities where eBRS is deployed and will validate the eBRS entries against the information on the paper forms. This activity will (i) build a working relationship between the DRO and the Health Facility, (ii) facilitate increased transparency in terms of staff capacity i.e. poor performing staff members will receive further targeted training, and (iii) the ADR will understand day-to-day challenges faced by Health Facility Staff and can report these to the project on a regular basis for continuous improvement purposes.

3. District Government authorities have a full view of birth data and registration rates for their jurisdiction and NRB have a view of operational and performance data for the whole country

District government authorities have online and offline access to aggregate birth registration rates, allowing them to track performance across their jurisdiction, disseminate status reports and address specific issues (e.g. through additional training or communications).

NRB have online and offline access to country-wide data allowing them to track performance across districts, responding appropriately.

4. The birth certificate can be collected on-demand at any District Registration Office and Post Office

Parents collect their certificate as and when they need it, from the DRO or local Post Office (dependent on National ID programme delivering same service at Post Offices). Staff at these locations can search for the record using a number of different fields including Last Name, DoB, Location of Birth, Birth ID number. Certificate collection locations have computers and printers and access to internet to allow them to search for the record and print the certificate.
5. Vital statistics data is shared with relevant agencies

All government agencies and a variety of other actors e.g. Planning and Development Departments, NGOs, MoH etc. will be able to access the vital statistics reporting dashboard. This will allow them to use aggregated vital statistics from birth registration to plan for adequate provision of services to the population. NRB can also make key statistics publicly available as part of ongoing communication efforts.

Late Registration Drives

As the eBRS system was only introduced formally in August of 2015, the majority of children born before this date remain unregistered.

Late registration drives will be conducted in all target communities, registering all children without a birth certificate between the ages of 0-16 (the National ID programme will mass register all citizens aged 16+).

Plan Malawi’s mobile van will be used to facilitate late registration drives. The mobile van is a large vehicle that has three work stations equipped with computers and a printer, a store room and disability friendly entrance to accommodate children with disabilities access registration services. A full-time team comprised of Plan staff and an official NRB official will support late registration drives throughout the programme lifecycle. The presence of an official NRB officer is crucial as this ensures that the process is legitimised.

Registration will be done in digital format, either by using a version of eBRS (dependent on NRB approval) or through a low cost offline alternative that has the same effect (further described below).

The official NRB Officer will input the child’s details into a birth registration form on one of the van’s workstations; this form will populate a csv file that is later uploaded into the central eBRS system. Using a CSV file allows direct data upload into a database as per the defined database fields, ensuring no need for further data input. No internet is required to support the use of this technology but the mobile van is equipped with internet if the registration team need to query the central database if they have a concern about the application.

The van will target villages within each target district that are easy to reach for multiple villages, targeting a wide catchment area. The service will be offered at locations that are frequently visited by citizens and provide access to other services as and when possible e.g. village clinics, schools and markets.

In addition to the ongoing late registration drive using the mobile van, the programme will also support the NRB to design innovative late registration approaches that can be used across the country. The programme will support NRB to test these approaches in the field to identify effective and replicable ways in which they, along with support from other partners, can conduct registration drives at scale. These approaches will include targeting market days where large numbers of people travel from villages across the district, and targeting school opening days, registering all children who attend the school in one sweep. This effort will further contribute to clearing the large backlog of children aged 0-16 who are not registered and do not have a birth certificate in Malawi.

Birth Registration in Emergencies (BRiE)
Malawi is a disaster prone country affected by both natural disasters and conflict. Malawi hosts around 35,000 refugees and asylum seekers and is currently experiencing its worst food security crisis in the last decade, with 2.8 million people including 1.5 million children affected. The DBR Programme will design and test Standard Operating Procedures for the emergency context, 1 in response to natural disasters and 1 for refugees.

Birth registration is a standalone right and a protection tool that promotes access to other basic rights. In emergencies, unregistered children are amongst the most vulnerable. They are unaccounted for and therefore commonly unassisted. This forces unregistered children and their families to resort to negative coping mechanisms, like child labour, child marriage, and trafficking, in order to meet basic needs.

In an emergency context: parents are less likely to have the supporting documentation required to register births; existing authorising agents are often overwhelmed responding to the emergency; and the birth registration system will subsequently experience significant delays, disenabling parents to register within the legal timeframe required.

Using Plan International’s BRiE activity guidelines, an appropriate birth registration process and SOPs will be defined in collaboration with key stakeholders including the Department of Refugees, UNHCR, and NRB. Related regulatory changes will be proposed that reflect any changes to the business as usual registration process. These approaches will be tested in one emergency affected community and one refugee camp.
Change Management

In order to facilitate acceptance of the DBR system across affected institutions, and to ensure that service providers are adequately skilled to effectively facilitate the digital birth registration process, a change management programme will be implemented. Change management is the management of transformative activities within an organisation in such a way as to ensure that the changes that occur are fully accepted and integrated into daily routine. An effective change management approach is crucial to facilitate the acceptance and use of the digital CRVS system and processes across the NRB and the Ministry of Health. Clear and targeted communications through a variety of different channels will be used to explain what changes are happening, when, and how they will affect each stakeholder and a comprehensive training curriculum will be provided to all service providers.

Key components of the Change Management work-package will include:

- **Structured communications plan**: we will build credibility in the project and change by being clear in communications to all affected actors (direct and indirect) from the outset, informing them of changes early on in the process to avoid “fire-fighting” when the change is implemented. This will include:
  - **Understanding individual needs**: all communications will be targeted for specific groups of people, ensuring that the communication is tailored to their needs in order to facilitate an acceptance of the change.
  - **Mobilise a network of Change Champions**: Change Champions for individuals at all levels across NRB, the Ministry of Health and the community who are charged with spreading “good-news” about the upcoming change; responding to queries; and gathering feedback. These individuals are part of the groups that will be affected by the change and thus are able to relate to those affected and respond more effectively than those initiating the change. See table below for examples of where change champions will be used.
  - **Mobilise a Project Sponsor**: this will be a senior individual from the Government of Malawi who will champion the change at the highest level and encourage adoption of the digital birth registration process across all layers of the different affected institutions.

- **Capacity Building**: Training IT staff and users in the use of the digital CRVS system and processes will ensure that the system is used effectively and will mitigate the risk of business rejection and safeguard against improper use. A comprehensive training plan will be developed to ensure that each actor is provided with relevant training at regular intervals. Using a train the trainer approach, the capacity of NRB and all other affected actors to provide effective and efficient birth registration services will be strengthened.
## Structured Communications Plan

The table below provides an initial view of what type of communications will be disseminated throughout the programme lifecycle.

<table>
<thead>
<tr>
<th>Actor</th>
<th>What do they need to know?*</th>
<th>What communication method(s) will be used?</th>
</tr>
</thead>
</table>
| Health Facility Staff        | ▪ What is the new process, when will it be implemented and how will it affect their day to day activities?  
                                  ▪ What follow up activities are there for parents e.g. on-demand certificate collection?  
                                  ▪ What is their responsibility in the new process?  
                                  ▪ Role of QA Agent and how they will work together.  
                                  ▪ Benefits of the new process e.g. alignment with ante and post-natal care, reduction of effort | ▪ Visual representations of the new process posted in health facilities.  
                                  ▪ Team meetings held in health facilities to explain the change, as defined in column left.  
                                  ▪ Official notification of change via letter from senior change champion.  
                                  ▪ Change Champions will be identified in each Health Facility to share key change messages. |
| District Registration Staff  | ▪ What is the new process, when will it be implemented and how will it affect their day to day activities?  
                                  ▪ New roles and responsibilities incl. validation and certification provision on-demand.  
                                  ▪ Benefits of the new process and system e.g. easy to use, paperless | ▪ Visual representations of the new process posted in District Registration Offices.  
                                  ▪ Official notification of change via letter from senior change champion.  
                                  ▪ Announced to all staff by District Commissioner; legitimising the new process. |
| District Management Personnel| ▪ What is the new process, when will it be implemented, how will it affect their day to day activities and benefits?  
                                  ▪ New roles and responsibilities incl. monitoring of performance of DROs and health facilities in their jurisdiction  
                                  ▪ Accountability structure | ▪ Official notification of change via letter from senior change champion.  
                                  ▪ All change materials incl. posters sent and distributed by District Management  
                                  ▪ Change champion identified in management team |
| Village Headmen              | ▪ What is the new process, when will it be implemented and how does it affect the process they currently complete?  
                                  ▪ Key change messages that need to be disseminated to the community | ▪ Official notification of change via appropriate medium  
                                  ▪ SMS based notifications on a regular basis  
                                  ▪ Visual representations of the new process to be hung in Headman home and leaflets to be distributed via community groups |
| NRB HQ Functional            | ▪ What is the new process, when will it be implemented, how will it affect their day to day activities and benefits?  
                                  ▪ Decentralisation of old responsibilities; where old responsibilities sit. | ▪ Senior Change Champion notifies of change in department meeting  
                                  ▪ Official communication sent to all staff  
                                  ▪ Operational change champion charged with personal-selling and responding to FAQs |
| NRB HQ Management            | ▪ What is the new process?  
                                  ▪ How does the new process affect their respective departments/staff members?  
                                  ▪ What are the benefits of the new process? | ▪ Senior Change Champion notifies of change in management meeting  
                                  ▪ Official communication sent to all staff  
                                  ▪ Detailed explanation of amended governance structure shared |
| Ministry of Health | What is the new process?  
What are the benefits of the new process?  
New roles and responsibilities incl. monitoring overall performance of district registration  
How CRVS aligns closely with other health processes | Senior Change Champion notifies of change in management meeting  
Key change messages circulated via official notification to all affected individuals  
Visual representations of the new process and benefits posted around MoH |
|-------------------|-----------------------------------------------|--------------------------------------------------|
| eGovernment       | What is the new process?  
How does the new process affect their respective departments/staff members?  
New roles and responsibilities  
How the eBRS system works with other government systems | Senior Change Champion notifies of change in management meeting  
Key change messages circulated via official notification to all affected individuals  
Regular email updates on progress of system development and deployment |
| Technical Working Group | What is the new process?  
How does it affect ongoing CRVS strengthening activities in Malawi?  
How does it affect respective projects?  
Role in project and design process e.g. review and approval cycles with relevant actors | Senior Change Champion notifies of programme and planned changes in TWG meeting  
Official communication sent to all TWG partners  
Regular updates in TWG forum, including review of key design decisions |

Table 11. DBR Structured Communications Planning

*All individuals affected by the change will be provided with targeted communications on CRVS basics and why it is important

Delivery of the change messages and training as defined above will be scheduled in a repetitive manner in line with the defined deployment schedule.
## Capacity Building

The table below details training requirements of key actors involved in the redefined birth registration process. Note that all individuals will be provided training on CRVS basics and why it is important.

<table>
<thead>
<tr>
<th>Actor</th>
<th>Responsible</th>
<th>Training Needs</th>
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</table>
| Health Facility Staff                             | Informing parents of process throughout MNCH cycle                           | ▪ How health related processes can be utilised to inform parents of the need for birth registration  
  ▪ System and processes for as and when required  
  ▪ Basic computer skills and system troubleshooting |
| Quality Assurance Agent (New role)                 | Monitoring of birth registration form data quality & validation of entries in system | ▪ System and process, incl. follow up requirements and activities  
  ▪ Basic computer skills and system troubleshooting  
  ▪ Health related processes and how they affect and contribute to the birth registration process |
| District Registration Officers                     | Validation of birth registration applications and issuance of birth certificates on-demand | ▪ System and process  
  ▪ Basic computer skills and system troubleshooting  
  ▪ Accountability and performance management processes |
| NRB HQ Functional Monitoring & reporting functions; system management | ▪ System and process  
  ▪ System administration  
  ▪ Additional areas where technical expertise is lacking in the department  
  ▪ Accountability and performance management processes  
  ▪ Reporting |
| eGovernment IT Officers                            | Ongoing operational maintenance and management of system                       | ▪ System and process  
  ▪ System design and administration  
  ▪ System management and operational maintenance  
  ▪ General systems management skills e.g. database management |
| National Statistics Office                         | Reporting and dissemination of key vital statistics                           | ▪ Analysis and production of vital statistics based on birth registration records  
  ▪ Reporting |
| NICE Volunteers & other communication actors (defined in the Behavioural Impact section below) | Disseminating key behavioural impact messaging as defined in the integrated marketing and communications campaign | ▪ Redefined process  
  ▪ Importance of birth registration |

**Table 12. DBR Training Requirements**

In addition to the training topics detailed above, the programme will support NRB to (i) attend 2 International conferences to learn from other countries’ experiences and showcase their work, and (ii) travel to 2 other African countries who have taken positive steps to improve their CRVS systems, supporting further South-South learning in the area of CRVS digitisation.
### Advocacy

In order to effectively support the digital birth registration process, appropriate legal and policy reform is required to ensure that the birth registration system supports a rights-based approach, avoiding discrimination and ensuring inclusion, and preventing the misuse and corruption of birth registration data. Based on a thorough assessment of the existing legal and policy framework that supports civil registration processes, the programme will advocate for the following legal, policy and regulatory reforms, making the process accessible and safe for all:

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<tr>
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</thead>
<tbody>
<tr>
<td><strong>Data protection and privacy</strong></td>
<td>There is no specific law on data protection and privacy, leaving citizens’ personal data vulnerable to misuse.</td>
<td>Comprehensive data protection and privacy laws put in place.</td>
<td>Malawi Law Commission; Ministry of Justice; National Assembly Malawi Human Rights Commission Ministry of Gender, Social Welfare and And Persons with Disabilities National Registration Bureau</td>
</tr>
<tr>
<td><strong>Birth registration is free in all circumstances</strong></td>
<td>Under the National Registration Act, late registration is allowed after payment of appropriate fees</td>
<td>Removal of fines for late registration Removal of fines/punishment for non-registration</td>
<td>Malawi Law Commission Ministry of Justice National Assembly National Registration Bureau</td>
</tr>
<tr>
<td><strong>Adequate budgetary allocation to support structures responsible for CRVS, specifically</strong></td>
<td>Lack of adequate resources to support a fully functional CRVS system</td>
<td>Parliament to allocate sufficient resources to support a fully functional CRVS system, specifically the birth registration process in health facilities</td>
<td>Ministry of Finance Ministry of Home Affairs National Assembly National Registration Bureau</td>
</tr>
</tbody>
</table>
The existing legal framework does not support coordination or sharing of civil registration or vital statistics data between different agencies or define the administrative structure that will support such activities.

- Legal framework put in place to encourage coordination and collaboration between authorities. Within the provisions made should be a defined governance structure to help in the coordination between authorities.
- Decentralisation of key birth registration functions, including validation and certification, from HQ to District level.
- Malawi Law Commission
- Malawi Human Rights Commission
- Malawi Police Service
- National Statistical office
- Ministry of Justice
- Ministry of Home Affairs
- National Assembly
- Ministry of Gender, Social Welfare and Persons with Disabilities
- National Registration Bureau
- Judiciary

### Table 13. DBR Advocacy: Items for Reform

All advocacy efforts will be coordinated with other UN agencies and development partners working on CRVS-related activities in Malawi, aiming to support the NRB and Government of Malawi to develop a robust CRVS legal and policy framework that supports all CRVS strengthening activities across all life events.
**Behavioural Impact**

The survey conducted for this study clearly shows that awareness of birth registration and its importance is very low in Malawi (28.7%). Bottlenecks and barriers such as distance, cost and complexity also act as clear deterrents for citizens to engage in the process. In order to increase the demand for birth registration services, the Communication for Behavioural Impact (COMBI) approach will be used to positively change the behaviours of parents and caregivers towards birth registration, encouraging them to choose to give birth to children in health facilities and subsequently register their children.

With a sharp focus on desired behaviours, such an approach goes beyond the mere provision of knowledge as seen in traditional IEC campaigns, instead it looks at the incentives, prompts and triggers of parents to actively register their children.

The development of the COMBI Campaign will happen in four stages:

1. **Training**: 7 day training course is provided to all involved parties in-country on the Communication for Behavioural Impact Methodology. This training takes participants through the methodology and applies it to birth registration in Malawi, beginning to identify the strategic behavioural objective that the campaign will look to bring about, and investigate key communication strategies for an integrated marketing and communication campaign for the Malawian context.

   *NB. Other UN agencies and development partners interested in extending the reach of this campaign to different districts will be encouraged to participate in training and implementation in a collaborative manner.*

2. **Field-Work**: the Consultant spends a week in the field speaking to a range of actors from Parents to registration staff. The field-work is used to gather insight into the daily experiences of target audiences and tests some of the communication strategies developed in the training. This analysis involves listening to people and learning about their perceptions and grasp of the offered behaviour, the factors which would constrain or facilitate adoption of the behaviour, and their sense of the costs (time, effort, money) in relation to their perception of value of the behaviour to their lives.

3. **Planning**: the Consultant develops a detailed COMBI strategy that clearly outlines what messaging will be used and by which medium this messaging will be disseminated (examples included in table below). This strategy is developed into a detailed integrated marketing and communications plan that will span the lifecycle of the programme.

4. **Implementation**: coordinated implementation of the COMBI strategy and plan by partners throughout the country.

Detailed below are 5 key communication strategies that will be employed to bring about the desired behavioural impact. Please note that a final communication strategy will be developed through the COMBI approach described above.

<table>
<thead>
<tr>
<th>COMBI Action</th>
<th>Description of Action</th>
<th>DBR specific actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
<td>Area</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Public Relations / Advocacy / Administrative Mobilization</strong></td>
<td>Putting the defined behavioural objectives on the public and administrative agenda through meetings, discussion with leaders, official memoranda, partnership meetings, news coverage, talk shows, and celebrity spokespersons</td>
<td></td>
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<tr>
<td></td>
<td>▪ Extensive PR activities promoting the health facility based birth registration process, positioning it as a game-changing civil services programme.</td>
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<td></td>
<td>▪ High-profile public events with senior stakeholders from both NRB and the MoH, as well as the Project Sponsor (high visibility individual who can capture hearts and minds e.g. President’s Wife).</td>
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<tr>
<td></td>
<td>▪ Strong advocacy at parliamentary caucuses on security and relevant Ministry of Home Affairs officials.</td>
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<td></td>
<td>▪ Campaigning activities will focus on parents (both men and women)</td>
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<tr>
<td><strong>Community Mobilisation</strong></td>
<td>Engaging the community through different methods to educate and encourage the defined behavioural objectives through participatory research, community-group meetings, community drama, etc.</td>
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<tr>
<td></td>
<td>▪ A number of local community fora will be used to spread key campaign messaging, these will include village meetings, market day campaigns, football bonanzas, funerals, women’s caucus meetings, local drama, caucus for chiefs, women and youth groups, religious gatherings and interface meetings.</td>
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<tr>
<td></td>
<td>▪ Village criers will announce key messages and bring villagers together in meetings where the Village Head Man will disseminate key campaign messaging.</td>
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<td></td>
<td>▪ Village Head Men and religious leaders will be used to leverage their strong standing in the community.</td>
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<tr>
<td></td>
<td>▪ Village savings groups will be used to support expectant Mother’s save for travel to the health facility to give birth.</td>
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<tr>
<td></td>
<td>▪ Other community actors will include: area executive committee members, Health Surveillance Assistants (HSAs), Area Development Committee (ADCs)/Village Development Committees (VDCs) and Village Health Committees (VHCs).</td>
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</tr>
<tr>
<td><strong>Sustained Appropriate Advertising</strong></td>
<td>Ensuring that advertising for the defined behavioural objectives is Massive, Repetitive, Intense, and Persistent – via Radio, TV, newspapers and other media channels.</td>
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<tr>
<td></td>
<td>▪ Recognising that 80-85% of Malawians are based in rural locations and literacy rates are low, verbal communication and visual aids will be used to ensure that communications can be understood by all.</td>
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<tr>
<td></td>
<td>▪ Wide radio coverage on a national and local level will be leveraged (5 radio stations with national coverage and more than 10 community radio stations) to disseminate key messaging. Community radio stations will be used to disseminate messages in local languages.</td>
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<td></td>
<td>▪ Content will be included in newspapers including visual and text explanations of the new process along with key persuasive messaging.</td>
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<td></td>
<td>▪ Visual pamphlets and posters will be shared in locations with heavy foot traffic.</td>
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</tr>
<tr>
<td><strong>Interpersonal communication / Counselling / Personal Selling</strong></td>
<td>At the community level, in homes and at service points: Disseminating informational literature on the defined behavioural objectives and their benefits; explaining additional incentives; and listening</td>
<td></td>
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<tr>
<td></td>
<td>▪ Door to door campaign using NICE volunteers, community activists and community health workers to disseminate information on the importance of birth registration and certification, as well as information on how to engage in the process.</td>
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<tr>
<td></td>
<td>▪ Mothers will be engaged throughout their ante and post-natal care on the importance of birth registration and how they can register their child. These lessons will be closely linked with other key health messages.</td>
<td></td>
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</tbody>
</table>
and addressing concerns

- Fathers will be individually engaged to ensure that registration is deemed as a priority within the family; involvement of males from an early point in the pregnancy process (ante-natal care) is crucial to build a positive narrative over time.

<table>
<thead>
<tr>
<th>Point of Service Promotion</th>
<th>Promotion of the behavioural objective at key public service points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>▪ Health facilities and village clinics will display visual representations of the new birth registration process. For those who are literate, informational pamphlets will be disseminated.</td>
</tr>
<tr>
<td></td>
<td>▪ Health staff at village clinics, ante and post-natal care providers and vaccination staff will all engage Mothers &amp; Fathers directly and verbally explain processes and procedures; creating excitement and desire amongst Parents to register their child.</td>
</tr>
</tbody>
</table>

*Table 14. DBR Behavioural Impact Strategies*
Monitoring and Evaluation

Central to the success of the DBR project is a robust monitoring and evaluation framework, required in order to prove that the DBR model is effective and that the integrated approach to birth registration is scalable and sustainable. A key principle of the DBR project is that of continuous improvement, acknowledging that the model will undergo minor iterations throughout the lifecycle of the project in order to become:

- **Scalable**: able to function at scale in different contexts across the whole country.
- **Sustainable**: a cost effective solution that can be owned and run by the State.
- **Effective**: improves the quality, efficiency and overall experience of the birth registration service for both citizen and service provider.
- **Fit for purpose**:
  - The system fulfils its purpose, reflecting the business needs of the registration authority.
  - The system is easy to use, making the lives of service provision personnel easier.

The project will use system and field-based techniques to monitor the effectiveness of Plan Malawi’s interventions and to ensure that the model is continuously monitored and modified based on findings.

Monitoring and evaluation activities are key to the success of the DBR project. The ongoing monitoring and modification efforts will fine-tune the solution and implementation approach to allow us to develop a model that has been comprehensively tested prior to documenting the case for scale-up.

Baseline Survey

In order to effectively monitor changes that project interventions bring about, a baseline survey will be completed in each target district to benchmark the pre-intervention situation. This survey will be of a statistically representative sample size and use a sampling methodology that gathers representative findings for the project target area. The baseline data will be disaggregated by sex, age, disability, minority, ethnicity, religion and urban/rural.

Qualitative techniques such as focus group discussions, in-depth interviews, and key informant interviews will be used to set baseline rates for items relating to knowledge, attitudes and practices.

For indicators that relate to the DBR system, baseline measurements will be taken in relation to use, attitudes and content of the existing eBRS system.

System Based Monitoring:

During the development of the DBR solution, system requirements will be included to reflect KPIs that can be gathered through the system itself e.g. time taken from submission of application to validation of application by the DRO. These KPIs will provide an insight into the effectiveness of the system based on automatically generated data that can be accessed as and when required.

The reporting dashboard of the solution will allow project staff as well as local and national government to monitor these operational and performance related indicators. Different views can be created as required for each user of the system to fulfil reporting requirements.

Local Government institutions, both the DRO and District Health Office (DHO), will be jointly responsible for monitoring the performance of individual registration sites within their jurisdiction.
At this level, individuals can be held accountable for their performance in comparison to others within the same location, other locations within the jurisdiction and also in other districts. On a quarterly basis, high performing registration sites will receive a reward for their good efforts.

The **National Registration Bureau** will monitor country-wide registration rates and make key performance indicators publicly available.

The **Project Team** will support Government to utilise system based monitoring tools to monitor operational and performance indicators, encouraging ongoing monitoring of the birth registration service beyond the lifecycle of the project.

**System administrators** will monitor system-related performance indicators via their own personalised dashboard view. System modifications will be based on this ongoing monitoring. If issues are identified, system related updates will be made following a defined change management process i.e with sign-off and agreement from relevant stakeholders.

Based on both operational and performance related indicators that are monitored via the dashboard, targeted field-based responses will be conducted including on-site interviews and FGDs in the jurisdiction to understand why registration rates remain low and/or people are not engaging in the process. Following this the response in that area will be adjusted to include additional training, tailoring of communications etc as required.

**Field-Based Monitoring:**

The Community will be engaged directly for monitoring and evaluation purposes throughout the duration of the project. Focus group discussions and interviews will be held at regular intervals in each of the project areas to get feedback from a range of individuals including citizens, registration and health staff, and community leaders.

Coordinated visits between Local Government departments including the District Registration Office and District Health Office will be conducted at regular intervals to develop a sense of joint ownership and understanding of the day to day successes and challenges of the system. Decisions on how identified issues are addressed will be made together and escalated as described in *Programme Governance Structure*.

**End of project evaluation**

At the end of the project a detailed evaluation of the DBR solution will be conducted to assess whether the DBR solution is a scalable and sustainable solution. Based on this analysis a business case will be documented, detailing how and why the DBR solution is appropriate as a national, cost-effective civil registration solution.
Results Framework

The DBR programme aims to prove a sustainable and scalable model for birth registration in Malawi so that all boys and girls are registered through a rights-based national CRVS system. The below results and activities framework form a basis for monitoring and evaluation activities. A final assessment of programme results will provide evidence as to whether the technology solution and integrated programme approach should be scaled-up nationally and extended to support other vital events.

Figure 8. Results Framework
Impact: All Malawi boys and girls are registered through a rights-based national CRVS system

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Outputs</th>
<th>Activities</th>
<th>Indicators</th>
</tr>
</thead>
</table>
| 1. Increase in the number of boys and girls that are registered Lilongwe, Mulanje, Mzuzu and Kasungu by 2020 | De-centralised digital birth registration system deployed in health facilities and District Registration Offices | A1.1. Conduct technical system assessment of eBRS system  
A1.2. Write system requirements for the digital birth registration system based on the outputs of the DBR Technical Analysis  
A1.3. Design, build and test all software components of the digital birth registration system  
A1.4. Write product test scripts for birth registration system functionality  
A1.5. Test the digital birth registration system against the product test scripts  
A1.6. Write integration test scripts for all system interactions with external systems  
A1.7. Test the digital birth registration system against the integration test scripts  
A1.8. Write user acceptance test scripts based on use cases and scenarios  
A1.9. Conduct user acceptance tests on the integrated solution with real system users  
A1.10. Conduct system performance tests  
A1.11. Conduct system stress tests  
A1.12. Deploy accepted software at the national level and within target districts  
A1.13. Support the technical solution and maintain system at the national level and within target districts  
A1.14. Redeploy the technical solution with improvements and modifications at the national level and within target districts to resolve issues raised by users | • No. of sites (Health Facilities) to which the DBR system has been deployed |
| Required infrastructure deployed to support use of DBR system | | A2.1. Equip health facilities within the target districts with required hardware, electricity and connectivity to carry out digital birth registration  
A2.2 Build / improve national data centre with the necessary hardware to support the digital birth registration solution | • No. of sites (Health Facilities) to which required infrastructure has been provided to support the DBR system |
| A suite of SOPs developed and distributed to all users of the DBR system at health facility, DRO & HQ | A3.1. Create / update standard operational procedures for birth registration consistent with the DBR system and the outputs of the DBR Technical Analysis  
A3.2. Distribute the standard operational procedures to all users of the DBR system at health facility, District Registration Office and HQ levels | • No. of users that have received SOPs |
<table>
<thead>
<tr>
<th>levels</th>
<th>A4.1 Create / update standard operational procedures for birth registration in emergency contexts (refugee + natural disaster)</th>
<th>2 SOPs for BRIE developed and tested in one refugee context and one natural disaster context</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOPs developed for birth registration in emergencies (refugees + natural disaster)</td>
<td>A4.2. Distribute the standard operational procedures to all actors who will be involved in birth registration during emergencies (dependent on context) A4.3. Support NRB to test SOPs in 1 refugee context and 1 natural disaster context</td>
<td></td>
</tr>
<tr>
<td>Late registration drives planned and conducted using the DBR system</td>
<td>A5.1. Create SOP for late registration drive using Plan mobile van A5.2. Develop late registration drive approaches (process, staffing, tools and rollout) A5.3. Test late registration drive approaches and document successful methods A5.4. Develop training materials for those who will conduct a late registration drive A5.5. Train those conducting the late registration drive using mobile van in target districts A5.6. Conduct late registration drives using mobile van in target districts</td>
<td>No. of late registration drives conducted per district per year No. of children registered during late registration drives per district per year</td>
</tr>
<tr>
<td>1.2 Service providers (registration agents and UC Secretaries) have the capacity to provide an effective and efficient birth registration service</td>
<td>DBR system users trained on the tools and processes A6.1. Create a training plan for all actors involved in the birth registration process at national, health facility, district and community levels, defining who will be trained on what and when A6.2. Create process training materials and manuals for all actors involved in the new birth registration process at national, health facility, district and community levels A6.3. Create technical solution user training materials and manuals for all actors involved in the new birth registration process at national, health facility and district levels A6.4. Train all relevant actors at the national, health facility, district and community levels on the new birth registration process A6.5. Train all relevant actors at the national, health facility, district and community levels in the use of the digital birth registration tools A6.6. Create training materials for statisticians on the analysis and production of vital statistics based on birth registration records A6.7. Train statisticians in the analysis and production of vital statistics based on birth registration records</td>
<td>No. of training sessions run on tools and processes No. of Health Facility and District Registration staff trained Average training test score by type (Health Facility Staff, Quality Assurance Agent, DRO)</td>
</tr>
<tr>
<td>DBR</td>
<td>A7.1. Create technical solution administrative training materials and manuals for</td>
<td>No. of DBR administrators trained</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
| **administrators trained on system maintenance and support** | technical staff that will be supporting and maintaining the technical solution at national and district levels  
A7.2. Train technical staff at the national and district levels on how to support and maintain the technical solution  
A7.3 Train technical staff at the national level in specific technical areas as required e.g. database management (to be defined with NRB) | on system maintenance & support  
- Average training test score of DBR administrators |
| **Communications plan implemented at all administrative levels to raise awareness on CRVS and get buy-in for the DBR system and process** | A8.1 Create detailed communications plan defining who needs to be informed about upcoming changes to processes and tools, by when and through which channels  
A8.2 Create communication materials required to support change management at the national, district and community levels  
A8.3 Implement the communications plan at national, district and community levels | - No. of change communications materials created and distributed  
- No. of relevant people receiving the change communications |
| **Emergency response staff trained on the tools and process for birth registration in emergencies** | A9.1. Create a training plan (immediate and ongoing) for all emergency response staff and partners who will be involved in birth registration during emergencies  
A9.2. Create training materials and manuals for all actors who will be involved in birth registration during emergencies  
A9.3. Conduct training for all actors who will be involved in birth registration during emergencies | - No. of emergency response staff and partners trained on system maintenance & support  
- Average training test score of emergency response staff and partners |
| **Parents and caregivers understand the process and importance of birth registration** | A10.1. Train the COMBI national and district working groups on the COMBI methodology  
A10.2. Develop COMBI strategy for parents to choose to give birth in health facilities and subsequently register their child  
A10.3. Develop COMBI implementation plan for target districts with detailed activities, budget and roles and responsibilities  
A10.4. Develop and produce campaign materials (including tender documents for advertising companies, development, production and dissemination, including TV and | - No. of people directly reached by the communications campaign (e.g. through community mobilisation)  
- No. of people indirectly reached by the communications campaign (e.g. through radio announcements) |
| Health Facilities and Subsequently Register Their Child | Radio adverts etc.) for target districts  
A10.5. Train resources (including community members) on the implementation of the COMBI plan in target districts  
A10.6. Plan and implement special events to deliver on COMBI specific behavioural objectives  
A10.7. Revise COMBI implementation plan based on monitoring feedback |
|---|---|
| Legal and Policy Recommendations Supporting Rights Based Birth Registration and DBR System Developed and Shared with CRVS Stakeholders at Provincial and National Levels | A11.1. Conduct the DBR risk assessment to develop mitigation strategies for potential child protection risks  
A11.2. Define the legal and policy changes required for rights based birth registration, such that it conforms to UN guidelines and Plan International’s key principles and standards for birth registration  
A11.3. Define the legal and policy changes required to enable the DBR system and processes  
A11.4. Lobby at the national level for legislative and policy reform for birth registration |
| CRVS Steering Committee Workshops Convened at the National Level to Review and Evaluate the Legal and Policy Recommendations | A12.1. Plan the content of the CRVS trainings for the national CRVS steering committee  
A12.2. Conduct the CRVS training sessions for the national CRVS steering committee  
A12.3. Organise a steering committee workshop to review and evaluate the legal and policy recommendations supporting rights based birth registration and the DBR system at the national level  
A12.4. Organise a steering committee workshop to review and evaluate the legal and policy recommendations supporting rights based birth registration and the DBR system at the provincial level. |
| DBR Evaluation Report and Scale-up Recommendations Developed and Distributed to CRVS Stakeholders at National and District Levels | A13.1. Write DBR evaluation report  
A13.2. Distribute DBR evaluation report to CRVS stakeholders at the national and district levels  
A13.3. Present DBR evaluation report at the national CRVS steering committee  
A13.4. Present DBR evaluation report at the Technical Working Group |

1. National Birth-Registration Legislation and Policies Support the DBR Model and are Rights-Based |

   - No. of legal & policy recommendations advocated for
   - No. of lobbying meetings held

2. The DBR Model is Included and Budgeted for in the National CRVS |

   - No. of CRVS steering committee workshops to review legal and policy recommendations convened at the national level
   - No. of national meetings where the DBR evaluation report is presented
| Investment plan by 2020 | CRVS stakeholders at the national level | A14.1. Create promotional materials showing the DBR model in action and having a real impact for beneficiaries  
A14.2. Publish the promotional materials and disseminate to CRVS stakeholders at the national and district levels | No. of DBR promotional materials created per year  
No. of relevant officials receiving the DBR promotional materials per year |
|------------------------|----------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------------|
| Promotional materials on the DBR model  
created, published and distributed to CRVS stakeholders at the national level | A15.1. Plan the content of the CRVS trainings for the national CRVS coordination steering committee  
A15.2. Conduct the CRVS training sessions for the national CRVS steering committee  
A15.3. Conduct the CRVS training sessions for the Technical Working Group  
A15.4. Organise a Technical Working Group workshop to review and evaluate the legal and policy recommendations supporting rights based birth registration and the DBR system  
A15.5. Organise a steering committee workshop to review and evaluate the legal and policy recommendations supporting rights based birth registration and the DBR system at the national level | No. of CRVS Technical Working group meetings convened at the national level  
No. of CRVS Steering Committee meetings convened at the national level |
| CRVS Technical Working Group and steering committee workshops convened at the national level to review and evaluate the DBR model | A16.1. NRB staff member to travel to 2 regional level CRVS conferences to inform CRVS strategic planning processes  
A16.2. 2 NRB staff members to travel to 2 African countries to see digitisation best practice in action and inform CRVS strategic planning processes | No. of lessons learned sessions run by NRB after international CRVS best practice visits |
| National level NRB staff trained in CRVS best practice approaches from across Africa | | | |

Table 15. Results Framework: Outputs, Activities & Indicators
Programme Implementation

Proposed Programme Locations

The programme will be implemented in 4 districts of Malawi where Plan is currently operating: Lilongwe, Kasungu, Mzuzu and Mulanje. These locations have been chosen in order to prove the approach in different contexts such that the model is scalable across the whole country.

<table>
<thead>
<tr>
<th>District</th>
<th>Population</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lilongwe</td>
<td>1,077,116</td>
<td>5,702 km²</td>
</tr>
<tr>
<td>Kasungu</td>
<td>480,659</td>
<td>7,878 km²</td>
</tr>
<tr>
<td>Mzuzu</td>
<td>610,944</td>
<td>10,430 km²</td>
</tr>
<tr>
<td>Mulanje</td>
<td>521,391</td>
<td>2056 km²</td>
</tr>
</tbody>
</table>

Health Facility Types

Rural hospitals and Health Centres will be targeted with high birth registration rates (threshold to be determined alongside NRB and MoH). Facilities that provide citizens with accessible maternity services in hard to reach areas will be prioritised.

Baseline Registration Rate

TBC (based on NRB and Health Department data):

- per cent of births in the district registered in the given year and within 60 days of birth
- per cent of births in the district registered in the given year and within 1 year of birth

Programme Governance

Figure 1. Programme Governance below provides an overview of the proposed programme organisation structure.
A DBR Programme Working Group (PWG) will be established in order to set expectations of the programme, coordinate key design and implementation decisions amongst implementing partners, and report on the project’s progress to key CRVS stakeholders. The group will provide coordinated inputs on required decisions to national CRVS committees - the Technical Working Group and National Steering Committee on Registration.

The PWG will be led by the DBR Programme Manager, who will be appointed to manage the programme as a whole. The DBR PM will be supported by a lead representative from NRB, nominated by NRB as a focal point and decision-maker for all DBR project activities. Key stakeholders from across both national and district levels will act as focal points in this group including representatives from the various departments of the Ministry of Home Affairs & Internal Security incl. Departments for Refugees and Immigration, the Ministry of Health, Department of eGovernment, Ministry of Justice, Ministry of Gender, Children Disability and Social Welfare, and implementation partners. Each of the DBR Programme Working Group members will be expected to nominate a focal point/Desk Officer to act as the programme’s decision maker.

The DBR Programme working group will report into the Technical Working Group which will in turn report to the National Steering Committee on Registration, for coordination and alignment with the broader National level strategic plans. This element of the programme governance is essential to build a political engagement necessary to achieve the long-term programme outcomes.

Plan’s Global Birth Registration Innovation Team will support the Programme Manager and will offer technical and implementation guidance and support across all workstreams.

Each programme workstream will have a dedicated lead responsible for the delivery of the workstream. The workstream leads will coordinate with one another to ensure an aligned and integrated delivery. Workstreams which require a permanent local presence (e.g. technology, training and COMBI), will have Officer posted at the district level.

**Implementation Partners & Stakeholders**

The success of the DBR programme, proving a scalable and sustainable model for birth registration in Malawi, is largely dependent on a strong and collaborative working relationship amongst all involved actors, building a strong sense of ownership from the outset. Listed below are all government and development partners who will have a role to play in the DBR Programme.

**Government Partners**

**Ministry of Home Affairs & Internal Security**

The Ministry of Internal Affairs and Public Security exists to facilitate the provision of safe and secure environment for sustainable national development in Malawi. The Ministry is composed of the Ministry Headquarters, National Registration Bureau, Malawi Police Service, Malawi Prisons Service, Immigration Department, Department of Refugees. The Ministry’s mandate is derived from Constitutional Provisions, Acts and Government Policies related to the machinery of public service administration58.

National Registration Bureau

Under the Ministry of Home Affairs & Internal Security, the NRB, as the department responsible for the registration of births, will be the lead implementation partner for the DBR project. Plan and NRB will develop a joint workplan to ensure that roles and responsibilities are clearly defined and ownership of the project is with NRB from the outset. The NRB will be responsible for providing a project manager who will be the key focal point for the DBR project. They will support in defining system requirements; the development of SOPs (standard and emergency); provision of required resources to ensure project success; training of NRB and health registration resources; creation of key communication messages as part of the COMBI campaign; lead change management activities through ownership from the outset; and will own all work products when the programme is officially complete.

Ministry of Health

A key stakeholder in the DBR project, Plan and NRB will work closely with the MoH at both the national and local level to ensure that health requirements and needs are appropriately reflected in the system and processes. Recognising the importance of developing co-designed and owned SOPs and work products, programme planning will be done in collaboration with the MoH. Representatives from the Ministry will be involved in design workshops and in providing recommendations for effective implementation including identification of change champions, defining training needs, and also in identifying which health facilities should host the system. The MoH will be responsible for identifying a focal point/Desk Officer to ensure that MoH positions are reflected in implementation planning and activities throughout the lifecycle of the project. The District Health Office will be engaged at a local level to monitor day-to-day operations and to work closely with the District Registrar to facilitate monitoring and evaluation activities.

Ministry of Local Government

The Ministry of Local Government will be a key player in field level project implementation in each of the proposed programme districts. The District Commissioner is responsible for all administrative and government functions at a district level so will be key in coordinating the efforts of all local level government departments including NRB, MoH etc. The involvement of Village Chiefs will be coordinated by the DC as they are under local government payroll, and the involvement of community committees e.g. savings groups and social protection committees in communication activities will be managed at this level.

Department of eGovt

The Department of eGovt is the custodian of all government information systems. The department will be involved in the system design process and development to ensure that the system can be effectively maintained by eGovernment staff after the lifecycle of the project. They will also provide input into training requirements for eGovt staff to ensure that the system is supported in the long-term. The department will provide a full time resource to support the programme technically to ensure sustainability. This individual can also train other team members in the management and maintenance of the system.

National Statistics Office

The National Statistics Office is the main government department responsible for the collection and dissemination of official statistics. The NSO will be involved in defining data requirements for vital statistics purposes so that these can be reflected in the data that they can access/receive from NRB.
They will receive training on the analysis and production of vital statistics based on birth registration records, and will use data generated through the eBRS system to create a vital statistics report.

**Ministry of Gender, Children, Disability and Social Welfare**

The Ministry is mandated to provide policy guidance for women and child development services with the aim of promoting the welfare and protection of women and children. It is responsible for putting in place systems to develop instruments, structures, policies, guidelines and programmes whose impact will culminate into the realization of the ministry's goals and objectives. The Ministry will be a member of the DBR Programme Working Group and will support the programme through the inclusion of community groups and protection programmes as key players in the behavioural impact campaign. The Ministry will also be consulted in the development of SOPs and legislation to support the universal registration of children in Malawi.

**Ministry of Justice & Constitutional Affairs**

The Ministry exists to provide legal services to the government and its citizens. It will support the DBR project as a member of the Programme Working Group by drafting proposed changes/new regulations and bills as required and support in advocating for these changes in the Cabinet Office. If Parliament rejects/questions proposed legislation, the MoJ will support in providing official responses that reflect TWG decisions.

**Department of Immigration:**

Under the Ministry of Home Affairs & Internal Security, the Department is responsible for providing services in the areas of border control and issuance of travel documents, residential and work permits, Visas as well as Citizenship to eligible persons. The Department will be included in consultations on SOP development for birth registration in emergency contexts. It will also be engaged in advocacy activities relating to immigration related legislation changes.

**Department of Refugees:**

Under the Ministry of Home Affairs & Internal Security, the Department is responsible for management of refugee affairs in the country and coordination of the refugee programmes in collaboration with the United Nations of High Commission of Refugees (UNHCR). The Department will be closely involved in both the development of SOPs for birth registration in emergency contexts and coordination of activities to test these approaches in different locations across the country.

**Development Partners:**

**UNICEF**

UNICEF is an active member of the CRVS TWG and will share its experience and knowledge of birth registration programming in Malawi. Plan will look to extend the reach of the DBR programme through cooperation with UNICEF e.g. extending the reach of the COMBI campaign in additional UNICEF programme areas.

**UNDP**

UNDP is supporting the NRB by managing the implementation of a National ID programme in Malawi. A system is being developed and will register all citizens aged 0-16 in the year 2017. UNDP will be part of the DBR Programme Working Group and system design consultations to ensure that the system is developed in the context of NRB’s whole system architecture.
CDC

CDC have led the development of the eBRS system with BHT in Malawi and will be rolling the system out in its current form to all District Hospitals and District Registration Offices. All activities relating to system development of eBRS will be closely coordinated with CDC and a workplan will be developed to reflect key activities and dependencies between the two ongoing efforts.

Baobab Health Trust (BHT)

Baobab Health Trust have developed the eBRS system design and architecture on behalf of CDC. All activities relating to system development of eBRS will be closely coordinated with BHT.

Community of St. Egidio

The Community of Saint Egidio BRAVO programme supports the NRB to increase birth registration rates in the district of Balaka, Malawi. The BRAVO programme will support in the deployment of eBRS to health facilities in Balaka and have already had positive results through an intensive community sensitisation programme that is increasing awareness of the need to register births. Plan will work together with the BRAVO programme to learn from their experiences to date and also to extend the reach of the COMBI campaign to Balaka.

CSOs

CSOs will support programme implementation activities in each district.
Workplan

The workplan below provides a high-level plan of work for all programme activities by workstream. The programme’s 5 workstreams will run in parallel, with each Workstream Lead coordinating the delivery of its defined responsibilities. The DBR programme will run over the course of 3 years and will be divided into 3 project phases; preparation and development, deployment and continuous improvement and evaluation.

### Figure 10. High-Level Workplan

<table>
<thead>
<tr>
<th>START</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance</td>
<td>Project management and national level advocacy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process &amp; Technology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eBRs upgrade design, build and test</td>
<td>Field test</td>
<td>Deployment 1</td>
<td>Deployment 2</td>
</tr>
<tr>
<td>SOP redesign</td>
<td>modify</td>
<td>modify</td>
<td>modify</td>
</tr>
<tr>
<td>Infrastructure assessment</td>
<td>Health facility infrastructure upgrades</td>
<td>Solution support planning</td>
<td>Technical support and maintenance</td>
</tr>
<tr>
<td>Late Registration Drive Planning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ongoing late registration drive using mobile van</td>
<td>Test Late Reg Approach</td>
<td>Test Late Reg Approach</td>
<td>Test Late Reg Approach</td>
</tr>
<tr>
<td>Change Management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communications strategy developed</td>
<td>Strategic communications to support new processes/roles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training preparation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioural Impact</td>
<td>Behavioural Impact Assessment</td>
<td>Campaign Preparation</td>
<td>Behavioural Impact Campaign Implementation</td>
</tr>
<tr>
<td>Advocacy</td>
<td>Strategy on legal and policy reform</td>
<td>Advocacy for legislative and policy changes</td>
<td></td>
</tr>
<tr>
<td>Monitoring &amp; Evaluation</td>
<td>M&amp;E Design</td>
<td>System &amp; Field Based Monitoring</td>
<td>Evaluation</td>
</tr>
<tr>
<td></td>
<td>Baseline Report</td>
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<td></td>
</tr>
</tbody>
</table>

### Figure 11. DBR Programme Implementation Phases

**Preparation / Development**: The first phase will last approximately 12 months and include all activities prior to the deployment of the technology solution and use of the new registration processes. Across the workstreams this includes all strategy workshops and the design, build and test of solution components, communications and training materials. If activities are completed before the end of the year, deployment can commence earlier.
Late registration drives will commence as soon as an SOP is defined and agreed with NRB and the digital solution is made available in the mobile van. One alternative late registration drive approach will also be tested and evaluated in the first year; this approach can then be used by NRB and/or partners to run late registration drives in non-programme areas.

**Deployment:** This phase will last approximately 18 months and include the deployment of the DBR solution and process improvements, COMBI plan, and associated training to successively more health facilities. This gradual ramp up approach ensures that early deployments are tightly controlled and that ongoing monitoring and modifications activities can be effectively executed.

BRiE SOPs will also be developed and tested during this period, after the standard DBR process in health facilities has been well tested. Solution support planning will happen during this phase to ensure that in phase 3, the solution begins to be maintained by government actors who will maintain the system on an ongoing basis after the programme ends.

Deployment of the technology solution will be conducted in 3 waves to allow field testing of individual solution components on a small scale before introducing other components and ramping up. This allows actors and stakeholders involved in the process to learn and adjust to new ways of working, and allows immediate modifications to be made based on close monitoring of the solution’s effectiveness.

**Deployment Wave 1:**

- A small number of health facilities to send birth notifications in each district.
- Quality Assurance Agents begin to support and validate birth notifications at health facilities in their jurisdiction.
- Field-level monitoring conducted to get early user feedback and incorporate improvements into deployment wave 2.

**Deployment Wave 2:**

- Incorporates the lessons learnt from Deployment Wave 1.
- Increases the number of health facilities that are reporting births.
- Introduces the monitoring and reporting tool to local and national government.
- Provides access to birth records to authorised agencies.

**Deployment Wave 3:**

- Incorporates the lessons learnt from Deployment Wave 2.
- Further increases the number of health facilities to cover the whole district.
- Provides access to the vital statistics reporting dashboard.

**Evaluation:** The last phase commences once the DBR solution and process improvements, COMBI plan, and associated training have all been fully deployed to the programme target areas. Support to the programme is reduced to sustainable levels and the programme is evaluated against the target outcomes and goals.

Technical support and maintenance activities will be tested during this phase to ensure that the system is effectively owned and managed by government actors once the programme ends. Refresher training courses will also begin, led by the NRB and other government partners, to continue to build the skills of registration agents and all those involved in the continuous efforts to improve birth registration services in Malawi.
Programme Costs

<table>
<thead>
<tr>
<th>Line Item - Budget Description</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td><strong>General Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programme Governance</td>
<td>216,691</td>
<td>216,691</td>
<td>185,735</td>
<td>619,118</td>
</tr>
<tr>
<td>Travel</td>
<td>37,361</td>
<td>42,698</td>
<td>26,686</td>
<td>106,744</td>
</tr>
<tr>
<td><strong>Total General Costs</strong></td>
<td>254,052</td>
<td>259,389</td>
<td>212,421</td>
<td>725,862</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Workstream Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process &amp; Technology</td>
<td>204,949</td>
<td>307,424</td>
<td>170,791</td>
<td>683,164</td>
</tr>
<tr>
<td>Change Management</td>
<td>74,721</td>
<td>96,070</td>
<td>42,686</td>
<td>213,478</td>
</tr>
<tr>
<td>Advocacy</td>
<td>32,023</td>
<td>48,035</td>
<td>26,686</td>
<td>106,744</td>
</tr>
<tr>
<td>Behavioural Impact</td>
<td>76,856</td>
<td>115,284</td>
<td>64,047</td>
<td>256,187</td>
</tr>
<tr>
<td>Monitoring &amp; Evaluation</td>
<td>52,305</td>
<td>37,361</td>
<td>59,777</td>
<td>149,442</td>
</tr>
<tr>
<td><strong>Total Workstream Costs</strong></td>
<td>440,854</td>
<td>604,173</td>
<td>363,998</td>
<td>1,409,026</td>
</tr>
<tr>
<td><strong>Total Project Costs</strong></td>
<td>694,906</td>
<td>863,562</td>
<td>576,420</td>
<td>2,134,888</td>
</tr>
</tbody>
</table>

*Figure 12. Indicative Programme Costs*

The programme costs have been estimated based on the following assumption:

- Local Government human resource costs are not included
- Development costs are dependent on the findings from the system assessment
- An average 4 health facilities per district
- Costs to equip health facilities with device with internet access are included
- Includes the registration of newborns and those registered during late registration drives
- A programme office will be established in each district within the project scope

The above estimate relates to the implementation of the project described. Scale-up costs i.e. costs associated with implementing DBR in other areas and ongoing running costs will be calculated during the project in order to build the business case for widespread rollout.
Risks and Mitigations

Implementing the DBR programme does bring with it certain risks. Identified risks and associated mitigation actions are listed below. It should be noted that with the conclusion of deployment wave 1 a more comprehensive risk assessment and mitigation plan can be put in place before any efforts for scale-up.

<table>
<thead>
<tr>
<th>Risk</th>
<th>Mitigation</th>
</tr>
</thead>
</table>
| Inter-Ministry Coordination                                          | **National Level**  
  - DBR Working Group formed under the leadership of the CRVS Technical Working Group to coordinate and resolve issues between the two authorities.  
  **District Level**  
  - District level committees will be formed to coordinate all involved actors.  
  - Mobilise community groups to lobby for effective implementation of the programme. |
| Lack of coordination (both technical & administrative) between NRB and the Ministry of Health at both national and local levels | **Resistance to change and lack of motivation of registration actors (DRO and Health staff)**  
  - Implement relevant change management programme to sensitise and motivate all involved actors  
  - Potential provision of non-monetary incentives  
  - Link performance and rewards to results driven outcomes  
  - Ensure that additional responsibilities are formally included in job descriptions  
  - Issue clear directive from high-level authority of the importance and need for this programme |
| Notification & Data Collection                                       | **Data is recorded incorrectly, creating an erroneous record**  
  - Provision of thorough training programme to process actors to ensure required capacity and accountability.  
  - Mobile Quality Assurance Agent introduced to validate birth registration notifications at health facilities and propose locations where further training is required. |
| Health facility overwhelmed with additional responsibility and unable to register all newborns as required | **Health facility overwhelmed with additional responsibility and unable to register all newborns as required**  
  - Quality Assurance Agent closely monitors data quality received from health staff.  
  - Quality Assurance Agent builds trusting relationship with health staff to pass feedback to project to manage continuous improvement measures.  
  - System and field-based M&E activities to include close monitoring of workload of health staff.  
  - ADR/Quality Assurance Agent role able to evolve over time if health staff are unable to conduct tasks consistently and to a high standard over time. |
| Programme Sustainability                                            | **Capacity of NRB (both availability of FTE and ability) not sufficient to maintain the DBR solution in the long-term**  
  - Build technical capacity of NRB at all levels across the organization including provision of training on system administration and management; infrastructure management; SOPs; simple system troubleshooting for system users; basic computer training.  
  - Support and maintenance planning to begin in year 2 of the project to ensure that handover mechanisms and capacity is in place by the end of the project.  
  - Technical support contract maintained 1 year after the end of the project to ensure that the NRB and technical resources are supported for a 4 year period.  
  - Thorough capacity assessment completed at project |
<table>
<thead>
<tr>
<th>Data Management</th>
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</tr>
</thead>
</table>
| **Registration terminals are not maintained by health facilities in the long-term** | ▪ During the system design assessment, investigate opportunities to integrate with other health systems used on a daily basis to avoid the addition of further hardware that must be maintained.  
▪ During the system design assessment, test different hardware options to see which ones are most durable and require the least maintenance.  
▪ Train health facility staff how to correctly look after registration hardware.  
▪ Include regular maintenance of registration hardware in NRB and MoH SOPs for facility maintenance.  
▪ Advocate for appropriate budgetary allocation to support effective registration services. |
| **Increased chance of localized corruption due to decentralization of validation and certification functions** | ▪ Implement an anonymous corruption reporting mechanism for both staff and citizens to increase transparency.  
▪ Employ monitoring mechanisms e.g. beneficiary feedback and “mystery informants”  
▪ Encourage increased performance management mechanisms from NRB; share best practice performance management approaches used in similar contexts |
| **Metadata collected during notification/declaration is made available to third parties or unauthorized users** | ▪ Implement strict data transmission permissions  
▪ Advocate for comprehensive and robust data protection and privacy laws |
| **Data and databases are compromised during sharing of information** | ▪ Data exchange layer built to limit access to birth records  
▪ Access to vital statistics data through a reporting dashboard; access to raw information limited  
▪ Codify and enforce solid privacy regulations |
| **Shared data is commercialised or used irresponsibly by receiving parties.**  
**Children and caregivers have no control over how their data is used** | ▪ Access to aggregated vital statistics data only through a reporting dashboard; access to raw information limited  
▪ Conclude solid agreements with shared agencies and partners on ownership, use, licensing and sharing permissions  
▪ Advocate for comprehensive and robust data protection and privacy laws |

*Table 16. Risks & Mitigations*
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