

# iMISS – Integrated Malaria Information Storage System for Mozambique, Phase 1

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Request for Proposals

## Context and Project Overview

In 2016 a National Malaria Surveillance Assessment conducted with the National Malaria Control Program in Mozambique identified critical challenges with the existing malaria surveillance landscape including:

- Multiple sources of data with different indicators definitions
- No standardization in reporting tools and indicators
- Poor accessibility and integration of data
- No automated outputs

In light of these findings, the development of an integrated malaria system (iMISS – integrated Malaria Information Storage System) was included in the malaria program’s National Strategic Plan for 2017-2022.

The primary goal of the integrated malaria system is to enable all malaria staff across the health system hierarchy to monitor key indicators, assess the impact of interventions and provide evidence to plan and implement responses. In order to achieve this, data must be integrated across a multitude of thematic program areas including case surveillance, vector control, entomology, information education campaigns, commodities, supportive supervision, survey data, and data quality audits. Data from these thematic areas is currently extremely fragmented across systems and ad-hoc databases such as DHIS2, OpenLMIS, Microsoft Access and Microsoft Excel, creating barriers to both access and routine usage.

The iMISS project will result in the development, testing and implementation of a DHIS2-based entry and storage system for all malaria data. This will be achieved through:

- Establishment of a new 2.32 DHIS2 instance for malaria
- Development of new DHIS2-based data entry forms to serve in place of ad-hoc (e.g. Excel) systems
- Integration with other routine systems in place
- Import of historical data

## Scope of Work and Milestones

The larger iMISS project is broken into two distinct phases:

1. Phase 1: Development of data warehouse and rollout of new data entry forms for Priority 1 data streams
2. Phase 2: Development of data warehouse and rollout of new data entry forms for Priority 2 data streams

This RFP is for Phase 1 ONLY, which will include the below requirements. The complete User Requirements Document (URD) along with more detailed design specifications can be found at <https://github.com/sbabur/iMISS/wiki/iMISS-User-Requirements-Document>. Note that this document includes specifications for both Phase 1 and Phase 2, and **proposals should only be written against requirements explicitly indicated as being part of phase 1**. Furthermore, note that this is a living document and will be updated as new design details emerge. All requirements are

listed with their requirement ID, requirement title, Annex section reference (from the user requirements document), and due date.

Work Package 1A - DHIS2 Instance Setup			
ID	Title	Due Date	URD Annex
1.0	Set up DHIS2 instance for the iMISS data warehouse	31-Oct-19	
1.2	Import Organizational Unit Hierarchy from National Data Dictionary	31-Oct-19	
Work Package 1B- General Crosscutting Requirements			
ID	Title	Due Date	URD Annex
1.2.1	Import additional organization units not included in National Data Dictionary	29-Mar-20	
1.1	Creation of user roles, user groups and users	29-Mar-20	
1.3	Configure identical metadata as source systems for all data elements and forms to be pulled into iMISS	29-Mar-20	
1.4	Configure all form features according to specifications provided	29-Mar-20	
Work Package 2 - Case Surveillance Module			
ID	Title	Due Date	URD Annex
2.0	Integrate SIS-MA HMIS DHIS2 (2.32) instance with iMISS	31-Oct-19	
2.1	Make monthly calls to SIS-MA on the 16 <sup>th</sup> of each month for routine data retrieval	31-Oct-19	
2.2	Import metadata for all malaria related indicators from SIS-MA	31-Oct-19	
2.3	Set up monthly call for data from SIS-MA form <i>Ficha Resumo Mensal Das Atividades Da Malária (Manejo de Casos) Unidade Sanitária e Comunidade Mod-SIS-M01</i>	31-Oct-19	8.2.1
2.3.1	Import historical data from (Mod-SIS-M01) from SIS-MA HMIS	31-Oct-19	
2.4	Set up monthly call for data from SIS-MA form <i>D03 – Reporting form of inpatients cases at health facility level</i>	31-Oct-19	8.2.2
2.4.1	Import historical malaria data from <i>D03 – Reporting form of inpatients cases at health facility level</i> from SIS-MA	31-Oct-19	
2.5	Set up monthly call for data from SIS-MA form <i>D04 - Reporting form of inpatients cases</i>	31-Oct-19	8.2.3
2.5.1	Import historical malaria data from <i>D04 - Reporting form of inpatients cases at hospital level</i>	31-Oct-19	
2.6	Set up monthly call for data from SIS-MA form <i>Resumo Mensal da Unidade Sanitária – SMI – Consulta Pré –Natal (MOD-SIS-B01-B)</i>	31-Oct-19	8.2.4
2.6.1	Import historical malaria data from <i>Resumo Mensal da Unidade Sanitária – SMI – Consulta Pré –Natal (MOD-SIS-B01-B)</i>	31-Oct-19	
2.7	Set up monthly call for data from SIS-MA form <i>Boletim Epidemiologico Semanal (MOD SIS – CO3)</i>	31-Oct-19	8.2.5
2.7.1	Import historical malaria data from <i>Boletim Epidemiologico Semanal (MOD SIS – CO3)</i>	31-Oct-19	
Work Package 3 - Vector Control Module			
ID	Title	Due Date	URD Annex
4.0	Integrate SIS-MA Individual DHIS2 (2.29) instance with iMISS	10-Jan-20	
4.0.1	Make weekly calls to SIS-MA Individual instance for routine data retrieval	10-Jan-20	8.4.1
4.1	Configure IRS forms in both SIS-MA Individual DHIS2 instance and iMISS	10-Jan-20	
4.1.1	Import IRS Supervisor form into SIS-MA Individual DHIS2 instance + iMISS using WHO DHIS2 module metadata	10-Jan-20	8.4.2
4.1.2	Import historical IRS tracking data into SIS-MA Individual DHIS2 instance + iMISS	10-Jan-20	8.4.3

4.1.3	Import IRS Quality Verification form into SIS-MA Individual DHIS2 instance + iMISS using WHO DHIS2 module metadata	10-Jan-20	
4.2	Import LLIN Distribution Campaign form into SIS-MA Individual DHIS2 instance + iMISS using WHO DHIS2 module metadata	10-Jan-20	
4.2.1	Import historical LLIN distribution campaign form	10-Jan-20	
<b>Work Package 4 - Entomological Surveillance Module</b>			
ID	Title	Due Date	URD Annex
5.0	Integrate SIS-MA Individual DHIS2 (2.29) instance with iMISS	10-Jan-20	
5.0.1	Make weekly calls to SIS-MA Individual instance for routine entomological data retrieval	10-Jan-20	
5.1	Import <i>Larval Collection</i> form from into SIS-MA Individual DHIS2 instance + iMISS using WHO DHIS2 module metadata	10-Jan-20	8.5.1
5.1.1	Import historical larval collection data	10-Jan-20	
5.2	Import <i>Adult Collection</i> form into SIS-MA Individual DHIS2 instance + iMISS using WHO DHIS2 module metadata	10-Jan-20	8.5.2
5.2.1	Import historical adult collection data	10-Jan-20	
5.3	Import <i>Insecticide Resistance – Discriminating Concentration</i> form into SIS-MA Individual DHIS2 instance + iMISS using WHO DHIS2 module metadata	10-Jan-20	8.5.3
5.3.1	Import historical Insecticide Resistance – Discriminating Concentration data	10-Jan-20	
5.4	Import <i>Insecticide Resistance – Intensity Concentration</i> form into SIS-MA Individual DHIS2 instance + iMISS using WHO DHIS2 module metadata	10-Jan-20	8.5.4
5.4.1	Import historical Insecticide Resistance – Intensity Concentration data	10-Jan-20	
5.5	Import <i>Insecticide Resistance – Molecular and biochemical mechanism</i> form into SIS-MA Individual DHIS2 instance + iMISS using WHO DHIS2 module metadata	10-Jan-20	8.5.5
5.5.1	Import historical Insecticide Resistance – Molecular and biochemical mechanism data	10-Jan-20	
5.6	Import <i>Insecticide Resistance – Synergist-insecticide bioassay</i> form into SIS-MA Individual DHIS2 instance + iMISS using WHO DHIS2 module metadata	10-Jan-20	8.5.6
5.6.1	Import historical Insecticide Resistance – Synergist-insecticide bioassay data	10-Jan-20	
5.7	Import Entomology Program Indicators from WHO module metadata provided into SIS-MA Individual DHIS2 instance + iMISS	10-Jan-20	
5.8	Import sentinel sites as organizational units into SIS-MA Individual DHIS2 instance + iMISS	10-Jan-20	
<b>Work Package 5 - Data Quality Audit Module</b>			
ID	Title	Due Date	URD Annex
7.0	Configure Data Quality Audit form for health facility level	7-Feb-20	8.7.1
7.1	Configure Data Quality Audit form for community level	7-Feb-20	8.7.2
7.3	Configure Data Quality Audit form for district level	7-Feb-20	8.7.3
<b>Work Package 6 - Surveys Module</b>			
ID	Title	Due Date	URD Annex
9.0	Create Population Census data set within DHIS2	7-Feb-20	8.9.1
9.0.1	Import census population data from 2017 and projections through 2027	7-Feb-20	
9.2	Create Malaria Indicator Survey data set within DHIS2	7-Feb-20	8.9.3
9.2.1	Import Malaria Indicator Survey data from 2018	7-Feb-20	
<b>Work Package 7 - Feedback and Maintenance</b>			
N/A	Address prioritized user feedback for all modules	29-Mar-20	
N/A	Provide maintenance to the system for a period of 6 months following roll-out	30-Sep-20	

## RFP Process and Timelines

An overview of the RFP timelines is depicted in the below table. All proposals and questions should be submitted to [sbabur@clintonhealthaccess.org](mailto:sbabur@clintonhealthaccess.org) according to the listed deadlines.

RFP Step	Date
RFP Release Date	9-Sep-19
Deadline for questions	16-Sep-19
Proposals due	24-Sep-19
Vendor evaluations completed	27-Sep-19
Vendor notified of selection	30-Sep-19
Contracted reviewed and signed	4-Oct-19
Development start date	7-Oct-19

## Decision Criteria

Vendor proposals will be evaluated by a joint panel made up of Ministry of Health stakeholders and partners (National Malaria Control Program, Department of Information Systems, Clinton Health Access Initiative, WHO Mozambique and Malaria Consortium) according to the following primary criteria:

Criteria	Weight
DHIS2 expertise, including integration with other DHIS2 instances/external systems	25%
Project management approach	25%
Development and maintenance costs	15%
Experience working with governments, NGOs and WHO	5%
Sustainability of the system proposed, and experience with capacity building of users	10%
Familiarity with Mozambican health systems and experience working with the Mozambique Ministry of Health (MISAU)	10%
Native proficiency in Portuguese	10%

## Proposal Format

In order to be considered, vendors shall respond to the following points pertaining to their profile and qualifications:

### *Company Background*

- Describe your company's background and mission
- Describe representative projects your company has worked on involving DHIS2 setup and configuration
- Describe representative projects your company has worked on involving DHIS2 integrations, both with other DHIS2 instances and with other systems
- Provide a link to projects that are publicly available or test instances to the developed solutions
- Describe any prior experience your company has with health systems in Mozambique

### ***Team Overview***

- Describe the proposed iMISS team within your company
- Where is the team located?
- Does the team have any proficiency in Portuguese?

### ***Project Approach***

- Describe the approach to project management
- Outline the process for communicating progress and risks during development
- Outline the process for testing, iterating on, and finalizing features based on feedback from stakeholders

### ***Scope and Timelines***

- Please highlight any perceived risks with the proposed Phase 1 scope and timelines
- Describe other current information system projects that are ongoing within your company, and how you will ensure competing priorities will not present a risk to the deliverable timelines

### ***Budget***

- Please provide a cost and time breakdown for each work package

### ***Training and Capacity-Building***

- Describe your company's approach to providing training support and facilitation

### ***Maintenance and Support Plan***

- Describe the support structure your company offers, including any SLA's that would be needed

### ***References***

- Provide 3 references of current or recent work of similar scope with other clients. Include a brief description as well as the name, title and email address of a relevant contact person