

TRANSLATION

# Cross-Border Collaboration Initiative to Combat Malaria

## TRANS-KUNENE ANTI-MALARIA INITIATIVE

### Operational Plan

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**MINISTRY OF HEALTH  
REPUBLIC OF ANGOLA**

**AND**

**MINISTRY OF HEALTH AND SOCIAL SERVICES  
REPUBLIC OF NAMIBIA**

## INTRODUCTION

The TRANS-KUNENE cross-border collaboration was conceived to maximize the operating capacity in malaria control among the people living in the two frontier areas of Angola and Namibia by sharing experience, expertise and logistics. TKMI (the Trans-Cunene Malaria Control Initiative) has as its objectives: reduce malaria transmission and support efforts to eliminate malaria in this region. Therefore, it is necessary to establish an operating plan that will translate the strategies and priorities of TKMI into an effective and tangible reality on the ground.

TKMI will create a joint entity unit for planning and implementation that will adapt itself effectively to the health systems of the two Countries. The management structure is of cardinal importance for the success of this initiative.

This document details the various elements of the TKMI operating plan during the 16-month period of its first phase (Phase 1), extending from September 15, 2010 until December 30, 2011. TKMI will be implemented in two phases, the first of which is **DEVELOPING THE TKMI OPERATING MODEL AND IMPLEMENTING THE PILOT PROGRAM IN THE CUNENE AND OSHICANGO REGION** and the second that of **OPERATING EXPANSION OF TKMI TO THE NAMIBE AND CUANDOCUBANGO BORDER.**

After two years of operating in a limited part of the Trans-Kunene area, a rigorous evaluation will be carried out to measure the impact of the program and the value added by two-country collaboration. If the evaluation is positive, it will permit refinement of the initiative and its expansion to other regions/provinces inside TKMI. Phase 2 will involve expanding vector and disease monitoring and control to other regions in TKMI. The following table summarizes the differences between phases 1 and 2.

### **OBJECTIVE OF PHASE 1**

To increase operating and technical efficacy of malaria control activities in the five regions/provinces through cross-border collaboration on the malaria control programs of Angola and Namibia, for the purpose of attaining shared support for the control and elimination of malaria through:

- Reduction of malaria morbidity in Angola by 60% between 2007 and 2012; and
- Reducing the incidence of malaria in Namibia to fewer than 5 cases per 1,000 in 2015.

## **OBJECTIVES**

1. To carry out sustained management and build administrative capacity in the national malaria control programs by defining vector-control activities and improving product management. (Year 1).

The countries and regions of TKMI recognize that TKMI will require additional management and an administrative structure beyond what is available in the Ministries of Health and the national malaria control programs in Angola and Namibia. External management will be recruited and will be responsible for the management of funds, planning, coordination, and monitoring of the TKMI activities. The management structure will also receive technical support from a panel of experts, which will monitor policies and their execution. There will be joint management of the governmental and non-governmental partner teams, so that they will be efficient, transparent, and accountable. The initiative shall establish rigorous criteria for the selection of partners to participate in carrying out operations, probably an organization with a presence in the region, and experience in operations management, and financial management capability. (*See section on management below.*)

In principle, it will be necessary to establish legal and diplomatic bases to facilitate the movement of personnel and equipment across the Namibia/Angola border. The success of the Trans-Kunene initiative depends on legal and diplomatic agreements between Angola and Namibia to facilitate the movement of goods, equipment, products, vehicles and health sector technicians across the border. With the backing of the relevant Governmental entities, the initiative shall seek the issuance of special passes for the whole course of TKMI—relating to

migratory and customs movements. Various agencies of the Governments shall be involved in order to establish similar agreements; these shall include customs, immigration departments, drug regulatory authorities, and the central regulators of importation of medical goods and medicines.

2. Use operating research methods in order to apply experience and results from efficacious projects and models that strengthen cross-border programs (Years 1 and 2)

As an innovative model, cross-border cooperation will depend on operating research to develop and strengthen mechanisms for collaboration. The pilot project to test the operational aspects of collaborations on a smaller scale (for example, including IRS<sup>1</sup> and LLIN<sup>2</sup> distribution in the regular reports of the border regions/provinces) are to be carried out, together with activities designed to prevent the reintroduction of malaria cases after zero malaria transmission is achieved.

Relatively little is known about the characteristics and the intensity of malaria transmission in the TKMI regions. When Angola and Namibia carry out evaluations of malaria indicators to establish prevalence, the trends in malaria transmission and the risks of transmission will be known in spacial terms (foci of malaria transmission) and temporal terms (changes in intensity of malaria transmission over time). The lack of detailed understanding of the limits of malaria transmission prejudices projections of objectives. In principle, the baseline epidemiological data collected in the five regions/provinces show a tendency of malaria transmission in all of them. Present estimates of levels of the disease are based largely on reporting systems that are not very reliable (because of the lack of precision in the reports based on clinical diagnoses, which are incomplete and late); the tests of reduced prevalence (tests in children under five) may help in the preparation of estimates of malaria transmission risks in the Trans-Kunene areas. Starting with this baseline, continuous evaluation will be carried to monitor the impact of collaboration and redefine activities.

It is also necessary to understand better the dynamics and the impacts of movements of people into Namibia and the risk of reintroduction of the disease after transmission levels

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<sup>1</sup> Translator's note: Indoor residual spraying.

<sup>2</sup> Translator's note: Long lasting insecticide-treated nets.

have been reduced to near-zero levels. Human migratory movement is greater than the movement of vectors, and therein lies the risk of importation of the disease through movements of humans. Once the risk of importation of the disease by Namibia is minimized, vulnerability will be a function of cross-border movement and of the level of endemicity in Angola, where the visitors come from. The burden of imported malaria on the national health service of Namibia will be estimated based on simple observation (exit interviews at the healthcare units) that will determine the number of positive malaria cases in Namibia's healthcare units which attend people coming from the other side of the border. The added load on the Namibian healthcare system because of the arrival of these patients, who seek diagnosis and treatment in Namibia, will be estimated through exit interviews at the healthcare units, to determine the proportion of malaria-positive patients from Angola who are treated in Namibia.

Finally, a program should be planned for efficacious research and monitoring of vectors and disease parasites at the border level (specific to the border region, in addition to what is being undertaken by the national programs).

3. Develop systems and supply and logistical chains to increase the coverage and effectiveness of malaria control activities (years 1 and 2).

Transportation facilities in Namibia (roads, ports, etc.), with the involvement of Angola and its malaria control partners, will result in the main cost and operating efficiencies for Angola (and possibly for Namibia, where operational synergies may arise from the existing common systems).

As a test of this innovative principle, Phase1 will consist mainly of pilot studies of concepts of how to use Namibia's basic infrastructure as support for services in the Trans-Kunene region, and particularly the south of Angola, which bore the main brunt of the intermittent political and military instability in Angola. The American Presidential Malaria Initiative (PMI) plans to conduct wide scale spraying activities in Angola, including the urban areas of Cunene. PMI intends to use the facilities of TKMI to offer services in the south of Angola, such as insecticides and other products, presenting the possibility of creating partnerships with Namibian and Angolan officials to use the established agreements and facilities of

TKMI. This collaboration is an opportunity to test, prove and refine the proposed model, which, if successful, will be expanded in future activities.

4. Share experience and carry out common vector-control activities to maximize the quality and the operational coverage of indoor residual spraying and to increase the coverage of use of mosquito nets (years 1 and 2).

*i. indoor residual spraying*

Namibia has carried out an indoor residual spraying program for more than 30 years and will coordinate with Angola in planning and monitoring for a synchronized spraying campaign. There will be advantages in carrying out common training of supervisors, since similar techniques will be used and applied to ecological adjustments and in households.

It is hoped that the Angolan provinces will learn best practices from Namibia's complex logistical exercise, and from the use of logistical facilities in Namibia for the transport and distribution of goods. (Given the proximity of the five regions, and their ecological and ethnological profiles, synchronized spraying operations are indicated; there would be no value in achieving high levels of coverage on one side of the border while the other side is not also achieving high coverage. Malaria transmission would increase in the low-coverage area, and reduce the effect of high coverage through importation and transmission of malaria cases.

The proposed initiatives also indicate an expansion of resources obtained for the region. Angola and Namibia have significant national commitments in terms of resources from the Global Fund, to increase indoor residual spraying coverage, and the distribution of LLINs in the region. A Global Fund proposal for Namibia was recently approved, aimed at protecting at least 90% of the at-risk population with indoor residual spraying, thus significantly increasing the existing coverage.

From this point, vector control activities will involve the following activities:

- Common recognition and geographic quantification of the indoor residual spraying requirements, based on common criteria for universal coverage in malaria

transmission areas; determine the necessary logistics, insecticide warehousing and distribution facilities, for supervision, and with respect to environmental preservation for the indoor residual spraying program in the five regions.

- An operating plan for indoor residual spraying in the five regions shall be developed, to ensure that the products are delivered and stored in facilities that are accessible to all the Angola and Namibian districts; this will probably require storage in the north of Namibia for onward distribution in accordance with the needs as projected.

*ii. Mosquito nets treated with long-lasting insecticide*

Both countries intent to achieve universal coverage of LLINs, that is, distribution of LLINs to the entire population, including pregnant women, traditional thought to be the most at risk. Indoor residual spraying is costly, and it should be accompanied with acquisition and distribution of mosquito nets and joint campaigns to change behavior in relation to the use of LLINs.

*iii. Joint IRS/LLIN Campaign*

A pilot project will be undertaken in one Angolan province and one Namibian region, to test the concept of massive door-to-door distribution of LLINs, together with IRS activities. If door-to-door visits are made to all households in a malaria area in order to spray, it would be very good to distribute LLINs simultaneously. The individual IRS and LLIN campaigns should involve quite specific logistical planning, combining the two interventions, and thus maximizing the yields from the resources and the results. Messages about behavior change should be standardized and translated into the common languages whenever possible, because of the common social and cultural characteristics along the border.

As noted, Angola has as a strategic goal distributing LLINs to cover at least 80% of the pregnant women and children under five years of age. The initiative will support the coordination of activities on both sides of the border in order to maximize the impact from the use of available resources. There will be no mosquito net acquisition in this proposal, since the stocks of the countries planned for the target provinces and the respective budgets are to be used, thus putting to work the distribution networks structured for TKMI.

#### *iv. Larvicides*

An operating plan for larvicide shall be developed, once the potential breeding grounds (stagnant water) have been identified. Angola has received technical support from international partners for larvicide and will support Namibia in reinforcing its larvicide activities in the areas that are selected (to contain malaria transmission, including limiting breeding potential, in the TKMI areas).

5. Detection and Control of Malaria Epidemics through strengthening the monitoring system; rapid detection of 100% of the epidemic manifestations , which are to be brought under control in 2 weeks (year 2).

All five regions/provinces will share data weekly on malaria cases that occur, through monitoring indicators previously agreed to. The purpose of this goal is to accelerate response to epidemics on both sides of the border, and to potential epidemic outbreaks in the five common regions/provinces. At quarterly meetings at the border, the monitoring and evaluation officials shall agree on the periodicity and format of the reports and sharing of data. The information system for communications and the sending of reports (by land, telephone, and other means to obtain data from the healthcare units) has been a limiting factor in the reception of timely and complete information; reporting by mobile telephones and radio transmission will be monitored to evaluate their impact on reporting.

### **MANAGEMENT**

The existence of a strong management unit is important for the success of the partnership and its operational capability. The cross-border collaboration will be coordinated by an independent management unit, under the technical direction of a regional malaria control commission, which will lend support to other national programs as regards financial and administrative management of operations. The Regional Commission for the Control of Malaria (RCCM) will define the policies and manage the technical aspects of the initiative; this is the field of governmental representatives and technical experts. The management unit shall be an independent institution, responsible for raising resources and directing operations; the management unit shall report to the Regional Commission for the Control of Malaria.



Moreover, community-based organizations shall be selected to assist with the execution of activities such as door-to-door distribution of ITNs.

This management unit shall be established in such a way that it can support the regions with:

- Coordination of all operational aspects, development of annual work plans jointly with the districts/municipalities and community social strata
- Undertake the financial monitoring and efficient disbursement off duns, in accordance with the agreed work plans and budgets, as well as transparent reporting
- Advocacy for fundraising
- Support the monitoring and evaluation (tools and reporting rules) to be carried out at the level of the districts and community-based organizations
- Prepare quarterly reports (financial and program) on behalf of the partners

The financial management team shall be required to be established in Oshakati, in the north of Namibia, and the operations shall be based there.<sup>3</sup> Experience in managing and supervising large projects (operational, administrative, financial) will be necessary for this function. The Trans-Kunene initiative will use all efforts to create working capacity at the subregional/provincial level. It is expected that activities such as IRS will be undertake through the regional/provincial health programs and the national malaria control programs; the management unit will complement these efforts by taking charge of management and logistics.

The management structure will take into account the LSDI model,<sup>4</sup> in which the Medical Research Council in South Africa acted as the receiver of funds and general coordinator. Management will be carried out by a small team of employees who will dedicate themselves to the management of administrative documents and be responsible for receiving and administering fund in the name of the initiative. This team will not be responsible for supervising execution in the field, but it will support those activities with those of secretariat, planning, financial management, evaluation and sustainability of research. The management unit will propose an

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<sup>3</sup> Translator's note: In order to be in agreement with the Implementation Strategy, perhaps this passage should read: "The financial management team shall be established in Ondjiva, in the south of Angola, and the operations shall be based there. The logistical center shall be in Oshakati, which shall be the center for all logistical support."

<sup>4</sup> Translator's Note: Lubombo Spatial Development Initiative (LSDI).

independent non-governmental organization to reduce bureaucratic obstacles and to expedite the release of funds as necessary.

## 1. PARTNERSHIPS

The national malaria control programs of Angola and Namibia recognize the role that partnerships with non-governmental entities will play in the success of this collaborative program. Various collaborators, the national verification programs, and technical and operational forces from various entities will be brought in. The following partners are suggested for collaboration and discussion.

- *Nets for Life*, is a community organization with developed efforts in community mobilization for the use of insecticide-treated nets in Angola and in Namibia. Working through an extensive network of Anglican churches, the organization uses a system of door-to-door mobilization for households, together with monitoring of the use of preventive measures. Its presence in the north of Namibia and the south of Angola is what makes Nets for Life a prospective partner in community mobilization, door-to-door distribution, monitoring and evaluation of TKMI on both sides of the border.
- *Presidential Initiative for Malaria Control (USAID)* is a partner of the Angolan NMCP<sup>5</sup> and has supported IRS activities on the south of Angola. In 2010, this organization, together with RTI<sup>6</sup> – will carry out spraying activities in the province of Cunene, Angola. TKMI and the PMI will work together in planning and carrying out spraying activities to avoid duplication of effort and to look for synergies through shared systems of transport and logistics. For PMI, which will import large quantities of products for use in Angola, the proposed logistical and transport channels through Namibia should drastically reduce PMI's costs.
- *The Malaria Atlas Project—Kenya* was a key partner in the management of LSDI, which stands out as the model of cross-border malaria collaboration in the region. Bringing the LSDI experience for the benefit of TKMI will be key to the success of the initiative.

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<sup>5</sup> Translator's note: National Malaria Control Program.

<sup>6</sup> Translator's note: RTI International, a research institute.

- ***The Malaria Research Programme—South Africa*** is a key partner in managing LSDI, which has been the outstanding model for cross-border malaria cooperation in the region. Bringing LSDI experience to benefit TKMI will be key to the success of the initiative.
- ***The World Health Organization*** is a key partner of both the NMCPs. The investigation of binomial and vector susceptibility tests to evaluate impact will be supported by WHO in the country and by regional teams. Will provide technical support for monitoring and evaluation.
- ***The Clinton Health Access Initiative*** will supply management support in the initial phases of the initiative, bring together partners and supporting the NMCPs in mobilizing funds for the initiative.<sup>7</sup>
- **UNICEF**. Will supply technical support in terms of acquisition and distribution of nets.<sup>8</sup>

## 2. TIME PERIODS

The first phase of the project is a pilot project for the operating aspects of the collaboration, planned for the end of the first quarter of 2010 to the end of 2011. It is hoped that the initiative will continue to cooperate beyond this period, but an evaluation and adjustments will be undertaken during this phase 1. A detailed timetable will be found in the Annex.

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<sup>7</sup> Translator's note: The Implementation Strategy refers to this project manager as the Southern Africa Malaria Program.

<sup>8</sup> Translator's note: UNICEF's participation is not mentioned in the Implementation Strategy.



		-Operating Plan -Work Plan																
		Pre-launch technical meeting in Oshakati	NMCP-Namibia	Clinton F. Anglican Church	X													
2		Preparation of other complementary documentation and approval in the Ministries of the interior/customs and tax departments for free circulation of products, vehicles, and healthcare workers	NMCP (Angola and Namibia)	Ministries of the interior/customs and tax		X												
3	Installation of the TKMI technical operating units	Finding and building out space for offices within the healthcare	NMCPs – Angola and Namibia	Regional health departments		X												

		units in Ondjiva (TKMI services) and Oshakati (Warehouse)															
		TKMI launch	MoH, NMCPs – Angola and Namibia	Regionla health departments  Partners			<b>X</b>										With attendance of the ministers of both countries
		Drafting of the Management Plan for TKMI	NMCP-Angola	NMCP-Namibia  Anglican Church  Regional health departments			<b>X</b>										
		Recruiting and training of technical, support, and materials purchasing personnel for the operations of	NMCPs – Angola and Namibia	Regional health departments			<b>X</b>										

		each unit																
		Create and place in office the regional malaria control committee (provincial committees) in Ondjiva	NMCPs – Angola and Namibia	Regional governments of the Kunene and Oshakati, DPS, MININT.		X												
		Establish the TKMI committee between Angola and Namibia	NMCPs – Angola and Namibia	Partners		X												
4	Conduct baseline operational research and evaluation of the indicators that have been established (CAP and importation study) research	Establish protocols for baseline studies and for importation of malaria cases	Regional Malaria Control Commission	WHO, Medical Research Council-Durban, SAMEST, NMCP		X												

		Entomologic and vector research, vector conduct susceptibility tests, bio-tests at various points in the TKMI region to support ongoing impact evaluation	NMCP-Angola	WHO-Angola, Medical Research Council-Durban, SAMEST, NMCP					X								
		Impact evaluation study	NMCP-Angola	WHO, Medical Research Council-Durban, SAMEST, NMCP											X		
		Presentation and publication of research results at the end of Year 1 and Year 2	Regional Cross-Border Committee	WHO, Medical Research Council-Durban, SAMEST, NMCP											X		
5	Obtain logistics (materials and products) for	Draft plan of materials and product	NMCP-Namibia	Op. Office in Ondjiva,		X											



		needs, procuring and acquisition for the TKMI region		NMCP-Angola													
	malaria control	Rental of warehouse infrastructure (Oshakati) and transport equipment; decide on routes and on supply program for the TKMI region	NMCP-Namibia	Op. Office in Ondjiva, NMCP-Angola		X											
		Importation of products	NMCP-Namibia	Op. Office in Ondjiva, NMCP-Angola		X	X	X	X	X	X	X	X				
		Begin transport of products across the border into the south of Angola [of the station]	NMCP-Namibia	Op. Office in Ondjiva, NMCP-Angola Customs Services			X	X	X	X	X	X	X				

6	Carry out vector control	Share experience of Phase 1, carry out joint vector control and mapping in the distribution areas	NMCP-Namibia-Angola	PMI, SAMEST, WHO, MRC-Durban  Anglican Church,		X	X	X	X	X	X	X	X	X				
		Develop protocol for IRS and LLIN campaigns (possibly joint campaigns)	NMCP (Angola, Namibia)	PMI, SAMEST, WHO, MRC-Durban  Anglican Church,		X	X											
		Training of supervisors in IRS and LLIN distribution methods	NMCP (Angola, Namibia), Partners	WHO, UNICEF			X	X										
		Training of workers for IRS and net distribution	Regional Health Directorates of Ondjiva and Oshakati	Parceiros			X	X										
		IRS and LLIN	Regional Health	Parceiros														

		distribution start-up	Directorates of Ondjiva and Oshakati					X	X	X	X	X	X					
		Evaluate impact of coverage with IRS and net distribution	NMCP-Namibia-Angola	PMI, SAMEST, WHO, MRC-Durban Anglican Church,														
Strengthen systems for monitoring, information and early detection evaluation		Establish communication system between the operating units in Ondangua e Ondjiva	Regional Health Directorates of Ondjiva and Oshakati	NMCP (Angola, Namibia),			X											
		Create and establish common database between the operating units	Regional Health Directorates of Ondjiva and Oshakati	NMCP (Angola, Namibia),			X											
		Joint technical surveillance to combat importation	Regional Health Directorates of Ondjiva and	Parceiros			X			X			X			X		

		of malaria cases and operational evaluation	Oshakati														
		Joint supervision at the country coordinator level	NMCP (Angola, Namibia), Partners	WHO, PMI, UNICEF				<b>X</b>						<b>X</b>			
9		Preparation of final report on Phase 1 of TKMI	NMCP (Angola, Namibia), Partners	WHO, PMI, UNICEF											<b>X</b>	<b>X</b>	Report to be sent to donors

Table 4. Phase1 of the project is a pilot phase with expansion in Phase 2 and thereafter

	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Anticipated Results</b>
Development of collaboration structure	Diplomatic arrangements & logistical systems in place to facilitate operations support for Angola via Namibia	Continue to leverage logistics and transport infrastructure to support Angolan operations		Additional, smaller scale prevalence studies to determine epidemiological impact as malaria transmission approaches zero. Serological prevalence studies establish interruption	Reduction of importation and eradication of malaria in the region  Establishment of a mechanism to control the incidence of new malaria cases in the region  TKMI becomes a model for
Surveillance and containment systems	Establishment of surveillance systems through information sharing and improvement of communications infrastructure for reporting and cell phone reporting piloted in two districts in each Country	Reporting and surveillance system expanded through sharing of information and expansion along the border to the east and to the coast (west)	Reporting and surveillance system expanded through use of cell phones; data base for sharing information	Use of GIS system for better evaluation of the program and its epidemiological impact	collaboration, and east Zambia and Zimbabwe.  Collaboration model used in other countries  .

Vector control	Joint IRS/LLIN distribution piloted in two neighboring districts	Joint IRS/LLIN distribution piloted in two neighboring districts	IRS/LLIN distribution expanded within TKMI, in accordance with pilot findings	Joint distribution of ITNs and IRS, beyond the two regions, in accordance with pilot findings	
Operational research	Prevalence studies to understand burden of disease and origin of malaria cases; health facility surveys to determine burden of imported cases	Impact of collaboration evaluated and model refined for expansion in Years 3 and 4			