

# **TASK ORDER 3 (MALARIA)**

### **FY2008 ANNUAL REPORT**





#### **NOVEMBER 2008**

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#### **USAID | DELIVER PROJECT, Task Order 3**

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#### **Abstract**

This annual report documents the activities of Task Order 3 (Malaria) during FY2008 (October 1, 2007–September 31, 2008). Key sections highlight the major activities under each objective, the accomplishments, the implementation issues and proposed solutions, and the key performance objectives for the next reporting period.

Cover photo: Meba Kagone, a technical advisor from the USAID | DELIVER PROJECT, coordinates door-to-door bed net distribution in Liberia. 2008. Photographer is Polina Flahive.

#### **USAID | DELIVER PROJECT**

John Snow, Inc. 1616 Fort Myer Drive, 11th Floor Arlington, VA 22209 USA Phone: 703-528-7474

Fax: 703-528-7480 E-mail: askdeliver@jsi.com Internet: deliver.jsi.com

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### **ACRONYMS**

ACT artemisinin-based combination therapy

ADDO accredited drug dispensing outlet

AMFm affordable medicines facility for malaria

AL artemether-lumefantrine

AS+AQ artesunate+amodiaquine

BCC behavior change communication

CHW community health worker

CMS Central Medical Store

CPIR Commodity Procurement Information Request

CTO Cognizant Technical Officer

EDI Electronic Data Interchange

EoI expressions of interest

EQA external quality assurance

ERP Enterprise Resource Planning

EWS Early Warning System

FIND Foundation for Innovative Diagnostics

FY fiscal year

GFATM Global Fund to Fight AIDS, Tuberculosis and Malaria

GHS Ghana Health Service

GMP good manufacturing practices

HWG Harmonization Working Group

IEC information, education, and communication

ILS integrated logistics system

IPTp intermittent preventive treatment (of malaria) in pregnancy

IQC Indefinite Quantity Contract

JSI John Snow, Inc.

LMIS logistics management information system

LN long-lasting insecticide-treated bed nets

LSAT Logistics System Assessment Tool

MIS management information system

MOH Ministry of Health

MOHSW Ministry of Health and Social Welfare

MOP Malaria Operational Plan

MOU Memorandum of Understanding

NDS National Drug System

NGO nongovernmental organization

NMCC National Malaria Control Center

NMCP National Malaria Control Program

PIB Procurement Information Bulletin

PLWHA Persons Living with HIV/AIDS

PMI President's Malaria Initiative

PMP Project Performance Monitoring and Evaluation Plan

PPMR Procurement Planning and Monitoring Report

PPMRm Procurement Planning and Monitoring Report for malaria

PSM Procurement and Supply Chain Management

PSMWG Procurement and Supply Chain Management Working Group

PTF Pharmacy Task Force

QA quality assurance

QASP Quality Assurance Surveillance Plan

RBM Roll Back Malaria (project)

RDT rapid diagnostic test

RIRV Requisition Issue Receipt Voucher

RLO regional logistics officer (if a proper noun, set in uppercase)

SDP service delivery point

SOP standard operating procedure

SP sulfadoxine-pyrimethamine

SPS Strengthening Pharmaceutical Supplies

STTA short-term technical assistance

TO3 Task Order 3 (Malaria)

TOT training of trainers

UNHCR United Nations High Commissioner for Refugees

WHO World Health Organization

WHOPES World Health Organization Pesticides Evaluation Scheme

### **EXECUTIVE SUMMARY**

This document presents Task Order Malaria's (TO3) Annual Report for the Fiscal Year 2008 (FY2008). Task Order 3, part of the USAID | DELIVER PROJECT Indefinite Quantity Contract (IQC), procures and delivers malaria commodities to the USAID missions that support malaria control efforts in sub-Saharan Africa countries. The President's Malaria Initiative (PMI) supports most of these countries; PMI shares the goal of USAID to cut in half the number of deaths from malaria, over five years, in 15 African countries, by providing long-lasting insecticide-treated bed nets (LNs); artemisinin-based combination therapy (ACTs); and rapid diagnostic tests (RDTs) for malaria, laboratory supplies, and drugs for intermittent preventive treatment of malaria during pregnancy (IPTp). PMI's goal is, in collaboration with national and international partners, to achieve 85 percent coverage with all interventions.

The task order has three main objectives, under which all its activities are organized: (1) improve and expand USAID's provision of malaria commodities to country programs, (2) strengthen in-country supply systems and their capacity for managing malaria commodities, and (3) improve global supply and the availability of malaria commodities. The level of effort varies across the objectives: 50–60 percent for Objective 1, 30–40 percent for Objective 2, and 5–7 percent for Objective 3. Activities described in this report originate from TO3's FY2008 workplan, including a number of emergency and out-of-workplan requests. TO3 successfully completed all activities under the FY2008 workplan.

**Objective 1.** The task order updated the lists of pre-qualified suppliers of LNs, ACTs, and RDTs. After reviewing the country Malaria Operational Plans (MOPs), we added several additional commodities to our procurement lists—drugs for severe malaria, drugs for management of uncomplicated malaria (other than arthemeter-lumefantrine), and drugs for IPTp. In several cases, the quality assurance (QA) team certified the manufacturing suppliers. The team successfully updated the commodity procurement information request (CPIR) form, which is used to certify procurement needs. We also prepared a country-specific matrix on procurement-related information for each PMI country. The matrix includes updated facts about shipping and import procedures and other issues that affect TO3's procurement and logistics work.

The project received procurement requests from 14 PMI countries, for a total of approximately U.S.\$35 million<sup>1</sup>. Close to 49 percent of the total was used to procure ACTs, 45 percent to procure LNs, 5 percent to procure RDTs, and the remainder to procure laboratory supplies and IPTp drugs. Malawi and Angola were the largest consumers of ACTs; Benin, Nigeria, Rwanda, and Senegal procured mainly LNs. During the 2008 fiscal year, approximately 18.5 million doses of antimalarial pharmaceuticals, 3.6 million LNs, and 1.8 million RDTs were shipped to countries. This represents a seven-fold increase compared to procurement in 2007.

The project's management information system (MIS) updated its core systems related to tracking shipment data. The MIS's main component, ORION, was deployed and updated during the year, from version 1 to version 3.1. As part of the MIS, a website and reporting system were also

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<sup>&</sup>lt;sup>1</sup> In this document, all dollar amounts are in U.S. dollars.

deployed. Although the MIS is now fully operational, the information technology team is still debugging the system to ensure that users have the most up-to-date data and reports.

The project's QA partner, Family Health International (FHI), established and continuously updated standard operating procedures (SOPs) for testing and monitoring the quality of PMI-procured commodities. TO3 physically inspected and chemically tested samples of LNs from 100 percent of the TO3 procurements. Similarly, all RDT procurements were tested post-shipment and found to be in compliance with WHO guidelines. The QA team has reduced the waiting time for testing results of artesunate+amodiaquine (AS+AQ) and sulfadoxine-pyrimethamine (SP) from approximately six weeks to seven days. To date, we have not received any product-quality complaints from any country.

**Objective 2.** The project continued to provide technical assistance (TA) to PMI countries on a variety of supply chain management concerns. TO3 has a long-term presence and also provides unscheduled TA in eight countries: Ghana, Liberia, Madagascar, Malawi, Mozambique, Rwanda, Tanzania, and Zambia. Additionally, TO3 provided short-term technical assistance (STTA) to several non-presence countries.

Highlights from the TA include examples from—

Ghana: The team provided TA to National Malaria Control Program (NMCP) to strengthen their management and monitoring of LN distribution to ensure that an overall picture of met and unmet need would be available; this enables the partners to coordinate the planning and direction of future activities. As part of this assistance, the team identified the challenges and parameters for developing a database to track the number of LNs distributed through six different channels and to strengthen the NMCP links to the institutional sales of LNs.

*Liberia:* For the PMI launch, the team oversaw the delivery and distribution of 170,440 LNs in three counties—reaching almost 100 percent coverage of households in the target counties.

*Malawi:* The project procured and delivered 6,403,431 treatments of ACTs, which are currently being distributed to approximately 560 service delivery points (SDPs) in three regions. Using the logistics management information system (LMIS), the project prepares a monthly summary report of ACT consumption and months of stock available at all levels of the health system.

Tanzania: The project worked with the NMCP to design a monitoring and supervision tool that has been used in 16 out of 21 regions to produce aggregated data from 180 facilities for each of the artemether-lumefantrine (AL) weight bands, as well as data for other antimalarial treatments (SP and quinine). This tool is now being used to regularly monitor stock status.

During FY2008, we continued to develop several training materials and tools to improve the local capacity to manage malaria commodities.

To provide more malaria-specific training materials for the "Overview of Supply Chain Management and Quantification and Procurement Planning" course, the project has added materials and curricula with malaria content; participants came from thirteen countries to attend our 2008 regional course in Africa. We complete a quantification and procurement guideline for ACTs; it is being revised with feedback from PMI.

Because one of PMI's priorities is to verify that malaria commodities are reaching the intended users, the project, PMI, and the Strengthening Pharmaceutical Supplies (SPS) project have developed an end-use verification guidance for PMI countries. The guide is being modified based on feedback from PMI; it will be tested in one country during the first half of FY2009. Finally, to

further ensure that stockouts are detected early and there is no waste due to expiry, the project has adapted its Procurement Planning and Monitoring Report to focus on malaria commodities (PPMRm). TO3 and SPS country offices provide the data; we will issue quarterly reports.

Objective 3. The project continued to work at the global level on a variety of policy discussions and activities designed to improve the supply and use of malaria commodities. We participated in the Roll Back Malaria—sponsored Supply Chain Management Working Group and also support several activities in the group's workplan. We participated in discussions to establish global RDT testing sites and were instrumental in securing funding to support WHO's continued testing of RDTs. At several brown bags, organized at the project's headquarters, we disseminated state-of-the-art information on malaria commodities. The project has taken a leadership role in initiating the discussion on how to manage waste produced by RDTs and LNs.

**Performance monitoring.** We submitted to USAID, on time, close to 100 percent of the deliverables identified in the FY2008 workplan. Additionally, we put a Performance Monitoring Plan (PMP) in place to further monitor the project's performance. The PMP, an indicator-based methodology, requires regular reports on several key project tasks. The project and PMI extensively discussed, defined, and agreed to the PMP indicators.

Implementation issues and solutions. During FY2008, TO3 had several important staffing changes. The Project Director retired and was replaced by the USAID | DELIVER PROJECT Director of Country Operations. A technical director was hired, but will leave at the end of November; the project is searching for his replacement. Quantification and forecasting issues continue to be problematic, as there is little experience with the current mix of malaria commodities and their implementation at the national level. We are developing tools to increase the accuracy of quantification and forecasting. Leakage of ACTs was a serious problem in one country, but the project took remedial action immediately and plans were put in place to reduce any future problems. Several emergency requests caused disruptions in our procurement and logistics plans. Fortunately, because we have excellent relationships with our manufacturers, we were able to honor all requests. The MIS was fully deployed during this fiscal year, but a few maintenance and issues still need to be resolved.

**Summary.** The project had a very successful FY2008; we are especially proud of our contribution to the PMI goals and objectives. We completed all activities in the FY2008 workplan; several others, not in the original workplan, were also implemented without problems. The team honored all procurement requests; most countries received their malaria commodities on time. We developed/enhanced several procurement tools to improve responsiveness to procurement requests. The team provided TA and unscheduled TA on logistics and chain management, trained local personnel, and developed malaria-specific tools for enhancing quantification and forecasting. Globally, we continued to engage partners and have remained a leading voice in procurement and supply chain management.

### INTRODUCTION

This document, the Task Order 3 (Malaria) Annual Report for Fiscal Year 2008 (FY2008), presents the actions, achievements, and challenges that the project undertook from October 1, 2007, through September 30, 2008. TO3's activities began in April 2007; therefore, this report presents its first full year of activities.

The report is organized by TO3's three main objectives: (1) improve and expand USAID's provision of malaria commodities to country programs, (2) strengthen in-country supply systems and the capacity to manage malaria commodities, and (3) improve global supply and the availability of malaria commodities. Under each objective, we report on tasks and activities that are based on TO3's approved FY2008 workplan (see TO3 Workplan 2008). Several activities in this report were not in the original FY2008 workplan, but, instead, represent project responses to unexpected requests from the President's Malaria Initiative (PMI) Cognizant Technical Officers (CTO), or requests from PMI countries.

In addition to activities under the three objectives, we also report on cross-cutting activities, including performance monitoring, key accomplishments, implementation issues and solutions, and planned performance objectives.

## **DESCRIPTION OF ACTIVITIES**

# OBJECTIVE I: IMPROVE AND EXPAND USAID'S PROVISION OF MALARIA COMMODITIES TO COUNTRY PROGRAMS

Under Objective 1, we report on three main areas of activities from TO3's FY2008 workplan: (1) procurement and delivery, (2) management information system, and (3) quality assurance.

#### PROCUREMENT AND DELIVERY

Under procurement and delivery, we describe several areas in the project's FY2008 workplan: (1) establish and update the list of pre-qualified suppliers for malaria commodities, (2) review and refine procurement systems and procedures, (3) improve the Commodity Procurement Information Request Forms (CPIR), (4) develop product fact sheets, (5) create a matrix with country-specific information, (6) freight forwarding, and (7) prepare procurement plans and execute procurement requests.

#### **Pre-qualified Suppliers of Malaria Commodities**

To add an additional RDT manufacturer, the team reviewed and expanded the pre-approved vendor list for long-lasting insecticide-treated bed nets (LNs) and malaria rapid diagnostic tests (RDTs). During the period, the TO3 team reviewed country Malaria Operational Plans (MOPs) for malaria commodities that were not included in our earlier procurement activities. Based on the results of this review, we posted another call for Expressions of Interest (EoI) for RDTs on the Procurement Information Bulletin (PIB) and the project's website (see appendix 1: EoI) to identify additional potential vendors. PMI and the project agreed that we would not issue another call for LN EoI's until the second quarter of FY2009. Therefore, the pre-approved LN manufacturers (see table 1) is unchanged, except for the World Health Organization Pesticides Evaluation Scheme (WHOPES) status of Olyset. Table 2 identifies the pre-approved RDT manufacturers.

Table I. Pre-Approved LN Manufacturers

Manufacturer	Brand	Polyester	Polyethylene	WHOPES
BASF	Interceptor®	√		II
Bestnet Europe (Intection)	Netprotect®		√	II
Clarke Mosquito	DuraNet®		√	II
Sumitomo Chemical	Olyset®		√	III
Tana Netting	DawaPlus®	<b>√</b>		I
Vestergaard Frandsen	Permanet®	√		II

**Table 2. Pre-Approved RDT Manufacturers** 

Manufacturer	Brand	
AccessBio	CareStart®	
ICT South Africa	Malaria Pf®	
Inverness Medical	BinaxNOW®	
Orchid Biomedical Systems	ParaCheck®	
Premier Medical Corp	First Response®	
Span Diagnostics	ParaHIT®	
Standard Diagnostics	Bioline®	

The MOP review revealed an expanded list of antimalarials required by PMI countries, including drug treatments for severe malaria; pharmaceuticals, such as sulfadoxine-pyrimethamine (SP) and artesunate+amodiaquine (AS+AQ) (not including arthemether-lumefantrine [AL]); and injectables and quinine-based products. To ensure product quality for the project, the procurement and quality assurance (QA) teams used this expanded list to review a supplier certification of manufacturers of AS+AQ and of pharmaceutical and medical supplies wholesalers.

To ensure the quality of the products, TO3 obtained site and product dossiers from the manufacturers, then sent the wholesalers a documentary checklist and questionnaire on sourcing and QA processes. From this exercise, we selected three organizations that currently satisfy the QA and procurement needs of the project for many of the non-AL pharmaceuticals, including—

- IDA Foundation, The Netherlands
- Missionpharma AS, Denmark
- UNICEF Supply Division, Denmark.

#### **Review and Refine Procurement Systems and Procedures**

During this fiscal year, the supply operations team has continued to manage TO3 orders and procurements while refining operating procedures and enhancing the MIS to support to the project. To continue improving the business processes, which will ultimately lead to improved business performance, we developed a proposal and received funding to implement a quality management system (QMS).

The QMS added a business process analyst who will work with the MIS team to collect bugs and enhancements and develop requirements documents; a process quality specialist who will review, revise and oversee the implementation of standard operating procedures (SOPs) and develop a plan to ensure that work is being performed according to accepted procedures; and a technical writer, who will establish a template and numbering conventions, incorporate existing SOPs into the template, and work closely with the process quality specialist to update and complete the SOPs for each technical area.

The project will present the SOPs—procedures for QMS implementation and reports on improvements in supply operations—to the task order managers by May 15, 2009.

#### Improve the Commodity Procurement Information Request Form

The project refined the existing special procurement instruction forms to reflect feedback from the field and to reflect usage during this period. The CPIRs are used to establish the recipients' procurement needs; both the USAID | PMI Missions and the implementing/recipient organization (for example, the National Malaria Control Program [NMCP]) sign off on the forms. Currently, four CPIRs cover Coartem, RDTs, LNs, and pharmaceuticals/medical supplies (see appendix 2).

#### **Develop Matrix with Country-Specific Information**

The country information matrix sheet shows the location of country-specific procurement-related information. The matrix has been initiated; it contains malaria treatment choices for each PMI focus country. The matrix is a reference point for shipping and import procedures the project needs to consider when malaria commodities are sent to PMI-focus countries. If known, it also lists the types and brands of RDT tests used in each country.

The matrix, located on the project's G drive, provides supply management—related information, such as consignee names and details; customs clearance requirements; and regulatory requirement controls that affect the import of malaria commodities in the respective countries. As contact details and procedures in the PMI-focus countries change, the information on the matrix will be updated.

#### FREIGHT FORWARDING

The project's freight team handles shipment execution tasks, including freight estimate preparation, vendor door pickup, freight booking, shipment tracking, customs clearance, and final recipient delivery. The relatively large shipment sizes and limited airline capacity continue to present challenges, but the freight team has responded effectively.



Several of the country-

specific shipping instructions were revised and vetted with each UPS country agent. Shipping instructions document the consignee contact, UPS destination contact, and customs documentation requirements; it also includes the special mandatory country customs processes. The freight team will continue to update the shipping instructions, as required.

We continue to manually update shipment milestones in ORION, part of the project's management information system (MIS). MIS website users can view shipment milestones. To finalize the UPS Electronic Data Interchange (EDI) feed, the freight team made recommendations to the MIS group. Currently, the EDI feed is on hold, pending funding.

# PREPARE PROCUREMENT PLANS AND EXECUTE PROCUREMENT REQUESTS

During FY2008, 14 countries sent the project requests for procurement assistance—Angola, Benin, Ghana, Kenya, Liberia, Malawi, Mali, Mozambique, Nigeria, Rwanda, Senegal, Tanzania, Uganda, and Zambia (see table 3) for a total value of \$35 million. LNs were, by far, the most commonly requested commodities, approximately 49 percent of the total, and artemisinin-based combination therapy (ACTs), approximately 45 percent. RDTs constituted about 5 percent of the total.

Table 3. Procurement Requests Received from Countries by Type of Commodity and Value

COUNTRY	DATE	сомморіту	QUANTITY	VALUE (U.S.\$)
Angola	Nov-07	Lab Kits	25	95,000.00
•	Mar-08	RDTs	375,000	258,700.00
	Sep-08	Coartem	1,883,520	1,754,440.00
	Dec-07	Coartem	1,483,710	2,069,000.00
	Dec-07	RDTs	375,000	257,400.00
	Mar-08	Coartem	1,152,000	1,198,130.00
Benin	Feb-08	Coartem	1,073,490	650,490.00
	Sep-08	LNs	835,000	3,619,725.00
	Dec-07	SP	2,300,000	69,000.00
Ghana	Sep-08	AS+AQ	1,142,760	766,470.00
Kenya	Apr-08	Coartem	397,440	390,600.00
Liberia	Oct-07	AS+AQ	496,000	283,026.00
Malawi	Dec-07	Coartem	2,311,200	2,596,000.00
	Mar-08	Coartem	668,160	745,300.00
	Jul-08	Coartem	3,830,400	3,062,131.00
Mali	Dec-07	LNs	212,000	1,127,552.00
Mozambique	Feb-08	Coartem	1,440,000	1,931,700.00
Nigeria	Nov-07	LNs	96,000	478,540.00
3	Sep-08	LNs	706,000	3,285,370.00
Rwanda	Oct-07	LNs	550,000	2,182,735.00
Senegal	Mar-08	LNs	790,000	4,062,400.00
3	Jun-08	Lab Eqpt	Various	115,000.00
Tanzania	Jan-08	RDTs	350,000	232,740.00
	Feb-08	Coartem	146,730	147,000.00
	Sep-08	RDTs	725,000	456,000.00
Uganda	Oct-07	LNs	350,000	1,715,000.00

COUNTRY	DATE	COMMODITY	QUANTITY	VALUE (U.S.\$)
Zambia	Dec-07	RDTs	979,000	550,000.00
	Jan-08	LNs	108,235	509,787.00
	Sep-08	Coartem	495,360	396,404.00
TOTAL				35,005,640.00

Figure 1 shows the commodities shipped by TO3 in the first six months of operation, from April through September 2007. Figure 2 shows the large increase in procurement undertaken in FY2008. It is clear that countries tend to concentrate their procurement requests to TO3 on primarily one commodity—either LNs or ACTs. Malawi and Angola are the biggest consumers of ACTs, while Benin, Nigeria, Rwanda, and Senegal concentrated on procuring LNs. An analysis of the dates when procurements were requested shows that, with the exception of a small procurement in June and a larger one in July, most procurement occurred from September through April.

Figure I. Commodities Shipped in FY2007

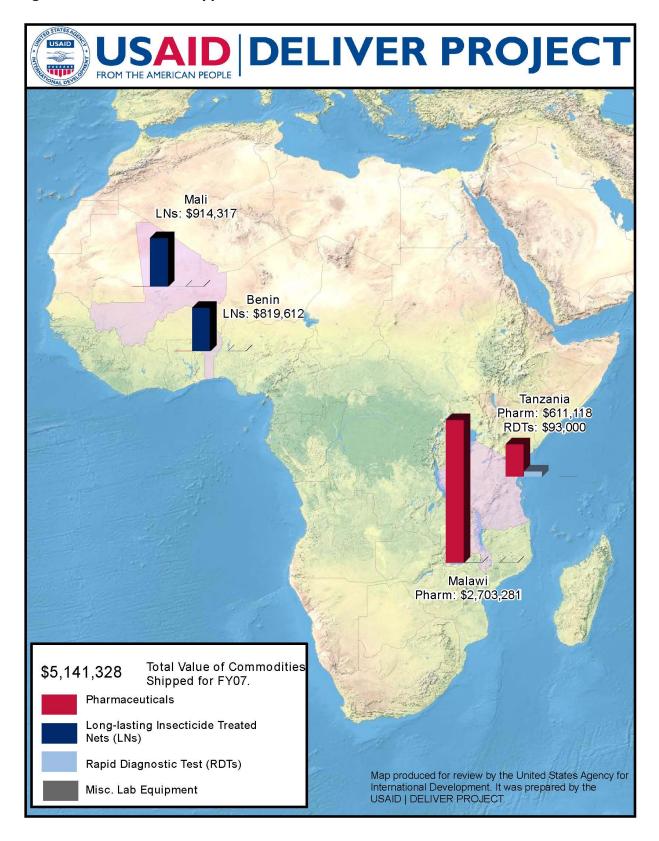
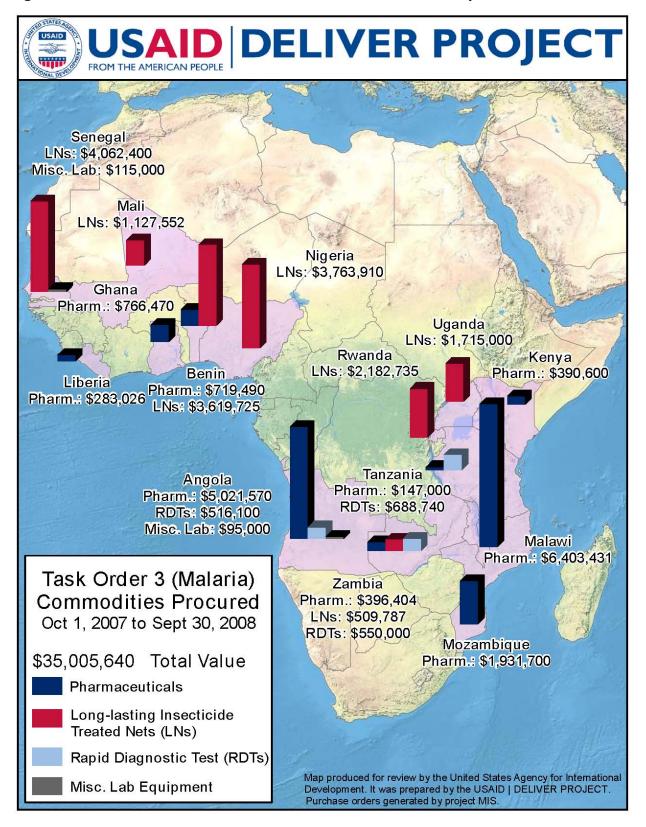


Figure 2. Commodities Procured between October I, 2007, and September 30, 2008



#### MANAGEMENT INFORMATION SYSTEM

During the past year, the project has changed virtually all its core information systems related to tracking shipment data, including the enterprise resource planning (ERP) system, EDIs, freight rate calculation application, and reporting tools for customers, as well as for internal users. While this large and complex project has been a challenge for the team, we now have an industry-standard ERP system in place, which includes several EDIs and a web-based reporting platform that serves all users. After developing a solid foundation for the supply chain, we are having ongoing discussions with USAID on how to develop the additional features envisioned for the MIS.

#### Implementing a New Enterprise Resource Planning System

ORION, the largest component of the MIS, is the new ERP system; it replaced NEWVERN for data storage and the essential tool box for procurement data used by the supply operations team. ORION, an industry-standard distribution model ERP, enables the team to collect, process, and distribute data related to all phases of the supply chain. Standard ORION functionality includes requisition orders, sales orders, and purchase order management; procurement management; inventory management; distribution; shipment tracking; and financial management. ORION's standard functionality was configured around the established business practices of Task Order 1, with modifications for Task Orders 2 and 3. When practices and reporting needs differed from the industry standard, we worked with 3i InfoTech, the developers of ORION, to augment the ORION application by developing customized features to accommodate customer needs. We also created a data warehouse with the capacity to hold data views from ORION and data storage space for various smaller applications.

Implementing a large and complex system like ORION has meant changes to the day-to-day work processes for everyone who uses supply chain data. Adjustments to the new procedures can be expected; the supply operations team has met the challenge as they learn to work with the new system. Revisions of SOPs and training of internal staff will be ongoing.

#### Launch of a New Website and Web-based Reporting System

In April 2008, the project launched an exciting new website that contains real-time information about account status and shipments of malaria commodities procured by the project on behalf of USAID. The new website features information about the commodity security status of USAID-supported countries, reference materials on commodity security and logistics, and links to other sources of information. To prepare for the project website launch, the project transferred more than 890 project publications from the old website to the new website, and the project created more than 140 new web pages.

By having a central role in the project's efforts to increase the availability of essential health supplies in public and private services, the new website facilitates and improves access to commodity security, supply chain management, and health commodity information for logistics professionals in the developing world. It also serves as an intranet for the project staff.

With the website, we launched a new web-based reporting system that showcases the model for the information distribution originally envisioned for the MIS. We moved from a system with a large client-server—based set of reports to a system with a smaller set of more flexible web-based reports, where users can choose their own report parameters using selectors on a web page. In the long term, this approach adds benefits—reports being developed on one platform can be accessed by many different user groups. The sophisticated identity management system can limit pages or selectors

depending on the access level; this reduces the cost of the system over time, because many users with different permission levels can use the same reports. Users who access the system include USAID/Washington, missions, project and procurement staff, recipients, affiliates, and partner organizations.

The new reporting system within the "My Commodities" section has many enhanced features for tracking and monitoring shipments, accounts, and inventory. Information is easily accessible for orders and shipments, shipment summaries, current account status, account transaction history, worldwide loans, inventory reports, and shipping information; users can also access a product catalog of malaria commodities.

Together, the website and reporting system comprise a knowledge sharing platform that collects, processes, and distributes data essential for the project staff and other stakeholders, which they use to make decisions and, ultimately, achieve project objectives.

#### **Management Information System Achievements**

The ORION ERP, implemented on March 31, 2008, is the foundation of the supply chain management system; it is used to implement all sales order management, procurement, inventory

management, distribution, shipment tracking, and procurement-related financial management functions. The website and reporting system was launched on April 14, 2008, after a two-week data conversion period. The two components are essential parts of the MIS; they enable us to do our work.

Building the ORION component is a precondition for any other component of the MIS; work on this piece started soon after the IQC was awarded. ORION release 1, completed in June 2007 and release 2, completed in November 2007, provided operational support to Task Orders 2 and 3. Release 2.1 was completed in February 2008; release 3 was completed on March 31, 2008, and incorporated the three task orders.

The website and reporting system were deployed on April 14, 2008, replacing almost all the functionality of the previous systems.

#### **MIS Benchmarks**

### The USAID | DELIVER PROJECT has met the following benchmarks: MIS Release 1.0

- ORION™ R1.0 deployed.
  - Used by the procurement unit for all TO2 and TO3 procurement activities.
- Historical TO2 shipments consolidated in spreadsheet for easy reporting.

#### MIS Release 2.0

- ORION™ R2.0 deployed November 12, 2007.
- Functionality complete for TO1, TO2, and TO3.
- Payable and non-payable transactions functionality implemented.
- The project's Customer Service Request System deployed in November 2007.

#### MIS Release 2.1

- ORION™ R2.1 deployed February 12, 2008.
- Sales order and purchase order cost allocations for TO1, TO2, and TO3.
- Kitting module for TO2.

#### MIS Release 3.0

- ORION™ R3.0 deployed March 31, 2008.
- ORION reports to support daily work of the supply operations team.
- New USAID | DELIVER PROJECT website deployed April 14, 2008.
- Website framework and design, search capabilities, and content management system.
- "My Commodities" web-based reporting system with multi-level identity management for controlling user access. Reporting areas include shipment information, inventory, financials, and a product catalog.
- Freight Rate Calculation

#### MIS Release 3.1

- EDI with the Reproductive Health Interchange (RHI) deployed July 1, 2008.
- EDIs 940 and 211 add with Agility deployed August 20, 2008.
- Shipping notes reports deployed September 23, 2008.

Although the original deadline for the entire system was October 1, 2007, it became clear as requirements were developed that the complexity and scope of building a system to incorporate three different task orders was far more complicated than expected. An extension of the release for the complete system, with all components operational, was requested and approved. An additional \$207,000 was requested to finish components that could not be completed by April 14, 2008. The amount was approved; the components were completed at the end of September. The project may add additional features in the future; we are currently in ongoing discussions with USAID on how to move forward.

#### **QUALITY ASSURANCE**

#### Long-lasting Insecticide-treated Bed Nets (LNs)

The project's quality assurance team arranges for the physical and chemical testing of every order of long-lasting insecticide-treated bed nets (LNs) that we procure. In FY2008, the quality assurance team arranged for concurrent physical and chemical testing, with shipping to be conducted on several orders of polyester deltamethrin LNs procured from Vestergaard-Frandsen, Bestnet Europe/KRT India, and Sumitomo A-Z. All the shipments met the specifications and the LNs were delivered.

In Antwerp, in July, representatives from the QA team participated in a WHO meeting, jointly organized with the Institute of Tropical Medicine and the Bill & Melinda Gates Foundation, titled "Development of quality standards for LNs: Information gap and way forward." The meeting was held to inform the industry, research partners, and other stakeholders about the experience gained from testing and evaluating LNs. At the meeting, the participants also discussed the information gap in developing quality standards for such products; organizers asked for support in generating the data/information required to meet the identified needs. After this meeting, the QA team adopted the abbreviation of LN (instead of LLIN) to align us with WHO and the industry.

#### **Rapid Diagnostic Test Kits**

We conducted five procurements of RDTs during the reporting period. WHO-Western Pacific Regional Office (WPRO) laboratories in the Philippines and Cambodia conducted post-shipment testing. WHO-WPRO also conducted stability tests on samples from earlier procurements after three, six, and nine months. All test results met WHO requirements. Due to local circumstances, problems were found with the post-shipment sampling and inspection for both shipments to Angola. WHO-WPRO has been asked to perform a visual inspection at the same time as the regular testing.

#### **Pharmaceutical Drug Products**

**Coartem.** More than 60 batches of Coartem was shipped and distributed to Angola, Malawi, Kenya, and Zambia. In August, FHI received retention samples from Novartis for each batch. As part of building a more comprehensive AL spectra library, which can be used for quality assurance or investigative purposes, CDC-Atlanta and FHI used near-infrared (NIR) to scan the samples.

**Artesunate+amodiaquine and sulphadoxine-pyrmethamine.** Previous AS+AQ and SP procurements showed that waiting up to six weeks for test results does not achieve the overall objective of timely delivery of drug products to the countries. Therefore, TO3 adopted a new policy that allows the testing of drug products that are WHO pre-qualified and are from manufacturers that the project has previously obtained through wholesalers—IDA Foundation, MissionPharma, and

UNICEF—to be conducted concurrent with shipping. Implementing this policy required a quality assessment of IDA, Missionpharma, and UNICEF to verify their quality procedures for product approval, manufacturer approval, testing, and recall.

In May 2008, we procured a second shipment of SP for Benin. Using the new policy of concurrent testing, the order was released for shipping seven days after sampling, compared to 41 days for the first order. All test results were compliant with pharmacopoeial specifications.

MissionPharma is procuring AS+AQ for Ghana. The samples have passed inspection and testing is underway.

To date, for PMI-financed procurement through the project, we did not receive any complaints about product quality from the countries.

# **OBJECTIVE 2: STRENGTHENING IN-COUNTRY SUPPLY SYSTEMS**

The success of the task order depends on strengthening in-country supply systems and building greater capacity for improved management of malaria commodities at the local level. By successfully completing these actions, the project will ensure the rational and efficient use of commodities procured and delivered under Objective 1 activities. According to the TO3 FY2008 workplan, the project was to provide assistance in three main areas: (1) short-term technical assistance (STTA), asneeded; (2) implementation of technical assistance (TA) workplans in presence countries; and (3) additional tools and guidance.

#### SHORT-TERM TECHNICAL ASSISTANCE

For the project, STTA is usually provided in one- to three-week assignments to help malaria program managers resolve a well-defined problem, such as improving in-country distribution, solving storage capacity problems, or completing quantification exercises. Although the assignments are short, we emphasize developing capacity for the country requesting assistance. Consultants work directly with ministries of health and national malaria programs.

During the last year, TO3 has provided STTA in Ghana, Liberia, Angola, Malawi, Madagascar, and Senegal. This assistance focused on facilitating the receipt, clearance, and distribution of large shipments of malaria commodities; performing supply chain analyses; conducting needs assessments; and coordinating future activities with missions and the Ministry of Health (MOH), often in tandem with other organizations. For a more complete description of the project's STTA efforts, see appendix 3.

#### Implementation of Technical Assistance Work Plans in Presence Countries

The following section will focus on specific activities performed in countries where the USAID | DELIVER PROJECT has an office and has provided longer-term assistance during FY2008. We have offices in Ghana, Liberia, Madagascar, Malawi, Mozambique, Rwanda, Tanzania, and Zambia.

#### Ghana

To support the maternal and child health campaign, the Ghana field office successfully
implemented unexpected mission requests, including transporting bed nets and printing
vouchers for USAID.

- The team finalized and submitted to the mission for comments the Malaria Commodities Supply
  and Pharmaceutical Care Management systems joint assessment report. The report identified
  problems and proposed interventions for all components of the pharmaceutical management
  and logistics cycle.
- The team developed a training course and training of trainers (TOT) curricula for the Public Health Commodities Logistics System; they trained 30 master trainers.
- The field and home office teams reviewed the workplan and budget, then submitted them to the mission for approval.
- We hired a program officer, who will be dedicated to malaria and will be part of the Ghana field office team.
- The project planned and implemented a malaria commodity quantification exercise that identified an acute shortage of malaria treatment drugs and an emergency funding gap of \$13 million. The team has determined the quantities required and has started the procurement process. During the quantification exercise, 16 counterparts in the MOH and Ghana Health Service (GHS) learned about the quantification process.
- To finalize the Ghana Malaria Control Strategic Plan (2008–2015), the project provided information about logistics, quantification, and procurement components. When the draft strategic plan was being revised, it was noted that the project has expertise in specific areas and that others should seek our assistance.
- The project collaborated with the Supply Stores Division/GHS to review the Requisition Issue Receipt Voucher (RIRV). ACTs, artesunate suppositories, and quinine syrup were added to the list of commodities; monotherapy artesunate tablets were deleted. Following this review, copies of the revised RIRV (with antimalarial drugs in agreement with the new malaria drug policy) are being printed and distributed in the regions.
- The project held six regional-level trainings to better cultivate malaria commodity management. A total of 377 individuals benefited from this training; this group will support the supply system, as well as the newly operational RIRVs and SOPs (revised for inclusion of ACTs). The newly trained staff will improve the reporting of facility-level malaria commodity consumption and stock on hand data, which is critical for maintaining routine resupply, addressing stock imbalances, and limiting waste through expiry.
- The project initiated the procurement process of ACTs and LNs with the mission and NMCP. All initial documents from Ghana have been prepared, signed, and dispatched to the procurement unit at the project's headquarters. When ACTs and LNs are procured, an initial \$1,200,000 would be used to procure AS+AQ 12 × 12, 6 × 6, and 3 × 3, and a additional \$1,000,000 would be used to support procurement of rectal artemisinin and AS+AQ 12×12. The mission agreed to use \$2,200,000 to procure LNs.
- USAID asked the project to review the current distribution of free bed nets and provide advice.
  The project staff visited facilities in several regions; they identified several challenges in bed net
  distribution—bad roads; lack of information, education, and communication (IEC)/behavior
  change communication (BCC) activities to inform the target population about the availability of
  bed nets; and delays in the arrival of bed nets. During the project staff's visit, bed nets were
  moved from the regions to facilities and distribution was ongoing.

- TO3 staff made monitoring visits in two regions; they showed the availability of ACTs (not all formulations), artesunate suppositories, and brands of AL. Bed nets were available at all facilities visited and were sold at the subsidized rate of \$2.00.
- The project has started work on developing a database for bed nets. In late September, a team from the home office collaborated with the NMCP and stakeholders to define parameters for bed net database development, which would track six separate LN distribution channels. To provide a coordinated approach to addressing unmet need, the database will strengthen linkages between NMCP and stakeholders.

#### Liberia

- Based on the results of the project's LN logistics assessment, a project team developed
  recommendations for a number of activities: forecasting, procurement, inventory management,
  warehousing, transportation and distribution, IEC/BCC, social marketing and the private sector,
  coordination mechanism, and product selection; they also want to develop a more efficient
  logistics management information system (LMIS). The team prepared plans to implement the
  PMI jump-start activities.
- The project oversaw the delivery and distribution of 170,440 LNs in Bomi and Grand Cape Mount counties, reaching a near 100 percent coverage of households in the target counties.
- The team developed distribution forms for the door-to-door distribution and conducted a TOT for 22 supervisors on how to use the forms. These supervisors have since trained 287 community health workers (CHWs) in two counties.
- A total of 496,000 doses of ACTs were procured and delivered to the National Drug Service (NDS) for distribution in Monrovia and other counties. We disseminated a press release on the ACTs delivery and the official USAID hand-over ceremony; 11 newspapers and TV and radio stations covered the event.
- Nearly 1,000 delegates attended the PMI launch, including representatives from six counties, and six newspapers, which published articles about the event.
- In July 2008, the project sent a full-time resident advisor to Liberia to provide TA to the Ministry of Health and Social Welfare (MOHSW) and the NMCP on supply chain issues and to advise the mission, as required. In addition to the resident advisor, the project office also has a finance and administrative officer.
- The project provided TA to the MOHSW and NMCP to address the priorities and identify gaps in the MOHSW-proposed supply chain terms of references.
- The project developed a joint workplan with the Strengthening Pharmaceutical Supplies (SPS) project, which strengthens the USAID inputs in the assistance given to NMCP. The joint workplan is being implemented and each project leverages the comparative advantage of the other.
- The project continued its support to the NDS. We conducted a half-day coaching session on the procedures used to determine the storage capacity for stores and warehouses. Storage capacity quantification is used, with the product bulk storage volumes, to determine storage availability and to plan the arrival schedules for the procured products. Nine participants

- attended the training, including high-level officials and partners, staff from the BASICS project, the MOHSW chief pharmacist, and the NDS supply chain manager and operations manager.
- To identify gaps and strengths in the logistics system, the project used the Logistics System Assessment Tool (LSAT), developed by the project, to work with national counterparts in assessing the logistics system. We analyzed all elements of the logistics cycle. The participants discussed the identified issues and made recommendations.

#### Key findings and recommendations included—

- Create a user-friendly data management system to strengthen the existing LMIS.
- Train personnel and improve feedback at all levels; the LMIS will be run from NDS through all the programs to the service delivery posts (SDPs).
- Improve the basic structures and operations in the physical layout of warehouse and storage depots in the counties; the recommendations are considered when the SOPs are revised and the curriculum is developed to train trainers on the use of the SOPs.
- With the NMCP, the project supported the distribution of 12,450 LNs that remained after the March 2008 jump-start door-to-door distribution. The LNs were distributed to four counties through 97 antenatal clinics.
- The project, with NMCP, and a county health team member, conducted a rapid survey in Steward Camp in Bomi on the use of LNs distributed during the jump-start. The group visited households and interviewed residents to determine if they had received LNs (in March 2008) during the house-to-house distribution; they also inspected the sleeping areas to see if nets were hung. Approximately 80 percent of the 25 households visited had their bed nets hanging. Household members interviewed confirmed that they used the nets.
- MOHSW and partners, including the project, developed a draft SOP manual for an integrated health logistics system (malaria, tuberculosis, and HIV/AIDS commodities).
- The project trained pharmacists on the basic LMIS tools, including the electronic inventory tally sheet, bin card, and stock reporting forms. Eleven county health pharmacists, including the 15 counties and seven central-level representatives, attended the session. These participants are responsible for the health commodities in the system.
- The project is working with supply chain managers from the following programs—NMCP, NACP, NLTCP, reproductive health, and essential drugs—to coordinate their activities, improve their logistics skills, and learn how to integrate requisition and reporting forms.

#### Madagascar

- Before an office was established in Madagascar, staff made two TA trips to assess the Malagasy logistics system and to lay the groundwork for the project.
- We opened a field office in Madagascar in September 2008; this office is currently staffed by the resident logistics advisor, who will be the point person for all malaria-related activities.
- The HQ-based senior program manager traveled to Madagascar to help open the office, orient the resident logistics advisor, and introduce the project team to the various stakeholders and partners.

- The field and home office teams finalized the workplan and budget for TO3 and submitted them to the mission for approval.
- The project is negotiating a Memorandum of Understanding (MOU) for distributing LNs; the project is currently analyzing the RFQ for procuring the LNs.

#### Malawi

- The project helped procure and deliver 6,809,760 treatments of ACT, in four separate consignments, to the Central Medical Stores (CMS). The consignments are currently being distributed to approximately 560 SDPs, in three regions. The project also asked that the Coartem outer packaging be modified for easy identification of the four different presentations; the manufacturer (Novartis) responded by color-coding the shipping cartons.
- After the initial distribution, members of the ACT task force carried out an assessment, which included five members of the project. The task force developed a monitoring tool that was used to do spot checks in 62 randomly selected facilities.
- The project designed Excel-based malaria commodity tracking tools and corresponding job aids to enable local facilities and regional medical stores to base their resupply requests on need, until AL is integrated into the LMIS and resupply system.
- The Malawi field office team worked with the mission to address the difficulties surrounding the termination of the GLOCOMS management agent contract with the CMS; in March, the distribution of the second ACT consignment continued through the CMS.
- To improve and strengthen the LMIS for malaria commodities and other health commodities, the project recruited three regional logistics officers (RLOs). They will facilitate the data collection from SDPs, conduct monitoring visits with the district pharmacy technicians, and attempt to solve any issues that may arise during their field visits. They will review the order fill rates for Coartem to ensure that the facilities receive the amount ordered.
- To regularly capture and analyze ACT data, the project helped upgrade the Supply Chain Management software and LMIS forms.
- As part of the integrated support supervision and to improve the reporting rate, the project made monthly field visits to the SDPs to facilitate the monitoring of the malaria drugs logistics management. As a result, reporting rates have increased dramatically, from 56 percent in July 2008 to 78 percent in August 2008.
- To strengthen the CMS' capacity and improve the storage and distribution of ACTs, the project conducted a warehouse assessment and network optimization for the central level.
- The project continues to meet regularly with the mission, CMS, and other stakeholders to plan future CMS strengthening activities.
- The recruitment process for hiring a malaria logistics advisor for the project is ongoing; we have interviewed the top candidates.

#### Mozambique

• The project's cool box pilot in Maputo, Tete, and Quelimane provinces to store malaria commodities that require storage temperatures at 25°C or cooler has been extended to one year.

- It will end in December 2008, based on WHO's recommendation that we establish more formal evaluation parameters.
- The project received approval from the MOH in July to conduct the AL distribution pilot, which took place from September to November 2008. The pilot tested two inventory management and distribution approaches for the community-level management of AL—a modified kit system and a two-bin system. With the new bilateral malaria project, BASSOPA—which will lead the preparation and implementation of the clinical training sessions—the project began TOT sessions for health workers at the central, provincial, and district levels. The project also organized clinical and logistics trainings for health workers from the districts, including CHWs, on the new treatment guidelines. A total of 338 health workers from all the pilot districts (prescribers, laboratory agents, pharmacists) and 66 CHWs have received the training so far.
- In preparing for the pilot, the project assisted CMAM and the CMSs in repacking and distributing AL from the central level (Maputo and Beira warehouses) to DPM-Zambezia and Niassa; and from the provincial level to the pilot districts, health facilities, and CHWs.
- The project participated in a nongovernmental organization (NGO) coordination meeting; we presented the AL distribution pilot. The project used this opportunity to ask NGOs working in Zambezia and Niassa to support the pilot sites during their routine monitoring and supervision activities.
- The project participated in the malaria technical working group; we worked on the malaria program annual strategic plan, including the monitoring and evaluation plan. The project is tasked with integrating logistics indicators.
- The project helped the MOH develop the 2009 supply plan for malaria drugs. The MOH will procure part of the first line drug for malaria treatments (AL) with Global Fund Round 2 and Round 6 funding, through UNITAID; PMI will also procure part of the needs for 2009. To prepare for the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) proposal, the project also worked with the MOH to forecast and quantify malaria drugs and RDTs for 2009–2013.
- The NMCP is preparing for a health facility survey in November 2008 to collect indicators on malaria activities. The project was part of the group that revised the questionnaire by integrating logistics indicators on malaria commodity management (stockout, expiry, stock card, etc.).

#### Rwanda

- The Rwanda field office hired a malaria logistics advisor, who will be the point person on dayto-day malaria-related work and will be a dedicated resource for PMI activities for the stakeholders.
- The project is assisting the MOH in procuring 550,000 LNs. An additional 39,000 LNs are also being procured for persons living with HIV/AIDS (PLWHA).
- To facilitate the early treatment and referral of fever and malaria cases, the project is procuring 6,176 home-based management kits for CHWs.
- The project finalized an MOU with the Supply Chain Management System (SCMS) project to transition the supply chain management activities from SPS, prevent duplicate efforts for supply chain management, and maximize resources allocated to malaria-related activities.

- The field and the home office teams finalized the workplan and budget for TO3 and submitted them to the mission for approval.
- The project co-facilitated an LMIS harmonization workshop with the Pharmacy Task Force (PTF), SCMS, and SPS. To reduce the workload of stock managers across the system, the group integrated LMIS forms from various projects and products. Approximately 40 participants from various departments and programs attended the workshop.
- The NMCP asked the project to facilitate the recruitment of a malaria logistics advisor; this position will be seconded to the NMCP and will offer support for all malaria-related activities.

#### **Tanzania**

- The shift from monotherapy to ACTs has required the project's TA in monitoring the distribution of Coartem, discussing ways to integrate Coartem into the Integrated Logistics System (ILS), and transitioning Coartem from a centrally-managed *push* system to a facility-level-driven *pull* system.
- The project has developed a short refresher course on how to fill out the AL Request & Requisition forms and the correct use of the stores ledger, which will prepare service providers to place their orders in April.
- The project supported the NMCP in designing a monitoring and supervision tool, which has been used in 16 out of 21 regions. The tool has produced aggregated data from 180 facilities for each of the AL weight bands, as well as data for other antimalarial treatments (SP and quinine). This tool is being used to regularly monitor stock status.
- While SP availability continues to be a challenge, the project has provided assistance in managing practical solutions to reduce SP shortages in certain regions. This involved organizing and quantifying for a one-time push of SP treatments to districts in at-risk or stocked out regions.
- To improve product availability in the private sector, the project helped broker a transfer of Coartem from the accredited drug dispensing outlet (ADDO) program to a pilot initiative managed by the Clinton Foundation. This will make Coartem available through chemist shops. Because uptake through the ADDO program has been slower than expected, this transfer decreased the risk of expiries without jeopardizing the availability of the ADDOs.
- With the NMCP, and for the ADDO program and the United Nations High Commissioner for Refugees (UNHCR), the project conducted an annual national quantification exercise for antimalarials used on the mainland. The quantification results were used to prepare a procurement plan for AL for the public sector program using GFATM Round 4, Phase II funds. The UNHCR and ADDO programs receive commodities procured using PMI funds; separate forecasts and procurement plans for these programs were prepared. The quantifications will be updated every six months; results will be shared at a commodity security logistics forum for antimalarials.
- The project helped train 972 health workers from Kigoma and Tabora on the ILS. Kigoma and Tabora are the last two regions still implementing the kit system. AL is included in the new ILS forms introduced to these regions; these regions will be part of the next wave of regions transitioning from a push to a pull system for receiving AL.

- The project also updated the ILS training curriculum to include the management of AL; the logistics advisor in the field office attended a TOT and then led training sessions in Tabora. The TOT was conducted with TA from the home office; it prepared a training cadre that will lead trainings in future ILS roll-outs to the indent regions, which are planned for FY09.
- The ILS curriculum has been modified for use in the indent regions. With training time reduced from five to three days, because of the similarities between the indent and the ILS; the shorter roll-out will considerably reduce the cost per participant.
- To help maintain adequate supply levels of PMI-supported programs, the project brokered a transfer of 80,000 RDTs from UNHCR to the IMALDIA project, which conducts research in health facilities in Dar es Salaam and Morogoro. The project also assisted the Clinton Foundation with a transfer of 57,000 AL treatments that, otherwise, would have gone unused.

#### **Z**ambia

- The office established a TO3 team and recruited a Deputy Director. This team has established collaborative working relationships with in-country partners, including the National Malaria Control Center (NMCC) and the MOH.
- With the NMCC and MOH, the project completed a quantification and procurement planning exercise for antimalarials. This exercise identified some stock imbalances and risk of expiry among various weight bands. A budget gap of \$502,926 for June 2008–May 2009, and \$667,272 for May 2009–June 2010 for ACTs and drugs for severe malaria was also identified.
- The project completed the analysis of essential drugs/malaria drugs stocktaking data collected during a nationwide essential drugs/malaria drugs stocktaking exercise. This exercise helped prepare for the quantification and procurement planning exercise. Stock levels at 204 sites were evaluated; ACT stockouts, ranging from 29 percent to 45 percent for at least one weight band, were identified at health centers. Similar findings were found in hospitals and district health management teams.
- The project is helping to adjust procurement plans and reallocate stocks to ensure that health
  facilities have the drugs they need. Bottlenecks were found in several district warehouses—the
  project is resolving these issues by working with partners to redistribute stocks, as needed.
- Because malaria drugs are part of Zambia's essential drugs system, TO3 support is also contributing to improvements in supply chain management for all essential drugs, including public and private sectors. With the Medical Stores Limited (funded by World Bank) and the Government of Zambia, the project is piloting a project to further improve the essential drug system. This pilot project includes 24 of the 72 districts; it compares three logistics models to a control group (six districts each model and six control districts). It was specifically designed to provide cost-effective solutions that will reduce bottlenecks, which may delay users' access to ACTs and other essential medicines. This pilot is scheduled to begin in December 2008 and will continue for one year.
- The project provided support to develop a draft plan and tool for collecting essential data on PMI commodities. Data collection will done by using (1) regular visits the project already performs when monitoring antiretroviral drugs and test kits and (2) the pilot for essential drugs.
- The project is developing a geographic information system for monitoring and evaluation.

#### ADDITIONAL TOOLS AND GUIDANCE

Critical elements of TO3's mandate are to ensure that local capacity for supply chain management of malaria commodities at the local level increases and that the latest state-of-the-art science is applied to all aspects of malaria commodities mobilization. The project implemented two activities to support this mandate—(1) introducing malaria components into the current project training efforts and (2) developing materials for improved quantification of malaria commodities. Additionally, we also worked extensively to develop guidance to verify end users' availability of malaria commodities and to adapt a tool for central-level stock monitoring to track ACT stock status and identify pending stockouts or overstocks.

#### **Building Capacity of Local Supply Chain Manager**

Building local capacity in supply chain management is one of the project's main goals. Demand for training in logistics in recent years has escalated; the project receives several inquiries each month from the field about opportunities to attend logistics training; courses offered by the project are routinely over-subscribed.

In response to the increased interest and demand for an application of general logistics principles for malaria commodities, we added several examples and exercises related to malaria commodities to the Overview of Supply Chain Management and Quantification and Procurement Planning courses.

Some examples of malaria-specific content include the following:

- We included forms from the Nigeria malaria program in the LMIS training. In addition, participants were asked to bring their country-specific forms, which will probably include malaria commodity forms.
- In the session on Assessing Stock Status, accounting for the seasonality of malaria is discussed.
- An activity was added to calculate storage space for LNs.

In 2008, the "Overview of Supply Chain Management" and the "Quantification and Procurement Planning" courses, held in South Africa in January, were designed for a global audience. A total of 21 participants from 13 countries successfully completed the two courses. Two participants represented the National Malaria Program in Kenya. Since January, professionals that manage malaria programs and commodities have expressed increased interest in receiving logistics training. This strongly indicates the need to increase efforts to ensure that malaria commodity managers are aware of such training opportunities and that the course curricula meets their expectations and needs.

#### **Develop Quantification and Procurement Planning Guidelines**

ACTs present special problems for quantification, forecasting, logistics, and procurement. Their short shelf life, seasonal use, and recent introduction in many countries present a complex and different paradigm than other health-related commodities. It is important to identify these differences and to consider them when conducting quantifications and developing procurement plans. TO3's FY2008 workplan includes the development of quantification and procurement planning guidelines that will fill the lack of guidance relating to ACTs. The project has developed a draft document and has submitted it to PMI; we are currently revising it, based on the feedback received.

#### **End-Use Verification Guidance**

The impact of malaria commodities on malaria prevalence and mortality is based on whether or not the commodities reach the intended users. Therefore, verifying that ACTs, LNs, RDTs, and others are present and accessible at SDPs should be part of any malaria commodity monitoring system. We have worked closely with the SPS project and PMI staff to complete a draft document of the *End-Use Verification Guidance*. The document includes a set of indicators, draft tools for collecting data, sampling guidance, and reporting formats. It also includes examples from other countries that can be adapted for particular situations. The guidance emphasizes the importance of ensuring that the guidance does not replace already existing systems and tools for obtaining malaria commodity data. PMI is currently reviewing the document, it will be tested in at least one country to ensure that it captures the needed information.

#### **Central-level Stock Monitoring**

In the ever-changing environment of malaria commodity funding, procurement, and supply, it is critical to monitor stock status and to identify potential stock imbalances early enough to prevent countries from stocking out or having significant waste due to expiry. In response, the project, at PMI's request, adapted the Procurement Planning and Monitoring Report for malaria (PPMRm), a tool that provides an early warning of contraceptive stock imbalances, with a focus on ACTs. The project developed a new database for malaria commodities; to populate the database, the project and SPS country offices provide quarterly reports with the required information. We expect to update the PPMRm quarterly and share it with PMI leadership and global donors.

# **OBJECTIVE 3: IMPROVING THE GLOBAL SUPPLY OF COMMODITIES**

### Malaria RDTs Labs Testing and Lot-Testing Procedures Improvement Process Focused Meetings

With representatives from various WHO lab testing sites, including Cambodia and the Philippines, TO3 staff attended the February 14, 2008, WHO/Foundation for Innovative Diagnostics (FIND) meeting in Geneva to discuss the criteria for WHO–RDT overall lot-testing program.

On June 6, 2008, project personnel attended a follow-up WHO/FIND meeting in Geneva to discuss a communication strategy for the malaria RDT evaluation and the CDC product testing results. The discussions also focused on RDT testing quality assurances that will be documented for the Roll Back Malaria (RBM)–Procurement Supply Chain Management Working Group (PSMWG).

These meetings give the project important updates and the most recent information and skills, which help us ensure that we are providing the most relevant technical support to PMI countries. Additionally, the meetings are also a mechanism for the project's experience to inform global policy discussion on the various malaria commodities.

#### Roll Back Malaria—Procurement and Supply Chain Management Working Group

The project is an integral member of RBM's PSMWG, an advisory body to the RBM Partnership Board; we participate in all their global meetings. The PSMWG is mandated by the RBM partnership board to make recommendations on steps to support partners and countries in implementing national plans and related procurement and supply chain management activities. Procurement and supply chain management is defined broadly to allow consideration of all issues critical to

production, demand forecasting, marketing, regulatory systems, procurement, delivery, and associated monitoring and evaluation. To advance all the project's objectives, it is critical that we participate in the PSMWG. Following is a list of meetings attended by staff.

**Second PSMWG** meeting (October 1–12, 2007). At RBM executive committee's request, the PSMWG brought its draft workplan in line with the priorities determined by the RBM Partnership Board. They prioritized the roll-out of the affordable medicines facility for malaria (AMFm), while maintaining support for the scale-up of LNs and indoor residual spraying (IRS).

A workplan and budget for the following activities were submitted to the RBM Board:

- Create a network to identify Procurement and Supply Chain Management (PSM) experts in RBM partner institutions and consultancies and maintain a roster.
- Ensure that experts are available to the Harmonization Working Group (HWG) to address PSM issues in proposal development for resource mobilization.
- Ensure that experts are available to countries for assistance in developing procurement plans, including PSM plans for the Global Fund.
- Ensure that sufficient experts are available for prompt resolution of PSM bottlenecks, which were flagged by the HWG Early Warning System (EWS).
- Ensure accurate forecasting for ACTs, RDTs, LNs, and insecticides, for IRS for public and private sectors in-country.
- Ensure the development of a *delay* monitoring system to quantify delays in the funding and delivery processes for commodities and to identify action for lead-time reduction.
- Develop procurement guidelines (priority to ACTs and RDTs).
- Collate and disseminate existing tools for PSM gap analysis and capacity strengthening.
- Disseminate quality standards (priority to ACTs).
- Support the establishment of country coordinating committees for PSM.
- Facilitate supporting interventions for the scale-up of commodities through the public and private sector (priority to the ACTs co-paid by the AMFm).
- Facilitate mapping of the global supply side of commodity markets (ingredients, manufacturers, production capacity, quality, international distribution), with priority for ACTs.
- Facilitate support for the best performing local producers to help them meet international quality and good manufacturing practices (GMP) standards.
- Liaise with the Malaria Advocacy WG to include PSM in outgoing messages that raise awareness and resources for PSM issues.

Third PSMWG meeting (April 28–29, 2008). The Roll Back Malaria Procurement and Supply Management Working Group held their third semi-annual meeting in Woerden, the Netherlands. IDA Solutions hosted the meeting.

The meeting objectives were to—

• define the mode of operation and membership

- provide an update on the activities in the workplan
- provide an update on associated budgets
- define the roles and responsibilities of the members of the PSM WG
- analyze gaps in progress toward implementing the activities in the workplan
- create new task forces, as necessary, and appoint points of contacts.

#### Brown Bags within the Project on Various Malaria Issues

One of the project's roles is to disseminate and socialize information that is key to its core mandates—fast and efficient procurement, strengthen local supply and logistics systems, and advocate globally. To this end, we organized several brown bags at the home office:

- Abt Associates' presentation on AMFm
- Jessica Cohen's (Brookings Institute) presentation on free distribution strategy for LNs
- Dr. David Bell's (WHO) RDT overview presentation
- Tom Layoff's presentation on NIR/Ramon technology for QA
- Patrick Lukulay's (USP) presentation: Detecting counterfeit and sub-standard medicines in resource-limited developing countries.

#### Waste Management Issues for Malaria

There is a lack of policies, strategies, and enforcement of legislation for the handling and disposing of health care waste for malaria; the project, with WHO in Geneva, is part of a working group that will address these issues.

# Foundation for Innovative New Diagnostics: Development and Execution of an EQA Plan for Malaria RDT Specimen Collection and Lot-testing Sites

FIND is working with WHO to provide lot-testing for malaria RDTs; they will also collect and prepare standardized panels of malaria parasites for the global malaria specimen bank, which is the basis for the malaria RDT product testing. Specimen collection and lot-testing follow SOPs procedures developed by WHO and FIND.

To ensure that specimens prepared for the global malaria specimen bank are consistent and of high quality and that the lot-testing results are reliable, an external quality assurance (EQA) program is being developed. This will include periodic assessments using a laboratory assessment tool that was developed from a WHO/Lyon office's general laboratory assessment tool; it is a program of cross-checking and proficiency testing of lot-testing standards and a remedial program to address any identified problems.

With FIND and WHO, we will contract with a QA expert consultant to do the following:

- Review the draft revised EQA laboratory assessment tool and recommend modifications.
- Develop an EQA plan for the lot-testing and specimen collection laboratories supported by the WHO-FIND malaria RDT evaluation program, including the use of the EQA tool, proficiency testing, and remedial assistance.

• Produce a report that explains the plan above and is suitable for public dissemination.

The three regional lot-testing sites used by, or expected to be used by, the project—Ethiopian Health and Nutrition Research Institute, Research Institute of Tropical Medicine Philippines, and Institut Pasteur Cambodia—will support the consultant as he/she conducts the EQA assessment. Dr. David Bell, Malaria Diagnostics Officer at WHO/Western Pacific Regional Office, will provide oversight.

# Develop a Manual On Storage and Transport of RDTs at the Central Level and a Manual on Managing RDTs at the Peripheral Level

The appropriate storage, transport, and handling of RDTs is a key concern for the project. Exposure of RDTs to extreme temperatures and humidity can affect their accuracy and give results that may cause inappropriate management of fever. Similarly, the inadequate management of RDTs at the health facility—level can result in improper use and disposal. Currently, there are no guidelines for the proper storage and transport of RDTs.

Together, FIND, WHO, UNICEF, and the project are developing guidelines for central-level storage and transport of RDTs, as well as guidelines for managing RDTs at the health facility–level. The project's editorial team has drafted a layout for the documents; they have a contract with an illustrator for both documents. WHO and FIND are developing the text for both guidelines. The draft document will be circulated to 12 countries for pilot testing; final revisions should be ready by the end of November 2008. Two thousand–5,000 copies of each manual will be printed and distributed.

## PERFORMANCE MONITORING

The project monitors its performance in two ways. First, we establish a set of deliverables and their dates of submission at the beginning of each annual workplan period, including, in the approved workplan, a table that outlines all deliverables. The USAID Cognizant Technical Officer (CTO) vets the deliverables to ensure that they respond to USAID's monitoring needs; they are formally adopted at the beginning of the fiscal year. At weekly TO3/USAID meetings, project officers regularly update the CTO on the status of the various deliverables. Table 4 presents the agreed-upon deliverables and their status for this reporting period. Almost 100 percent of deliverables were submitted on time. Deliverables that involved other partners (e.g., End-Use Verification Guidance) were occasionally delayed because of difficulties in scheduling meetings, arranging discussions, and approving changes. We received comments from PMI on several deliverables; they will be updated during the first quarter of FY2009.

Table 4. TO3 Deliverables for FY2008

DELIVERABLE	DUE	COMPLETION STATUS
Objective I		
Timely and efficient procurement, management, delivery, and consignment of commodities	Periodic	Ongoing
Commodity management reports	Periodic	Ongoing
Certificates of receipt of goods	Periodic	Ongoing
Revised Commodity Procurement Information Request (order form)	March 31, 2008	Completed on time
Updated list of pre-qualified suppliers for malaria commodities	June 30, 2008	Waiting for the results of the WHOPES meeting December 2008
Product fact sheets	September 30, 2008	Submitted and incorporating feedback received
Matrix with country-specific information (products, quality assurance requirements, shipping, and delivery information, etc.)	September 30, 2008	Submitted and incorporating feedback received
Prepare documentation for freight forwarding and shipping costs to ensure that the project is obtaining competitive pricing	September 15, 2008	Sent to USAID October 10, 2008
Supplier Report Cards (draft)	September 30, 2008	Submitted
LLIN policy (draft)	August 31, 2008	Three policies (LNs, RDTs, pharmaceuticals) submitted to USAID

DELIVERABLE	DUE	COMPLETION STATUS
Objective I		
Agreement in place with WHO/FIND concerning RDT quality		Signed July 26, 2008
MIS Release 2.0	November 21, 2007	November 21, 2007
Release 2.1	February 2008	February 2008
Release 3.0	March 31, 2008	April 14, 2008
Objective 2		
Timely mobilization and response to USAID requests for technical assistance (Objective 2 and 3)	Periodic	Ongoing
End-Use Verification Guidance	Two stock monitoring activities were added (see below)	Guidance document submitted and under review
Conduct end-use monitoring of commodities	One country will have conducted at least one-quarter of supervision (Oct.–Dec. 2008) and reported the results by Jan. 2009. A second country will have done so for Jan.–March 2009 and reported the results by April 2009	Awaiting approval of End- Use Guidance document
Pilot the Procurement Planning and Monitoring Report (PPMR) for malaria commodities	First report due October 1, 2008	First report submitted
Develop quantification and procurement planning guidelines for malaria commodities (draft)	September 30, 2008	Submitted and incorporating feedback received
Develop a capacity transfer checklist to monitor capacity-building for in- country personnel and institutions	TBD	
Other		
Annual Report for FY2007	Draft sent January 28, 2008	Completed
Workplan for FY2008	Draft sent March 10, 2008	Completed
Semi-Annual Report for FY2008	Draft sent June 9, 2008	Completed
Workplan for FY2009	September 30, 2008 (draft)	Submitted
Annual Report for FY2008	November 15, 2008 (draft)	This report

With PMI, we use an agreed-upon set of indicators—the Project Performance Monitoring and Evaluation Plan (PMP)—to complete a second performance monitoring. The PMP describes how and when we will survey, observe, evaluate, and document performance outputs. The PMP includes all the deliverables in table 4; the PMP also contains additional performance indicators. The project and PMP extensively discussed the indicators with PMI; both groups agreed to a final list (see appendix 5), including sources, frequency of collection, and calculation instructions. Additionally, the project is developing a Quality Assurance Surveillance Plan (QASP) that further details the PMP

indicators and provides additional guidance on acceptable performance levels; responsibilities for data collection; and documentation required for verification, substantiation, and commentary on issues that may affect the interpretation of the indicators. See appendix 6 for a draft QASP. Quantification of PMP indicators will begin during the first quarter of FY2009.

Other less formal methods for performance monitoring (and management) are also in place—such as weekly TO3/USAID meetings and the distribution of an updated Current Actions Table (see appendix 7). During weekly meetings with USAID personnel and principal project staff, we discuss all issues related to upcoming procurement and technical activities; together, we decide on how to address any problems. A country-by-country review of all procurements is conducted and their status is updated on the Current Actions Table, which is then updated and made available every week to all PMI and project managers.

## **KEY ACCOMPLISHMENTS**

Fiscal Year 2008 marked the first full year of operation for Task Order3; the year was characterized by increased procurement requests, several emergency shipments, frequent requests for TA, and the continued standardization of all operational procedures. The team quickly and efficiently dealt with challenges and successfully responded to the needs of USAID, PMI, and the country teams.

Following are a few of the highlights from the project's support of the President's Malaria Initiative:

- Procured commodities worth \$35,005,640 for Angola, Benin, Ghana, Kenya, Liberia, Malawi, Mali, Mozambique, Nigeria, Rwanda, Senegal, Tanzania, Uganda, and Zambia. This included 18,423,330 treatments of malaria pharmaceuticals for eight countries; 3,647,235 LNs for seven countries; and 1,754,000 RDTs for three countries. This is almost a seven-fold increase over FY2007 procurements.
- In Liberia, contributed TA for door-to-door distribution of 170,440 LNs during the country's PMI launch, covering nearly 100 percent of the targeted population. This required mobilizing 287 CHWs, 52 conveyors, 14 pickup trucks, 18 motorcycles, 6 canoes, and numerous wheelbarrows.
- In Angola, coordinated emergency in-country ACT distributions to avert pending stockouts, investigated reported leakage, and developed an action plan for increased security.
- In Ghana, provided TA to NMCP to strengthen their management and monitoring of LN distribution to ensure that an overall picture of met and unmet need would be available, enabling the partners to coordinate planning and directing of future activities. Part of this assistance included identifying the challenges and the parameters for developing a database to track the number of LNs distributed through six different channels and strengthening NMCP linkages to institutional sales of LNs. By doing this, we supported efforts by NMCP to stimulate the commercial LN sector, while ensuring that we meet the country LN demand and pursue an effective intervention.
- In Mozambique, piloted a type of cool box in Maputo, Tete, and Quelimane provinces to store malaria commodities, developed training materials on new protocol for malaria treatment for MOH staff, and participated in a malaria working group to produce a three-year plan for addressing malaria.
- In Malawi, incorporated ACT reporting and resupply into the integrated health commodity supply chain. From the LMIS, the project prepares a monthly summary report that provides ACT consumption and months of stock available at all levels of the health system, enabling decision makers from NMCP, CMS, and donors to monitor ACT availability and make resupply and procurement and supply planning decisions.
- Developed wholesaler and manufacturer questionnaires that were used to help identify and ensure quality malaria commodity procurement.
- Conducted several joint assignments with SPS, including productive joint missions to Madagascar and Ghana.

- Participated in a number of international malaria meetings to address and improve the global supply of malaria commodities.
- Took a leadership role in initiating the discussion on management of waste produced by malaria commodities, RDTs, and LNs.
- Created a country-specific matrix on procurement-related information for each PMI country; it contains updated facts about shipping and import procedures and other issues that affect the project's procurement and logistics work.
- The QA team reduced the waiting time for results for testing AS+AQ and SP from the previous six weeks to seven days. To date, we have not received any product-quality complaints from any country.
- Launched a malaria-specific PPMRm that provides central-level stock status for the 15 PMI focus—countries, including months of stock available and planned shipments by supplier/funding source. The report summarizes and highlights, from the country-level data, countries that are currently stocked out, understocked, or overstocked. It also recommends ways to address critical stock issues. We will update this report quarterly through the SPS and project offices.

# IMPLEMENTATION ISSUES AND SOLUTIONS

During the year, several issues—from staffing to funding availability—have affected the project. Most have been solved without major problems.

**Staffing.** During FY2008 we hired a Technical Director for TO3. Unfortunately, he will be leaving the position at the end of November 2008. The project worked with PMI to modify the position description; we are actively recruiting for a new Technical Director. The TO3 director retired at the end of September 2008; she was replaced by the Director of Country Operations for the project's IQC.

Quantification and forecasting. The project is adapting/developing tools for more accurate quantification and forecasting of malaria commodities. We have carefully reviewed tools that have been proven effective for other commodities, and we have incorporated any lessons learned into any adaptations for malaria. Malaria commodity quantification and forecasting poses special difficulties because of the rapid increase in the coverage of malaria interventions, combined with not knowing the impact of the current mix of interventions; this situation is modifying malaria epidemiology in such a way that current forecasting models cannot yet accommodate. The project is adapting tools and conducting operational research to improve methods to ensure that no stockouts are reported because of problems with forecasting.

**Leakage.** Ensuring that the intended recipients receive the PMI's malaria commodities with minimal loss is one of the project's principal stewardship responsibilities. During FY2008, the project encountered problems with leakage of ACTs in Angola, which could have resulted in unavailable ACTs in health facilities. We investigated the chain of custody and found several solutions to the problem. Because some of the corrective action could not be implemented in time for the next ACT shipment, the project, with PMI, assigned two home office staff to oversee the next ACT shipment. Fortunately, some of the apparent leakage was later found to be a misplacement of boxes; a survey of health facilities showed that there was no immediate danger of stockouts. The project is working with local staff to establish mechanisms to control future leakage.

**Managing expectations.** The project has struggled with a key issue during the last year—managing the unrealistic expectations for the delivery of goods and the ability of the project to ensure delivery to the end user.

For procurement, as the purchase of malaria commodities has rapidly increased in tandem with increased international funding (principally for ACTs and LNs), the lead time for delivery has also correspondingly increased. Unexpected or emergency requests have further contributed to dislocations in securing malaria commodities; placing timely and precise orders has become increasingly important. The TO3 procurement team has carefully cultivated good relationships with vendors; we have responded and adapted to impromptu requests. We will continue to work on forecasting protocols and ensuring that PMI teams in countries are aware of the procurement issues that we will face in the near future.

For in-country system strengthening and delivery, PMI and in-country partners have high expectations that the malaria commodities procured and delivered to the country will reach the intended users. However, funding for in-country system strengthening has not always been sufficient to cover the required investments in capacity building if we are going to develop effective and sustainable malaria supply systems. Additionally, in-country distribution is often considered late in the process, or underestimated, requiring rapid mobilization by the project and the identification of additional resources (Liberia and Senegal are two examples). Finally, limited data is available to monitor the extent to which PMI-supported commodities or systems reach the end user. To respond, the project is improving how we define and articulate the system strengthening requirements and the benefits that result from investments in the malaria supply chain; we are also, with in-country partners, improving the way we define in-country distribution requirements. Additionally, as described earlier, the project has worked closely with SPS and PMI to develop the *End-Use Verification Guidance*; we will roll it out in its presence countries during the upcoming fiscal year.

Management information system. The development and launch of the MIS has posed a number of challenges—several are described above—which delayed release 3. Most of the major issues were addressed in the release and the MIS is now in maintenance mode. As is typical with a newly developed MIS, a number of bugs have been identified; the MIS team is solving them under the guidance and prioritization of the MIS Steering Committee and the Change Control Board. Progress and prioritization is reviewed weekly; all members of the Steering Committee receive the reports.

# PLANNED PERFORMANCE OBJECTIVES FOR THE NEXT SIX MONTHS

Based on the FY2009 workplan, during the next six months the malaria team will—

- update product fact sheets for clients' use
- update the list of pre-approved vendors for LNs
- update the country-specific matrix with key product and clearance information
- finalize the QASP, based on PMP indicators
- field test the End-Use Verification Guidance in one country
- roll out the End-Use Verification Guidance in other project-led countries
- update procurement scorecard and submit with semi-annual report
- update QA scorecard and submit with semi-annual report
- prepare and submit quarterly PPMRm report
- recruit a malaria field technical director
- participate in global malaria meetings to provide supply chain perspective.

# **APPENDICES**



Country: Global

Authority: USAID Contract number GPO-I-03-06-00007-00

Source/Origin: Geographic Code 935 Purchaser: John Snow, Inc.

Attn: Miguel Jaureguizar

1616 N. Fort Myer Drive 11th Floor Arlington, VA 22209-3100

Expression of Interest No.: MAL 08-01

Response Deadline: 05:00 PM EDT Jun 13, 2008

John Snow, Inc. is requesting Expressions of Interest from suitably qualified manufacturers of Malaria Rapid Diagnostic Test Kits.

The purpose of this request is to pre-approve manufacturers of Malaria Rapid Diagnostic Tests for procurement under the USAID | DELIVER PROJECT as part of an annual review of the Malaria RDT market.

Only product from successfully pre-approved manufacturers will be considered for procurement. Requests for Quote (RFQ's) will be issued to all pre-approved manufacturers according to project demand.

The authorized USAID Geographic Code for the USAID | DELIVER PROJECT is 935. However certain additional restrictions apply for pharmaceuticals

Phone: 703-528-7474

Email: deliver\_project@jsi.com

Fax: 703-528-7480

The pre-approval criteria will be available free of charge, and can be obtained by emailing mjaureguizar@jsi.com or from http://deliver.jsi.com

Phone requests will not be honored.

#### Technical Criteria for Malaria Rapid Diagnostic Test - Procurement Pre-Approval

#### **Background**

The global procurement of Malaria Rapid Diagnostic Tests (RDTs) has increased rapidly as has the range of commercially available products. Our procurement exercise aims to secure Malaria RDTs of a consistent quality with regards to both sensitivity and stability in malaria endemic countries. Methods to accurately monitor the quality of these tests are required.

Speed of response to field office demands is likely to be critical. To enable this, the establishment of a list of "pre-approved" vendors is necessary. The pre-approval process will also help set up a common standard for manufacturers and their products.

#### **USAID | DELIVER Procurement Pre Approval Criteria**

- 1. Proof of product registration with malaria endemic country's relevant authority, or proof that product is being provided to National Malaria Control Programmes as part of standard malaria diagnosis guidelines.
- 2. Evidence of third party field data testing including stability data. Demonstrate evidence of real time stability testing data of a minimum period of twenty four (24) months. Testing conditions for stability of temperature and humidity should be comparable to those found in typical malaria endemic countries.
- 3. Provide specificity testing results of at least 90% and sensitivity greater that 90%
- 4. Provide evidence of Good Manufacturing Practices in the form of ISO 13485:2003 or 21 CFR 820 covering quality management systems for the manufacturing of medical devices.
- 5. Proof of production capacity such as current customers with delivered orders over 50,000 test kits, complete with contact information.
  - 6. Demonstrated evidence of representation in-country providing product support, including names of personnel or agents, statement of capacity and nature of relationship with manufacturer.
  - 7. Required product shelf life shall be a minimum of 18 months (15 months remaining after delivery in-country). Provide real time data to support storage temperature.
  - 8. Test will be required to be in cassette format and include lancets, swabs, blood transfer device and buffer solution.

- 9. Instruction booklet shall be provided in the appropriate language.
- 10. Statement of willingness to accept pre-shipment QC/QA inspection and testing by independent testing agency designated by Buyer.
- 11. Product has been submitted to the WHO Malaria Product Testing Programme, 2008-currently underway at the Centers for Disease Control, Atlanta, GA.

Task Order 3 - Malaria						
TITLE: ACTs / Coartem	DOCUMENT No.:	Requesting Country:	Date:			
Commodity Procurement Information Request	DEL-PRO-COMM-03					

#### **PURPOSE**

The purpose of this document is to provide product, consignee and country information necessary for procurement, freight, inland clearing and handling. Additionally, all information indicated will be used to create a request for quote and sent to all USAID | DELIVER PROJECT prequalified manufacturers that meet the specifications.

Costs will be provided to you on the basis of the information you provide and will include costs for the commodities and shipping and handling. S&H costs include estimated freight, insurance, clearance, pre-shipment inspection and surcharge.

#### **Product Information**

Please indicate item(s) needed below. If a variation from the standard item is needed, please provide details of your preferred specifications.

Item Number	Item Name	Quantity	Variation Required (please provide rationale)
100004	Artemether/Lumefantrine 20mg/120mg, Pill, 6x1 Blister Pack, 30treatments		
100005	Artemether/Lumefantrine 20mg/120mg, Pill, 6x2 Blister Pack, 30treatments		
100006	Artemether/Lumefantrine 20mg/120mg, Pill, 6x3 Blister Pack, 30treatments		
100007	Artemether/Lumefantrine 20mg/120mg, Pill, 6x4 Blister Pack, 30treatments		
NOTE : For Qua	ntity please specify whether the number entered is for un	its, packs, kit	s, treatments or other unit of measure

#### **Packaging and Labeling Requirements**

Please review and indicate your acceptance or otherwise provide details of your preferred specifications

	Standard Label Specifications	Accepted (Please check box)	Variation Required (please provide rationale)
Markings:	Tertiary (outer shipping unit) packaging, on three adjacent sides with the PMI Logo.		

#### In Country Distribution or Other Logistics Activities

For any activities or assistance needed for this order which will utilize commodity funds, please indicate the activities that will be performed (e.g. TDY travel & per diem, customs clearance, transport to warehousing, security, etc), the dates during which the activities will take place and the estimated budget for those activities.

Activities	Dates	Planned Budget

#### **Delivery Information**

PStannard 011807 Version 5

Delivery information must be complete in order to fulfill order request. Please do <u>not</u> reference a PO Box, physical addresses only. (However, if this information is not yet known, please send this form in with the above information filled in so order preparation can begin.)

Ship To:						
Name:		State/Province:				
Address:		Country:				
City:		Postal Code:				
Consign To: (Please state whether Consignee will arrange Customs clearance – if not please give details of responsible party in the						

Page 1 of 2



Special Delivery I	nstruction	s below)					
Agency Name:							
Contact Name:				State	e/Province:		
Address:				Cour	ntry:		
City:				Post	al Code:		
e-mail:			Phone:			Fax #:	
Desired Delivery	y Date:						
Special Delivery	/ Instruct	ions (optional):					
Client Information	on: (Clie	nt refers to the age	ency or part	y funding the	procurement.	For example:	'USAID – Angola'.)
Agency Name:				State	e/Province:		
Address:				Cour	ntry:		
City:				Post	al Code:		
Contact Name:				Phor	ne #:		
Fax #:				E-ma	nil address:		
Name					Title		
Signature					Date		
Countersigned	Countersigned (by the recipient organization e.g. Ministry of Health, Malaria Control Program)						
Name					Title		
Signature					Date		
Name of Reques	ting/Reci	oient Organization			Official Star	mp	

PStannard 011807 Version 5 Page 2 of 2



Task Order 3 - Malaria

**DOCUMENT No.:** 

**Requesting Country:** 

Commod	ity Procurement Information Request	DEL-	PRO-COM	<i>I</i> I-02				
PURPOSE								
freight, inla	se of this document is to provide product, and clearing and handling. Additionally, ale all USAID   DELIVER PROJECT prequa	l inform	ation indica	teď wi	Il be used to	create a re	quest for quote	
commodit	be provided to you on the basis of the ies and shipping and handling. S&H coand surcharge.							
Product Inf	ormation te item(s) needed below. If a variation from the stan	dard iten	n is needed, ple	ease pro	ovide details of y	your preferred	specifications.	
Item Num	ber Item Name		Quantit No of tes	- 1	Variation Requ	ired (please	provide rationale	∍)
			<u> </u>					
NOIE: les	ts are normally supplied in kits of 25 or 50	tests e	acn, depend	ant up	on the manut	acturer		
	and Labeling Requirements  and indicate your acceptance or otherwise provide	details o	f vour preferred	l specif	ications			
	Standard Label Specifications	A	ccepted se check box)			ed (please p	rovide rationale)	
Markings:	Tertiary (outer shipping unit) packaging, on three adjacent sides with the PMI Logo.	(Fleas	e check box)					
For any activi TDY travel &	Distribution or Other Logistics Requirementies or assistance needed for this order which will utiper diem, customs clearance, transport to warehous dget for those activities.	lize com				ctivities will ta	ke place and the	
	Activities			Dates		Plan	nned Budget	
	formation mation must be complete in order to fulfill order requence is not yet known, please send this form in with the						s only. (However, if	
Ship To:								
Name:		S	tate/Province	:				
Address:		С	ountry:					
City:		Р	ostal Code:					
	: (Please state whether Consignee will arrange ( ery Instructions below)	Customs	clearance – if	not pl	ease give detai	Is of respons	sible party in the	
Agency Nan	ne:							_
Contact Nar	ne:	S	tate/Province					

TITLE: RDTs



Address:					Country:						
City:					Postal Code:						
e-mail:			Phone:				Fax #:				
Desired Delivery	esired Delivery Date:										
Special Delivery Instructions (optional):											
Client Information	on: (Clie	nt refers to the age	ency or par	ty fundir	ng the procurement	. For	example	USAID –	Angola'.)		
Agency Name:					State/Province:						
Address:					Country:						
City:					Postal Code:	Code:					
Contact Name:			Phone #:								
Fax #:					E-mail address:						

PStannard 081408 Version 6 Page 2 of 3



**NOTE:** The USAID | DELIVER PROJECT has pre-approved the following seven RDT manufacturers:

Access Bio	-	CareStart ®	
ICT South Africa	-	Malaria Pf®	
Inverness Medical	-	BinaxNOW ®	
Orchid Biomedical Systems	-	ParaCheck ®	
Premier Medical Corp	-	First Response ®	
Span Diagnostics	-	ParaHIT ®	
Standard Diagnostics	-	Bioline ®	
All of these manufacturers have, a particular RDT please give below	as a minin a brief sta	num, provided evidence of atement of explanation for	satisfactory GMP. If you have stated a preference for a your choice.
Signed (by requesting mission/	organiza	tion)	
Name			Title
Signature			Date
Countersigned (by the recipient	t organiza	ation e.g. Ministry of Hea	lth, Malaria Control Program)
Name			Title
Signature			Date
Name of Requesting/Recipient Or	ganizatio	<u></u> n	Official Stamp

PStannard 081408 Version 6 Page 3 of 3

				_				
Task Order 3- MALARIA								
TITLE: Bed Nets	DOCUMENT No.:	Requesting Country:	Date:					
Commodity Procurement Information Request	DEL-PRO-COMM-01							

#### **PURPOSE**

The purpose of this document is to provide product, consignee and country information necessary for procurement, freight, inland clearing and handling. Additionally, all information indicated will be used to create a request for quote and sent to all USAID | DELIVER PROJECT prequalified manufacturers that meet the specifications.

Costs will be provided to you on the basis of the information you provide and will include costs for the commodities and shipping and handling. S&H costs include estimated freight, insurance, clearance, quality assurance and surcharge.

#### **Product Information**

Please review and indicate your acceptance or otherwise provide details of your preferred specifications

	Standard Specifications	Accepted (Please check box)	Variation Required (please provide rationale)
Net material:	Polyethylene or Polyester (Please check box if either material is acceptable. If not, please indicate which material is required.)		
Net shape:	Rectangular		
Colors:	White		
Impregnation:	Long lasting ITNs		
Impregnation insecticide:	Any WHOPES recommended impregnation insecticide		
Dimensions:	See below for product list. Please indicate size required in next box.		

Quantity	Desired	
Desired:	Delivery Date	e:

#### **Packaging and Labeling Requirements**

Please review and indicate your acceptance or otherwise provide details of your preferred specifications

	Standard Specifications	Accepted (Please check box)	Variation Required (please provide rationale)
Markings:	Bale (tertiary packaging), on three adjacent sides with the PMI Logo.		

#### In Country Distribution or Other Logistics Requirements

For any activities or assistance needed for this order which will utilize commodity funds, please indicate the activities that will be performed (e.g. TDY travel & per diem, customs clearance, transport to warehousing, security, etc), the dates during which the activities will take place and the estimated budget for those activities.

Activities	Dates	Planned Budget

#### **Delivery Information**

Delivery information must be complete in order to fulfill order request. Please do <u>not</u> reference a PO Box, physical addresses only. (However, if this information is not yet known, please send this form in with the above information filled in so order preparation can begin.)

Ship To:							
Name:				State/Province:			
Address:				Country:			
City:				Postal Code:			
	ease state whether the C y in the Special Delivery				arance – if r	not please give deta	ails of
Agency Name:							
Contact Name:				State/Province:			
Address:				Country:			
City:				Postal Code:			
e-mail:		Phone:			Fax #:		
Special Delivery	Instructions (optional):						
Client Information	on: (Client refers to the age	ancy or na	rty fundii	na the procurement	t For evam	ole 'LISAID — Angola	······································
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Address:				Country:			
City:				Postal Code:			
Contact Name:				Phone #:			
Fax #:				E-mail address:			

NOTE: The USAID | DELIVER PROJECT has pre-qualified the following six LLIN manufacturers: **BASF** Interceptor ® Bestnet Europe (Intection) Netprotect ® Clarke Mosquito DuraNet ® Sumitomo Chemical Olyset ® Tana Netting DawaPlus ® Vestergaard Frandsen PermaNet ® All of these manufacturers have, as a minimum, WHOPES Stage I approval. Please give below a brief statement confirming the WHOPES status LLIN that is required and the reason why - e.g. National Malaria Control Program standards require a WHOPES level of Signed (by requesting mission/organization) Title Name Signature Date Countersigned (by the recipient organization e.g. Ministry of Health, Malaria Control Program) Title Name Signature Date Name of Requesting/Recipient Organization Official Stamp



	LLIN Product List									
Material	Insecticide	Strength	Size	Color	Shape	Ordering Unit				
Polyethylene	Permethrin	150 denier	100cm x 180cm x 150cm	White	Rectangular	Piece				
Polyethylene	Permethrin	150 denier	130cm x 180cm x 150cm	White	Rectangular	Piece				
Polyethylene	Permethrin	150 denier	160cm x 180cm x 150cm	White	Rectangular	Piece				
Polyethylene	Permethrin	150 denier	190cm x 180cm x 150cm	White	Rectangular	Piece				
Polyethylene	Alpha-cypermethrin	145 denier	70cm x 150cm x 180cm	White	Rectangular	Piece				
Polyethylene	Alpha-cypermethrin	145 denier	100cm x 150cm x 180cm	White	Rectangular	Piece				
Polyethylene	Alpha-cypermethrin	145 denier	130cm x 150cm x 180cm	White	Rectangular	Piece				
Polyethylene	Alpha-cypermethrin	145 denier	160cm x 150cm x 180cm	White	Rectangular	Piece				
Polyethylene	Alpha-cypermethrin	145 denier	190cm x 150cm x 180cm	White	Rectangular	Piece				
Polyethylene	Deltamethrin	100 denier	130cm x 180cm x 150cm	White	Rectangular	Piece				
Polyethylene	Deltamethrin	100 denier	130cm x 180cm x 170cm	White	Rectangular	Piece				
Polyethylene	Deltamethrin	100 denier	160cm x 180cm x 150cm	White	Rectangular	Piece				
Polyethylene	Deltamethrin	100 denier	160cm x 180cm x 170cm	White	Rectangular	Piece				
Polyethylene	Deltamethrin	100 denier	190cm x 180cm x 150cm	White	Rectangular	Piece				
Polyethylene	Deltamethrin	100 denier	190cm x 180cm x 170cm	White	Rectangular	Piece				
Polyester	Deltamethrin	75 denier	70cm x 180cm x 150cm	White	Rectangular	Piece				
Polyester	Deltamethrin	75 denier	100cm x 180cm x 150cm	White	Rectangular	Piece				
Polyester	Deltamethrin	75 denier	130cm x 180cm x 150cm	White	Rectangular	Piece				
Polyester	Deltamethrin	75 denier	160cm x 180cm x 150cm	White	Rectangular	Piece				
Polyester	Deltamethrin	75 denier	190cm x 180cm x 150cm	White	Rectangular	Piece				
Polyester	Deltamethrin	100 denier	70cm x 180cm x 150cm	White	Rectangular	Piece				
Polyester	Deltamethrin	100 denier	100cm x 180cm x 150cm	White	Rectangular	Piece				
Polyester	Deltamethrin	100 denier	130cm x 180cm x 150cm	White	Rectangular	Piece				
Polyester	Deltamethrin	100 denier	160cm x 180cm x 150cm	White	Rectangular	Piece				
Polyester	Deltamethrin	100 denier	190cm x 180cm x 150cm	White	Rectangular	Piece				
Polyester	Alpha-cypermethrin	75 denier	160cm x 180cm x 150cm	White	Rectangular	Piece				
Polyester	Alpha-cypermethrin	75 denier	190cm x 180cm x 150cm	White	Rectangular	Piece				
Polyester	Alpha-cypermethrin	100 denier	160cm x 180cm x 150cm	White	Rectangular	Piece				
Polyester	Alpha-cypermethrin	100 denier	190cm x 180cm x 150cm	White	Rectangular	Piece				

AMONAL DEVELO	FROM THE AMERICAN PEOPLE				-			
	Task	Order 3	- Malaria					
TITLE: P	Pharmaceuticals/Medical Supplies	DOCU	MENT No.	.:	Requesting Coul	ntry:	Date:	
Commod	lity Procurement Information Request	DEL-PF	RO-COM	VI-04				
PURPOSE								
freight, inla	se of this document is to provide product, on and clearing and handling. Additionally, all boall USAID   DELIVER PROJECT prequa	informat	ion indica	ted wil	I be used to creat	e a red	quest for quot	
commodit	be provided to you on the basis of the ies and shipping and handling. S&H co and surcharge.							ent
Product Inf	ormation te item(s) needed below. If a variation from the stand	dard item is	s needed, ple	ease pro	ovide details of your p	referred	specifications.	
Item Numb			Quanti			mment		
	Quantity please specify whether the number ente							
Packaging Please review	and Labeling Requirements v and indicate your acceptance or otherwise provide of the standard Label Specifications	Acc	epted		cations riation Required (pl	ease pi	rovide rational	e)
Markings:	Tertiary (outer shipping unit) packaging, on	(Please C	check box)					
markings.	three adjacent sides with the PMI Logo.	<u> </u>						
For any activi TDY travel &	<b>Distribution or Other Logistics Activities</b> ties or assistance needed for this order which will util per diem, customs clearance, transport to warehousidget for those activities.					s will tal	ke place and the	
	Activities			Dates		Plan	ned Budget	
	f <b>ormation</b> mation must be complete in order to fulfill order reque on is not yet known, please send this form in with the						only. (However	·, if
Ship To:								
Name:		Stat	e/Province	:				
Address:		Cou	ntry:					
City:		Pos	tal Code:					
Consign To	c: (Please state whether Consignee will arrange C	ustoms cl	earance – if	f not ple	ease give details of r	espons	ible party in the	•

Agency Name:



Contact Name:				State/Province:				
Address:				Country:				
City:				Postal Code:				
e-mail:			Phone:		Fax #:			
Desired Deliver	y Date:							
Special Delivery	/ Instruct	ions (optional):						
Client Informati	on: (Clie	nt refers to the age	ncy or party f	unding the procurement	t. For example:	'USAID – Angola'.)		
Agency Name:				State/Province:				
Address:				Country:				
City:				Postal Code:				
Contact Name:				Phone #:				
Fax #:				E-mail address:				
Name				Title				
Signature				Date				
Countersigned	(by the re	ecipient organizat	ion e.g. Mini	stry of Health, Malaria	Control Progra	am)		
Name				Title				
Signature				 Date				
Name of Reques	ting/Reci	oient Organization		Official S	tamp			

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# APPENDIX 3: SHORT-TERM TECHNICAL ASSISTANCE (COUNTRY SUMMARIES)

#### **Angola**

#### (October 27, 2007 - November 10, 2007) Marlon Banda, Gustav Malangu

In October, Marlon Banda, the project Procurement Coordinator, traveled with Gustav Malangu, a consultant from the Fuel Group, to Angola in a visit that was designed to: establish collaborative relationships with the NMCP and other stakeholders; prepare the ground work for effective port clearance of ACTs and RDTs; and develop a clear plan on how these commodities would be stored and distributed to the 18 provinces in the country.

#### (December 2, 2007 - December 17, 2007) Marlon Banda

In December, the Procurement Coordinator returned to Angola to provide hands-on support to the NMCP and NEDP in receiving and distributing a large shipment of ACTs. The visit was used to complete agreements with a local distribution agent and review the ACT distribution plan. When the delivery of ACTs was delayed due to difficulties with the airline, the TA provider worked with local stakeholders and supported efforts to deliver emergency stocks of AL to various provinces where stock-outs of anti-malarial pharmaceuticals were anticipated.

#### (August 4, 2008 – August 8, 2008) Marlon Banda

Following reports of leakage of ACTs in Angola, Marlon Banda traveled to Angola to investigate the circumstances of the losses, and provide recommendations to ensure the security of future consignments. These recommendations were implemented with the following shipment of ACTs from PMI.

#### Ghana

#### (January 5, 2008 – January 20, 2008) Dragana Veskov, Jaya Chimnani

In January, the Malaria Task Order sent a pair of technical advisors to Ghana to perform a joint assessment with MSH/SPS that examined the supply systems and pharmaceutical care management systems in Ghana. The team conducted a number of activities: stakeholder meetings, interviews with key participants in these systems, work planning and systems review workshops and visits to public and private sector health facilities. Following the assessment, the TA providers proposed a work plan which contained recommended strategies and activities to optimize the performance of these systems, and implementation plans were prepared for 2008 in accordance with the needs and resources identified in Ghana's MOP.

#### (September 8, 2008 – September 26, 2008) Marlon Banda, Chris Warren

In September, two members of Task Order Malaria traveled to Ghana to help strengthen management of ITN distribution by NMCP. This assistance included identifying the challenges and parameters for developing a database for tracking the numbers of ITN

distributed through all channels, and strengthening NMCP linkages to institutional sales and of ITNs to different groups.

#### Madagascar

(March 2, 200 – March 22, 2008) Isabelle Creamer (The Fuel Group) (June 23, 2008 – June 27, 2008) Isabelle Creamer (The Fuel Group)

A technical consultant from the Fuel Group conducted a joint assessment with MSH/SPS to help initiate PMI activities in Madagascar. The assessment was used to provide an overview of current capacities, update existing information and delineate a course of action for each project. The team developed corresponding work plans that highlighted how the different projects will be coordinating efforts and responsibilities in FY08. The visit was also used to gather information to facilitate the procurement and delivery of LLINs and RDTs in the upcoming year.

#### Malawi

(September 23, 2007 – October 5, 2007) Marlon Banda (October 1, 2007 – October 14, 2007) Greg Roche (October 14, 2007 – October 19, 2007) Phillip Kamutenga (Crown Agents) (December 10, 2007 – December 21, 2007) Phillip Kamutenga (Crown Agents) In the first six months of FY08, TO3 provided STTA to Malawi on several occasions, beginning in September and October with team members and consultants helping to support the arrival of a large shipment of ACTs. Following the successful receipt and clearance of the shipment, a Crown Agents consultant was sent to perform spot checks at a random sampling of health facilities in order to assess the performance of Malawi's supply chain. The information gathered in this assessment was quickly put to use in December when a second shipment of ACTs was sent to Malawi, and this same TA provider returned to facilitate clearance and distribution activities.

(July 14, 2008 – July 26, 2008) Chris Warren, Khumbulani Mpofu (The Fuel Group) Malawi requested technical assistance from Task Order Malaria to conduct an assessment to estimate the size and costs for constructing a Central Level Warehouse. The results of the assessment provided CMS with general costing information for a scenario involving a Central Level Warehouse that could contribute to systematic improvements. The assessment also presented several other scenarios to address CMS' needs, and suggested that after consideration of other possible solutions to address their concerns, CMS present these findings to both the Ministry of Health and the donor community to help mobilize resources to fund possible improvements leading towards logistics system strengthening.

#### Liberia

(October 19, 2007 – November 2, 2007) Ralph Rack, Meba Kagone (January 7, 2008 – April 19, 2008) Split between Meba Kagone, Janne Hicks Polina Flahive, Marlon Banda In October, two technical advisors from the project traveled to Liberia to assess the LLIN logistics system and prepare an action plan for LLIN distribution throughout the country. During their visit they also identified personnel and programmatic requirements for the project in the upcoming fiscal year and made preliminary decisions regarding staffing and office space for a USAID|DELIVER PROJECT office in Monrovia. Advisors returned to Liberia in January and stayed through April to assist in the implementation and administration of door-to-door LLIN distribution activities in two counties in association with the PMI launch, finalized the Liberia workplan and continued working to establish a project office.

#### Senegal

#### (June 8, 2008 - June 27, 200) Meba Kagone

USAID/Senegal requested that the project assist with the distribution of 790,000 LNs down to 31 districts in June. The net manufacturer, Netmark, handled distribution to 5 regions, and a technical advisor from the USAID | DELIVER PROJECT traveled to Senegal to coordinate the transport of the LNs to the district level in conjunction with the NMCP, the Mission and Agility, the company selected to deliver the nets. Despite an unforeseen 11 day delay caused by a lack of berthing stations at the port, our advisor was able to make the necessary arrangements to carry out the rapid and efficient distribution of nets to the regions, and then down to the districts.

Performance Monitoring Plan (Draft)

6-Aug-08

Deliverables	U-Aug-00 Indicators	Numerator/ Denominator	Source	Frequency	Comments
	ovision of malaria commodities to programs (50-60 percent LOE)	Numerator/ Denominator	Source	Frequency	Comments
irect procurement services	ovision of maiaria commodities to programs (50-00 percent LOE)				
	Monthly scorecard available which includes the following the indicators: TBD	Number of scorecards with 80% of the indicators available/ number of months	Delphi R3, Management reports	Monthly	Upon finalization of the forma
Procurement adhering to USG guidelines and requirements	Percentage of subcontracts over \$100,000 within ceiling	Number of subcontracts over \$100,000 within ceiling/ Total number of subcontracts over \$100,000	Program records	Annual	
	Percentage of subcontracts over \$100,000 in compliance	Number of subcontracts over \$100,000 in compliance/ Total number of subcontracts over \$100,000			
	Value and quantity of pharmaceuticals and health commodities purchased by the program, by product category (listed below) and by country		Delphi R3	Semi-annual	Value of the products only? Or does it include shipment/ QA/ insurance?
	- LLIN - RDT - Pharmaceutical - Laboratory material - Other				
Orders shipped on time	Percentage of orders available for shipping within 10 working days of contracted date with the vendors	f Number of orders available for shipping within 10 working days of contracted date with the vendor/ Total number of orders placed to the vendor	Delphi R3		
	Percentage of orders shipped to the countries within 10 working days of contracted date with the vendors	Number of orders shipped to the countries within 10 working days of contracted date with the vendors/ Total number of orders placed to the vendors	Delphi R3	Semi-annual	the date given to the mission after the money has been made available and we've received a completed CPIR
	Percentage of orders received by the countries within a month of agreed date with the mission	Number of orders received by the countries within a month of agreed date with the mission/ Total number of orders placed by countries	Delphi R3	Semi-annual	The CPIR has been received and the money is available for the order
Suppliers deliver ordered commodities to satisfy contractual requirements	Supplier fill rate (contracted quantity on time) (by products)	Number of on-time delivery of the agreed upon quantity/ Total number of orders placed	Delphi R3	Semi-annual	Full quantity means agreed upon quantity with mission at the time of order placement
	Median number of days required to contract one commodity from CPIR announcement to contract signing		RFP/RFQ posting and contract signing dates	Semi-annual	Our responsiveness in dealing with the order and approaching the vendors
Aanagement information system ( all the propo	sed indicators were replaced with new indicators suggested by USAII	D)		1	1
Availability of functioning MIS to USAID PMI staff	Percentage of times MIS is available		Source?		Ask Ann Marie about what is possible and what not
Total number of visits	Total number of visits		Source?		
Number of logins	Total number of logins		Source?		
Frequency of MIS update	Number of times MIS data base is updated every three days		Source?		Data are updated into MIS twice every day

Deliverables	Indicators	Numerator/ Denominator	Source	Frequency	Comments
Quality assurance and quality control					
Quality assurance and quality control procedures established and implemented	% of LLIN shipments with pre-shipment test reports available	Number of LLIN shipments with pre-shipment test report available/ Number of LLIN sent for pre-shipment testing	QA/QC Report Cards, certificates of conformation	Semi-annual	
	Median time (in days) and <b>range</b> required for pre-shipment LLIN tests reports				
	% of RDT shipments with up to date post-shipment test reports available	QA/QC Report Cards, certificates of conformation	Semi-annual	Based on SOPs	
	Median time (in days) and <b>range</b> required for up to date post- shipment RDT test reports			Semi-annual	
	% of pharmaceutical shipments with pre-shipment certificates of conformance	Number of pharmaceutical shipments with pre-shipment certificates of onformance/ Number of pharmaceutical shipments	QA/QC Report Cards, certificates of	Semi-annual	Ask Steve
	Median time (in days) and <b>range</b> required for pre-shipment pharmaceutical test reports	conformation	Semi-annual		
	tems and capacity for management of malaria commodities (30-40				
Respond to STTA needs as per mission requested to strengthen in-country SCM for malaria commodities	is (depending on availability of field funds for supply chain strength.  Timely response to ad hoc TA needs: % of STTA trips per Mission's ad hoc request conducted on time (within one month of the requested date)	Number of ad hoc STTA requests filled within one month of	Program documents	Semi-annual	Outside of workplan
In-country supply chain data management system developed or improved	Quantity of malaria commodities (LLINs, SP tablets, ACT treatments, RDTs) distributed in country using funds obligated to USAID   DELIVER project		Management reports, Delphi3, LMIS, program records/reports	Semi-annual	Even the products we did not purchased
	Number of countries receiving field support TA funds reporting on availability of malaria (tracer) commodities at service delivery points/LLIN outlets		Supervision visits	Semi-annual	Countries where the project is leading PMI's end use monitoring
				Semi-annual	For countries that have LMIS
	Number of countries receiving field support TA funds reporting on supply chain performance		Supervision visits	Semi-annual	Countries where the project is leading PMI's end use monitoring
	Number of staff trained on the supply chain management of malaria commodities		Activity reports	Semi-annual	Anybody who were trained other than USAID   DELIVER PROJECT staff
	Number of countries with field support TA funds reporting central level ACT stock in quarterly stock monitoring report		Quarterly stock monitoring report	Semi-annual	Countries where the project is leading PMI's central stock monitoring reporting
Objective 3: Improve global supply and availa	ability of malaria commodities (5-7 percent LOE)	1			
Support global and regional stakeholders/forums of SCM technical issues	Number of hits (downloads) of project materials from website every month				
	Number of global, regional and country level malaria initiatives with DELIVER technical participation				

Updated: 23-Sep-08 TO Malaria - Current Actions

									OAA			
	Funds from			RO		Original MOP		Order Form	Action		POD	
Country	Fiscal Year	Product or Service	Quantity	Number	Cost	Budget	Date Needed In Country	Completed	Completed	Arrival Date	Reports	Status
						\$4,000,000 for	-					
Angola	FY07	Coartem	1,483,710	61	Total: \$2,069,00			X	NA	19-Dec-07	X	Order arrived.
		Coartem	1,152,000	474	\$1,198,137		End of April/early May	X	NA	9-Jun-08		Order arrived.
						\$575,000 for RDTs and lab						
		RDTs	375,000	91	\$257,400 CIF	equipmen	Mid-January 2008	X	X	10-Apr-08	X	Order arrived.
		RDTs	375,000		\$258,707		June-08	X	ļ	26-Jun-08		Order arrived. Samples sent to WHO.
		Microscopes and malaria microscopy kits	25	75	\$95,000		Jan-Feb 2008	X	NA	10-Apr-08	X	Delivered to Angomedica 13-May
												\$2,265,000 early money for Coartem, clearance, delivery to Luanda central warehouse. CPIR received, order being
	FY08	Coartem				\$4,000,000		X	NA			placed for Jan-09 delivery.
		RDTs	600,000			\$450,000						
Benin	FY07	LLINs	150,000	31	\$869,961	N/A	ASAP	X	X	26-Sep-07	X	Order arrived
		CD (1st skinssest)	1.234 11		624.752	N/A	Endo Novembro 07	v	x	2 M 09		Outropied
		SP (1st shipment)	1.2 M tablets		\$34,753	IN/A	Early November-07	X	Α	3-Mar-08		Order arrived.
		SP (2nd shipment)	1.1M tablets 1,073,490	111	\$34,697			X	X	16-May-08		Order arrived.
		Coartem	treatments	78	\$650,486 CIF	N/A	Early November-07	X	NA	11-Mar-08	X	Order arrived.
			Treatments for									
	FY08	Coartem	children under 5, quantities TBD		\$75,000 CIF approx.	\$82,000	TBD		NA			
												Order ready for dispatch: Nov - 280,000; Feb 09 -
		LLINs	600,000			\$4,200,000	ASAP	X	X			280,000; May 09 - 275,000
		Artesunate suppositories for pre- referral treatment of severe										
		malaria	180,000			\$68,000						
		Ouining drug kits for in patient										
		Quinine drug kits for in-patient treatment of severe malaria	50,000			\$400,000						
		Microscopes, reagents	30			\$110,000		X				For IMaD project (MCDI). Catalog sent. CPIR received. Clarifying specifications.
Ethiopia	FY08	RDTs (tentative)				\$750,000	1	l				
Енноріа	1100	Lab Equipment				\$400,000						
						1	i e					CPIR received, clarification ongoing with DELIVER
Ghana	FY08	LLINs	350,000			\$2,200,000						office.
		Lab equipment (and RDTs)				\$375,000						Mission waiting for the lab assessment information from IMaD
		Second-line ACTs, rectal				\$575,000						IIVAUD
		artesunate, severe malaria treatment and supplies				\$1,200,000		X				Order placed.
	<u> </u>								1			
Kenya	FY08	SP Coartem	840,000 397,440		\$390,643	\$110,000 \$4,300,000		X	NA		X	Order arrived.
	+	Coartem	397,440		\$390,043	\$4,500,000	ASAP	X	NA NA		X	Order arrived. Order arrived.
		RDTs				\$120,000						
		LLINs										\$600,000 MAARD pending; received LLIN specifications clarifying with Mission.
	*		l l									

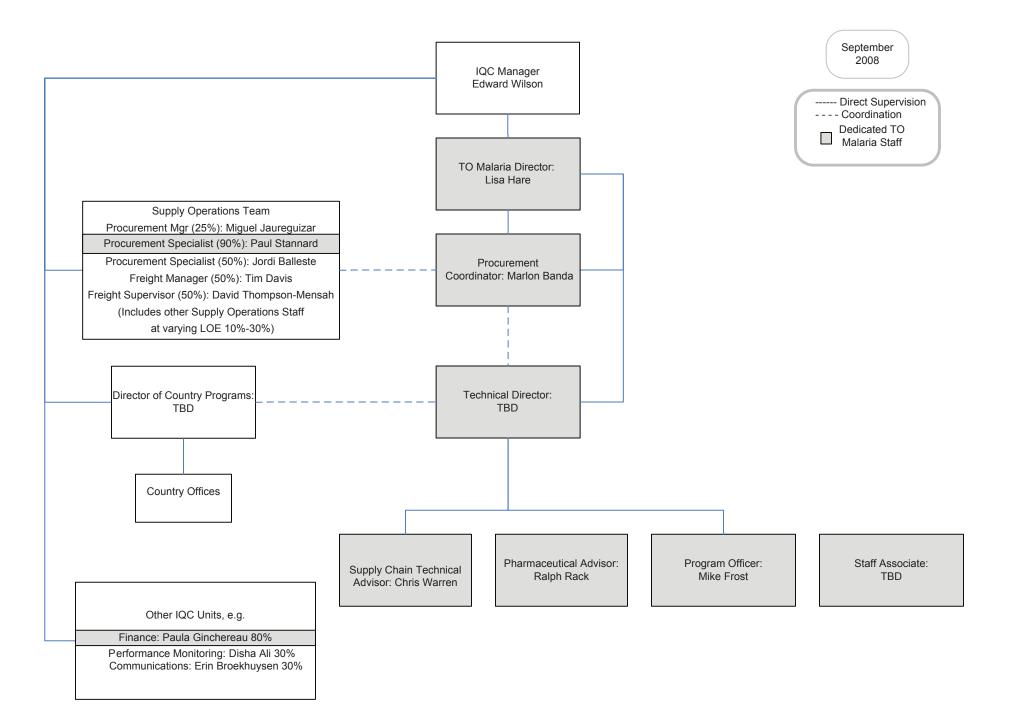
Updated: 23-Sep-08 TO Malaria - Current Actions

	F 1.6			no.		0 : : 13400		0.1.5	OAA		POD	
Country	Funds from Fiscal Year	Product or Service	Quantity	RO Number	Cost	Original MOP Budget	Date Needed In Country	Order Form Completed	Action Completed	Arrival Date	Reports	Status
Liberia	FY07	AS+AQ	496,000	62	\$283,026	N/A	October-07	X	X	26-Jan-08	X	Order arrived.
Liberia	- 1107		150,000	02	Ψ263,026	101	October-07			20-3411-00	А	order darrived.
	FY08	LLINs	480,000			\$3,360,000						CPIR received from Mission; clarification in progress.
		RDTs	1,200,000			\$700,000						CPIR received from Mission for RDTs and treatments; clarification in progress.
	+	Lab Supplies	1,200,000			\$100,000						ciarification in progress.
			255,000 for									
			children<5;									
			148,000 for ages 5- 14; 550,000 for									\$1,070,000 early money. Some money to be used for
		AS+AQ	over 14			\$1,270,000						LLINs.
			675,000 IM									
		Severe malaria drugs	artemether; 32,500 IV quinine			\$345,000						
Madagascar	FY08	LLINs	460,000			\$3,650,000						RFQ closed. Results being analyzed.
		RDTs	300,000			\$265,000						
		ND 13	300,000			\$205,000						
		Microscopy-releated equipment	300,000			\$20,000						
	1					\$6,100,000 for						
Malawi	FY07	Coartem	2,608,410	36	\$2,702,710	ACT:		X	NA	27-Sept. 07	X	Order arrived.
	+	Coartem	2,311,200	65	\$2,596,000		December-08	X	NA	15-Dec-07	X	Order arrived.
		ACTs			\$3,700,000							Commodity funding from MAARD: \$1,430,713
												\$3,000,000 early money.
	FY08	Coartem	668,160		\$745,300	\$6,450,000		X	NA	9-Jun-08		Order #3 arrived, DELIVER office verifying carton coun
												Order #4 placed w/ one-third delivery scheduled for Aug
							August-08	X				Sept, Oct. Aug portion arrived. Sept portion in transit in more than one portion.
												CPIR received for order #5 (delivery requested for Nov,
							Nov- 08, Jan-Feb-09	X				Jan and Feb). Reviewing quantification. Order #5 quantities adjusted to meet budget; awaiting funding.
Mali	FY07	LLINs	169,800 212,000	32 80	\$914,317 CIF \$1,127,552 CIF			X	X	23-Oct. 07 20-Feb-08	X	Order arrived Order arrived.
			212,000		φ1,121,332 CH	14/2	1 Corum y-08			20-1 00-08		
												Mission has initiated request for LLINs for \$3,723,500;
	FY08	LLINs	660,000			\$3,723,500		X				reviewing quotes from vendors.
		SP				\$96,000		X				Early money: \$96,000 for SP; reviewing quotes from vendors.
	+	RDTs				\$120,000		A			-	Tonas and the second se
		Lab equipment				\$73,000						Early money: \$25,000 for lab consumables
		ACTs and severe malaria drugs				\$964,500						Early money: \$371,000 for treatment drugs
		Consumables for sentinel surveillance sites				\$25,000						
				0.2				.,,				
Mozambique	FY07	ACTs	1,440,000	92	\$1,931,700	\$3,000,000	March-08	X	NA	14-May-08	X	Order arrived.
	FY08	AL, Quinine and related supplies				\$3,250,000		X				CPIR received for AL. Requested delivery date of Januar 2009.

Updated: 23-Sep-08 TO Malaria - Current Actions

									OAA			
C	Funds from Fiscal Year	Product or Service	Quantity	RO Number	Cost	Original MOP Budget	Date Needed In Country	Order Form	Action	Arrival Date	POD Reports	Status
Country	riscai Year	Product or Service	Quantity	Number	Cost	Биадет	Date Needed in Country	Completed	Completed	Arrivai Date	Reports	Status
Nigeria	FY07	AS+AQ			\$1,155,000	N/A						Expecting formal request.
		LLINs	96,000	105	\$478,540 CIF	N/A	December-07	X	X	6-Apr-08		Order arrived.
		LLINs	750,000				Beginning of November		X			Order placed; Calabar nets ETA early December.
Rwanda	FY07	LLINs	550,000	114	\$2,182,735	\$3,150,000	November-07	X	X			LLINs to be ready for inspection in Sept. ETA early Nov.
		CHW HBMF Kits			\$112,379							Local procurement for 6,176 CHWs. Cost includes distribution and DELIVER charges.
		Coartem			\$258,000	\$258,000	TBD					
	FY08	LLINs	300,000			\$1,800,000						Order #2: technical specs received. Will send CPIR for review and signature by Mission and NMCP.
		SP and folic acid	1,000,000 (SP)			\$80,000						
		Lab commodities (and RDTs)				\$100,000						
		Injectable Artemether and severe malaria drugs	60,000 (Injectable Artemether)			\$195,000						
		AL				\$800,000						
Senegal	FY07	LLINs, lab equipment		102	\$455,000	N/A	LLINs April 08	X				Final shipments of non-hazardous items arrived. Hazardous items to be shipped October.
	FY08	LLINs	790,000	102	\$4,062,393	\$4,270,000						\$4,270,000 early money. Order arrived. Distribution completed.
		Laboratory consumables Severe malaria kits				\$15,000						For FY09
Tanzania	FY07	RDTs for Zanzibar	150,000	48	\$93,000	\$130,000	ASAP	X	X	3-Oct. 07	X	Order arrived
Tanzania	F 107	RDTs for the Mainland	130,000	40	\$500,000	\$500,000		Λ	_ ^	3-Oct. 07	A	Order arrived
		RDTs for UNHCR	350,000	107	\$232,740 CIF		Feb-08?	X	X	1-May-08		Order arrived.
	-	Coartem for ADDOs Coartem for UNHCR	532,770 146,730	100	\$690,487	\$500,000 \$350,000		X	NA NA	10-Oct. 07 6-Mar-08	X	Order arrived
	-	Treatment for severe malaria	146,730	100	\$159,500 CIF approx. \$100,000	\$100,000		A	NA	0-Mar-08		Order arrived
		Treatment for Severe manax			\$100,000	\$100,000	IBD					
	FY08	RDTs for the Mainland				\$500,000			X			CPIR received for 725,000. OAA approvals received and orders placed.
		RDTs for Zanzibar				\$205,000						May request for December 2008
	-	Coartem for ADDOs Coartem for UNHCR				\$1,900,000 \$400,000			NA NA			
		Procurement of new therapies to							INA			
		be evaluated		_		\$100,000					_	
Y	FY07	LLINs	350,000	108	\$1,715,000 CIF	\$2,725,000	January	X	X	Delivery commenced 7- May-08		Total 350,000 LLINs delivered.
Uganda	FY08	Severe and pre-referral malaria drugs	330,000	100	\$1,713,000 CIF	\$650,000	January	A	A	Way-00		SPS to do quantification. Signed CPIR received for injectable artemether, seeking clarifications.
Zambia	FY07	LLINs	78,315	71	\$379,800 CIF	N/A	ASAP	X	X	28-Jan-08	X	Order arrived.
Amoia	1107	RDTs (ICT)	979,000	77	\$550,043 CIF	N/A		X	X	7-Jan-08	X	Order arrived.
	FY08	LLINs	400,000			\$2,450,000			I			
	1	RDTs	645,000	0.42		\$400,000		N/	27.4			
	+	AL		843		\$1,000,000		X	NA			Order arrived.
	1	LLINs (SFH)	120,000				1	X	1			Order placed; ready for inspection end of September.

## Appendix:





#### **USAID | DELIVER PROJECT**

John Snow, Inc. 1616 Fort Myer Drive, 11th Floor Arlington, VA 22209 USA Phone: 703-528-7474

Fax: 703-528-7480
Email: askdeliver@jsi.com
Internet: deliver.jsi.com