Long-lasting Insecticidal Nets Supplier & Partner Consultative Meeting

26 September 2019

Singapore



LLIN Supplier & Partner Consultative Meeting Agenda

- 1. ITN Policy Update
- 2. WHO Prequalification Vector Control Update & Progress
- 3. Global Fund Responsible Procurement Update
- 4. Global Fund, PMI, UNICEF LLIN QMS: Collaborative Expectations
- 5. IVCC Vector Control Product Development Pipeline
- 6. UNICEF Procurement Update
- 7. PMI LLIN Sourcing & Procurement Update
- 8. Global Fund LLIN Procurement Strategy



Dr. Kate Kolaczinski Malaria Team, The Global Fund LLIN suppliers meeting, Singapore, September 2019



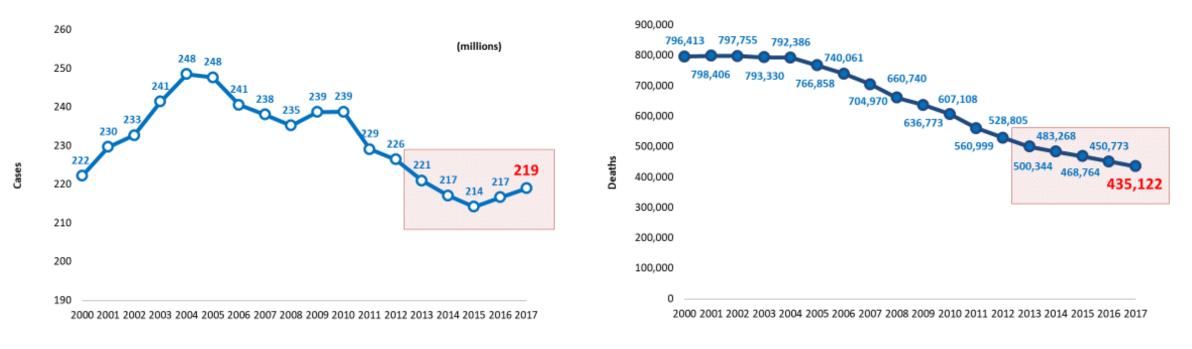
Outline

- 1. Malaria and funding landscape
- 2. ITN policy landscape
- 3. Global Fund approach to funding ITN interventions
- 4. Question and answer

1. Malaria and funding landscape

Number of malaria cases

Number of malaria deaths



Figures: Alastair Robb, Global Malaria Programme, WHO

டூ The Global Fund டு Le Fonds mondial டு El Fondo Mundial டு Глобальный фонд டு 全球基金 الصندوق العالمي டு

ITN ownership and coverage (Sub-Saharan Africa), 2010–17

Percentage of population at risk with access to an ITN and sleeping under an ITN, and percentage of households with at least one ITN and enough ITNs for all occupants, sub-Saharan Africa, 2010–2017 Source: ITN coverage model from MAP.^a

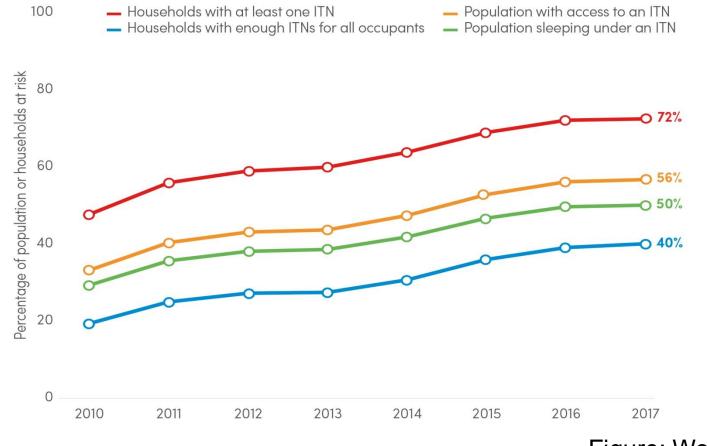


Figure: World Malaria Report, 2018

ITN: insecticide-treated mosquito net; MAP: Malaria Atlas Project.

^a http://www.map.ox.ac.uk/

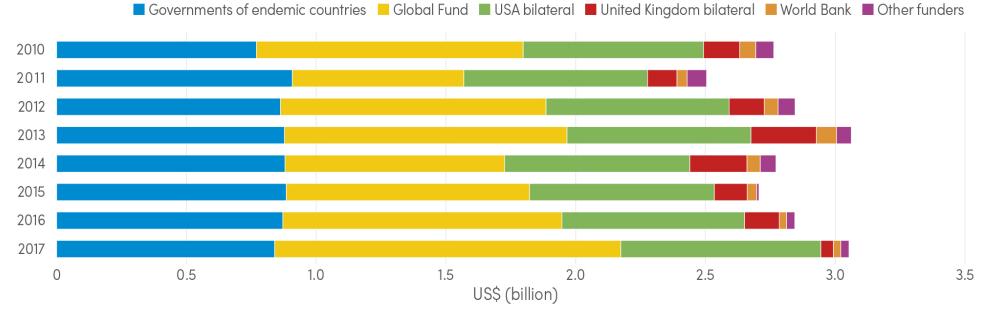
ூ TheGlobal Fund ூ Le Fonds mondial ூ El Fondo Mundial ூ Глобальный фонд ூ 全球基金 الصندوق العالمي இ

- Biological challenges
 - Insecticide resistance
 - Drug resistance
- Tools challenges
 - o Durability
 - \circ Efficacy
 - Residual transmission
- Systemic and contextual challenges
 - Health systems
 - Economic environments
 - Climate and climate change?
 - Insufficient funding for full needs

Stagnation in funding levels since 2010

FIG. 2.3.

Funding for malaria control and elimination 2010–2017, by channel (constant 2017 US\$) Sources: ForeignAssistance.gov, United Kingdom Department for International Development, Global Fund, NMP reports, OECD creditor reporting system database, the World Bank Data Bank and WHO estimates.



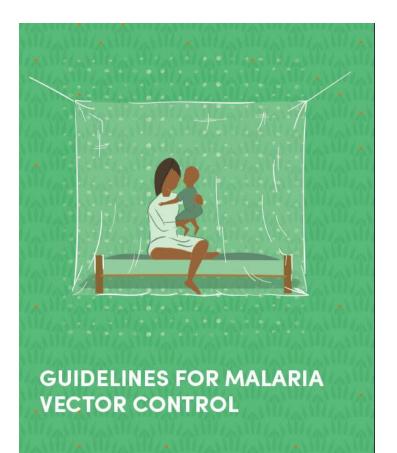
NMP: national malaria programme; OECD: Organisation for Economic Co-operation and Development; USA: United States of America; WHO: World Health Organization.

Figure: World Malaria Report, 2018

ூ The Global Fund の Le Fonds mondial の El Fondo Mundial の Глобальный фонд の全球基金 الصندوق العالمي の 🥑 🔰 🤋

2. ITN policy landscape

ூ The Global Fund ூ Le Fonds mondial ூ El Fondo Mundial ூ Глобальный фонд ூ 全球基金 الصندوق العالمي இ பி



World Health Organization

- WHO Guidelines for malaria vector control
- New document published in mid 2019
- Combines all guidelines on different vector control interventions in once place
- Operational manuals remain separate

WHO vector control guidelines: Insecticide-treated nets

MALARIA BURDEN REDUCTION AND ELIMINATION

Universal coverage with effective vector control using a core intervention (ITN or IRS) is recommended for all populations at risk of malaria in most epidemiological and ecological settings.

Good practice statement

Priority should be given to delivering either ITNs or IRS at high coverage and to a high standard, rather than introducing the second intervention as a means to compensate for deficiencies in the implementation of the first intervention.

Conditional recommendation



- Universal coverage of populations at risk with at least one core intervention
- Core vector control interventions:
 - o IRS
 - o ITNs
- Supplementary interventions recommended only in specific defined contexts
- Combining ITNs and IRS recommended under specific conditions only

INSECTICIDE-TREATED NETS

Pyrethroid-only LLINs prequalified by WHO are recommended for deployment as a core intervention in all malaria-endemic settings.

Strong recommendation as an intervention with public health value, high- certainty evidence

Pyrethroid-PBO nets prequalified by WHO are conditionally recommended for deployment instead of pyrethroid-only LLINs where the principal

malaria vector(s) exhibit pyrethroid resistance that is: a) confirmed, b) of intermediate level, and c) conferred (at least in part) by a monooxygenase-

based resistance mechanism, as determined by standard procedures.

Conditional recommendation as an intervention with public health value, moderate-certainty evidence



- Pyrethroid-only LLINs recommended as a malaria control tool in all areas
- Pyrethroid-PBO nets recommended in areas:
 - with specific IR context
 - where increased cost won't lead to coverage gaps
- No policy recommendation yet for dual ai nets

3. Global Fund approach

ூ TheGlobal Fund ூ Le Fonds mondial ூ El Fondo Mundial ூ Глобальный фонд 今全球基金 الصندوق العالمي 少 🕤 👘 🖇



General guidance given to countries:

All country requests for funding should be grounded in a national vector control strategy which is:

- Evidence based: entomologic and epidemiologic data
- In line with WHO global guidance
 - o or with clear explanations if local decisions differ
- Aims to ensuring universal coverage of at risk populations with at least one core vector control intervention (IRS or ITNs)
 - While embracing the flexibilities needed to appropriately allocate limited resources to maximize impact

Vector Control

Intervention specific guidance given to countries:

Insecticide treated nets:

- Strong focus on maximizing coverage and use in at risk populations
- Pyrethroid-only LLINs:
 - procurement will continue to follow WHO guidance
- PBO nets:
 - procurement will continue to follow WHO guidance, specific IR and operational conditions to be met if price is higher
- Other prequalified nets that do not have a WHO policy (e.g. dual a.i nets):
 - continue to be available through the New Nets Project pilots only
- Countries deploying PBO nets (or dual a.i nets as pilots) are recommended to not revert back to pyrethroid-only nets in future
- No change to net characteristics policy (size, shape, colour etc) from current cycle
- More funding for net durability and efficacy monitoring likely



Vector Control

Intervention specific guidance given to countries:

Indoor residual spraying and Insecticide treated nets:

- IRS continues to be supported as an effective malaria control intervention
- Countries recommended to maintain coverage in previously GF-supported IRS areas
- Must demonstrate sound insecticide-resistance management strategy and routine monitoring of the quality and coverage of IRS.
- TGF will consider funding ITNs and IRS in the same geographic areas if:
 - 1. Universal coverage of at risk populations with one method of vector control is ensured
 - 2. High coverage and utilization/acceptance of the first method
 - Combination is proposed for the management of insecticide resistance and is proposed as a part of a national insecticide resistance monitoring and management plan.

Questions?

ூ The Global Fund の Le Fonds mondial の El Fondo Mundial の Глобальный фонд の全球基金 الصندوق العالمی



WHO Prequalification Vector Control

Update and Progress

Marion Law, Group Lead WHO Prequalification – Vector Control

LLIN Supplier & Partners Meeting, 25-27 September 2019





19



Prequalification process: Application Statistics

Total prequalified products – 77

- ✓ Converted 71
- ✓ Prequalified 6

Requests for Determination of Pathway✓ 116 actions to date

Pre submission meetings - many

New applications -23 Change applications - 39 Protocol reviews - 27







Prequalification – VC applications

Prequalified

- ✓ SumiShield 50WG
- ✓ Cielo ULV
- ✓ Fludora Fusion
- ✓ Aquatain AMF
- ✓ Royal Sentry 2.0
- ✓ Royal Guard

Under Assessment

- ✓ Aquastrike
- ✓ Sylando 240 SC
- ✓ Tsara
- ✓ MkitoNet
- ✓ Axient 440EW
- ✓ In2Care Mosquito Trap
- ✓ Imergard





Outputs and ongoing work from Assessment Sessions

Policies

- ✓ Product Labelling
- ✓ Accepting publicly available information to support applications
- \checkmark Re-evaluation of active ingredients

Activities

- ✓ Risk assessment models review
- ✓ Label improvement plan
- ✓ Comprehensive Review of Chlorpyrifos
- ✓ Product review of combination of active ingredients in bednets
- ✓ Planning a re-evaluation program for PQ listed products.
- ✓ Regulatory framework for a gene drive mosquito interventions /products







PQT-VC Assessment Sessions Arusha, Tanzania 2018





PQT-VC Assessment Sessions

Arusha, Tanzania 2018





PQT-VC Assessment Sessions Rome, Italy, December 2018









PQT-VC Assessment Sessions Rome, Italy, December 2018







PQT-VC Assessment Sessions Dakar, Senegal May 2019





PQT- VC Priorities for 2019

Application assessment (new applications, protocols, changes)

✓ Assessor's sessions

Post market activities

- ✓ Implementation of label improvement plan
- ✓ Complaint Process
- ✓ Targeted oversight-surveillance & monitoring
- ✓ Post-market product review

JMPS

✓ Continue the integration of processes

Capacity building in countries- fact finding

Guideline review





Opportunity

Build a system, i.e., WHO Vector Control evaluation process, that is robust and ensures access to safe, effective and high quality products throughout their life-cycle and at the same time flexible enough to encourage new product development, incorporate new science and meet diverse geographic and population needs.







Thank You

Questions / Comments?

LLIN Supplier & Partners Meeting, 25-27 September 2019







Appendix 1 Guiding Principles

Engagement with colleagues, partners, all stakeholders

- Practice openness and transparency
- ✓ Collaborate, engage and listen through proactive/constructive 2-way communication
- ✓ Demonstrate integrity (judgement/confidentiality/tact/consistency)
- ✓ Be respectful and demonstrate respect

Process and Decision Making

- ✓ Action oriented, i.e., value-added processes which focus on end user access to products
- ✓ Evidence-based
- ✓ Adhere to established roles and responsibilities
- ✓ Transparent
- ✓ Timely
- ✓ Well documented policies and decisions
- ✓ Continuous evaluation and process improvement

Broader Impact

- ✓ Embrace innovation and creativity (Nick Hammon, Innovative Vector Control Consortium)
- ✓ Apply a global perspective to meet varying geographic and disease needs
- ✓ Monitor and evaluate current approaches to meet changing global needs, i.e., remain relevant





Responsible procurement

26 SEPTEMBER 2019, SINGAPORE

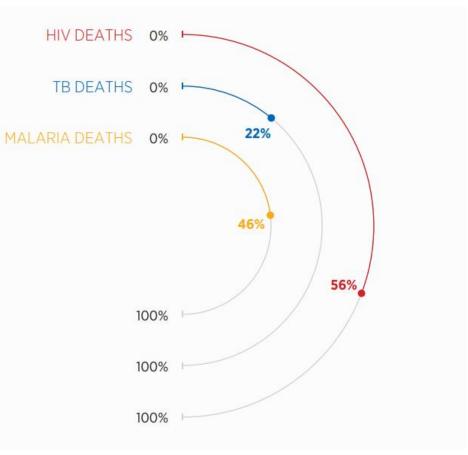


Global Fund Mission:

Investing the world's money to defeat AIDS, TB & Malaria

32 million lives saved

40% decline in deaths from three diseases



Ending the epidemics & promoting human rights: Considering the total cost to human well-being



Source: Human Rights Watch (www.hrw.org)

Our values and what they mean for LLIN suppliers

Dignity and respect

Working conditions:

- Labour rights
- Fair bargaining
- Health and safety
- No slavery
- No child labour
- No discrimination
- Gender-consciousness:
 - No harassment
 - No exploitation

Environmental respect:

- Protection from hazards
- Waste management
- Emissions scrubbing
- Waste minimization
- Re-use and recycling

Integrity

- Taking the total cost
- No corruption
- Managing conflicts of interest
- No anti-competitive practices
- Sustainability

Accountability

- Fair, honest and correct information
- Rules-based
 procurement
- Continuous
 improvement
- Third-party
 management
- Prompt disclosure
- Supply chain visibility

Duty of care

- Full and accurate records
- Performance & compliance systems
- Access and audits

We will invest in suppliers who share our values and who in turn invest in meeting these standards

Making Ethics work at the Global Fund



Taking responsibility for LLIN manufacturing

Market-shaping strategy

Integrity pact

Responsible Procurement

Global Fund:

- Revised codes of conduct
- Clear direction
- Strengthened monitoring
- Enhanced disclosures
- Material encouragement
- Continuous engagement

Suppliers:

- Environmental and occupational health certification
- Accountability for full supply chain
- 'Race-to-the-top' innovation
- Responsiveness to raised issues

Specific steps for procuring LLINs responsibly

STANDARDS & CERTIFICATION

Suppliers encouraged to take proactive steps to obtain the EMS and OHS certifications, or work towards fulfilling specific criteria

SUPPLY CHAIN DISCLOSURE

Each supplier must demonstrate the extent of **ownership** and **flexibility** over the entire supply chain, which allows to effect change

ENHANCED DUE DILIGENCE

The Global Fund will be aligning with partners to conduct site reviews, undertake testing and strengthen integrity risk management

LLIN QMS: collaborative expectations

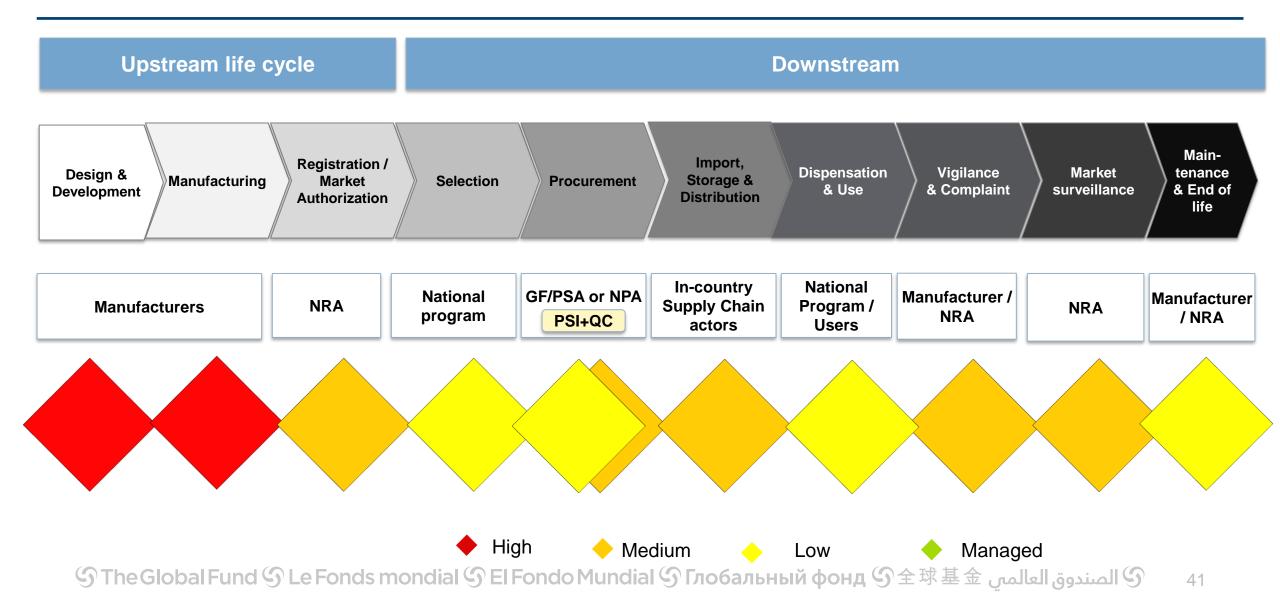
Stuart Turner & Jennifer Wray on behalf of The Global Fund, UNICEF & PMI

26 September 2019 – Singapore

PMI-specific QMS enhancements

- Revised contractual requirements from procurement agent
 - Record & product retention
 - Definition of batch
 - Long-term agreements
 - WHŎ PQ
 - Desk audit QMS review, in-place SOPs, ISO-9001 & cert documentation, etc
 - Environmental safety clauses
- Physical inspection & quality control testing continued
 - Alignment with GF/UNICEF on physical inspection
 - HPLC,GC on API; bursting strength; seam strength; etc
- LLIN durability monitoring continued
- Post-marketing surveillance TBD
 - Influence on existing/future contracts and eligibility
 - Donor-level & WHO PQ data exchange
- Evolving as procurement evolves (e.g., PBO & dual AI)

GF estimated Risk Profile along the Product life cycle (qual.)



Overview of QA related requirements in manufacturer agreement

SCOPE	GF/UNICEF	USAID			
Product Requirements	 Reference to PSM Guide / QA Policy Packaging Requirements Packing for shipment Packaging & Labelling Requirements To ensure supplier product registration 	 QA Policy: WHO Vector Control prequalified as minimum. Added testing and monitoring. QMS requirements. 			
Supplier related obligations	 To designate a Responsible person for QA To convey same obligation to supplier To ensure compliance with Authorization To ensure compliance with QMS /GMP standards To ensure compliance with GDP Standards To notify any change that may impact the quality 	 Supplier to provide documentation & evidence of compliance with GMP. Assess impact of all changes (materials and process) on quality. PMI notified of any change requests to WHO PQ. 			
Regulatory Authority & Audit	 To provide report of Regulatory Authority inspection To notify in case of Warning letter To accept GF audit 	 Notification of regulatory action within 2 business days. 			
Verification and control activities	To retain samplesTo allow GF to test retained samples	 Retain samples from every order, one-year past expiration. 			
Documentation	 To retain records technical files, manufacturing files and distribution files for traceability Le Fonds mondial S El Fondo Muncial S Глобал 	• To maintain records one-year past expiration ыный фонд の全球基金 الصندوق العالمي			

Overview of QA related requirements in manufacturer agreement

SCOPE	GF/UNICEF	USAID
Deviations & Out of specifications	 To inform in case of quality incidents, Out of specifications (internal) To engage in investigations /root cause analysis 	 Maintain records of all in-process check test results including OOS. Analyze/trend OOS result for root cause analysis. Continuous improvement. Implement resolutions
Quality Defect & Recall	 To inform GF of serious quality defect (external) and recall To allow GF to recall a batch in case of serious risk for patient 	 Define serious risk; active/insecticide content (efficacy), physical characteristics (efficacy) contaminant (health and safety)
Specifications and analytical methods	 To share specifications and analytical methods To provide if not commercially available, the reference standards 	
Shelf –Life & Sales	To ensure remaining shelf-lifeTo provide data on sales	 Ensure shelf-life along production/freight continuum (e.g., integrity of product during shipping)
Vigilance	 To designate a qualified person and a system in place To submit to the relevant authority To inform of any safety communication 	ce

Considerations

Responsibility for timely transparency

- Donors and vendors to provide data/info to WHO PQ
- Mechanism? Type of data? Frequency?
- Upstream subcontractor management?
- Dual API + pyrethroid
 - Procurement currently through NPP due in part to global volume supply
- PBO
 - PMI: 2/5 eligible; future volumes contingent on internal VC considerations on acceptable standardization
 - On-going ento/epi data collection to inform future procurements
- High-level donor transparency
 - Sharing of data, pre- & post-shipment

GF NC & OOS Data Base

- ✓ From February 2015 to Date
- ✓ 35 Events
- ✓ 17 Manufacturing sites

 ✓ More than 50 consignments / ??? batches

Main deficiencies identified

- Data Integrity / Data Manipulation
- Poor documentation practices
- Poor manufacturing practices
- Not authorized Variation in Design / manufacturing process / Testing Specifications
- Lack of efficacy (under investigations)
- ✓ Inadequate labelling and packaging
- Poor management of critical subcontractors
- Poor practices in managing complaint

✓ Areas of improvement

- ✓ Quality Management System (QMS)
- Registration / variations

 \checkmark

- Complaint & Vigilance
- Design Verification / Validation
- Storage, distribution & transportation
 Practices

Proposed Future UNICEF QC Activity

- Ongoing QA collaboration with all procurement agencies i.e. Durability studies
- Continue PDI to verify AI and Mechanical properties
- Surveillance on batches within lots
- Retain batch samples of all PO's
- Critical Review and Revision of the standard PDI Guidelines to support proposed QMS enhancements.
- Provide data on complaints or any post market activity findings to PQ
- Initiate closer relationship with Vector Control PQ team by quarterly calls and an annual face to face (possibly in parallel with regular VCWG Meeting in Geneva)

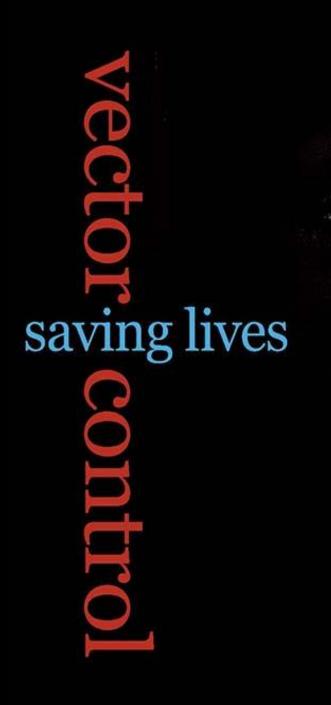
Thank you!



PRESIDENT'S MALARIA INITIATIVE



unicef 🚱



Vector Control Product Development Pipeline

John Vasanthan Paul

September 2019



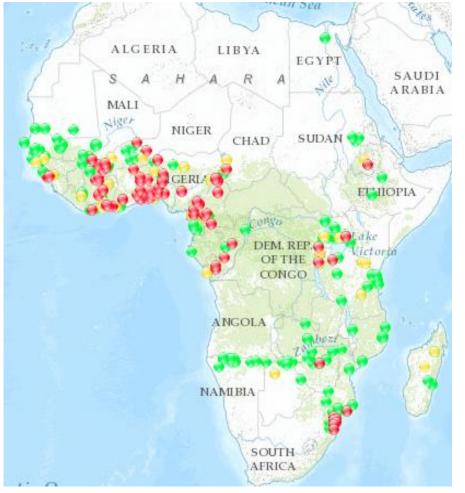
Vector Control Pipeline Agenda



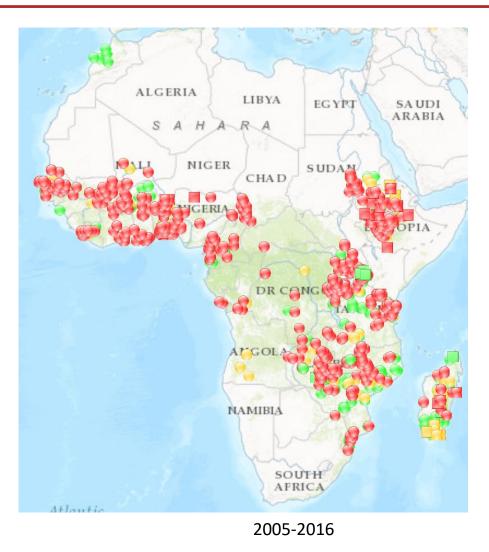
- What do we need from the vector control product development pipeline
- How does IVCC develop products
- What is the pipeline for IRS and LLINs
- New Nets Project Market intervention to enable the Dual AI net market.
- What else is in the pipeline
- What are the key barriers to bringing these products into beneficial use.

Resistance increasing in distribution and intensity





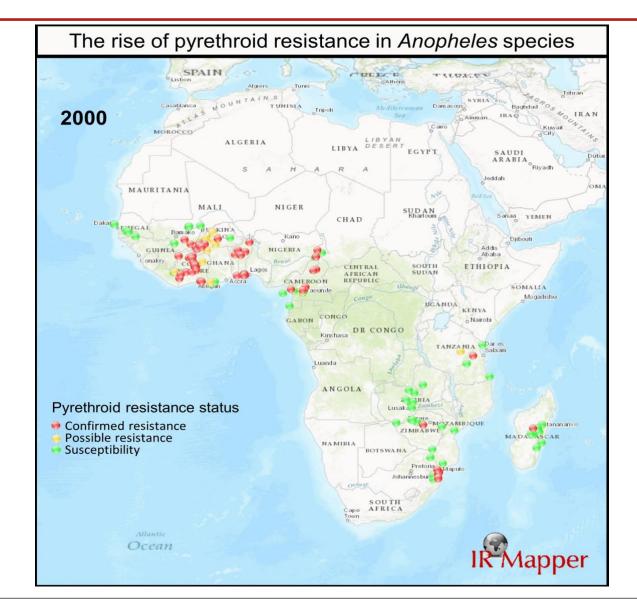




Source: IR Mapper (<u>www.irmapper.com</u>) June 2016

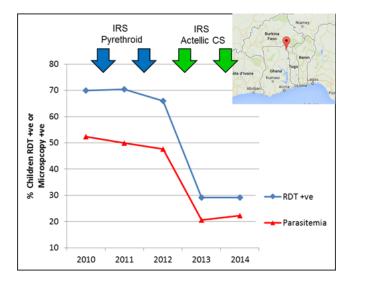
Rise in pyrethroid resistance





Restoring mosquito mortality improves vector control

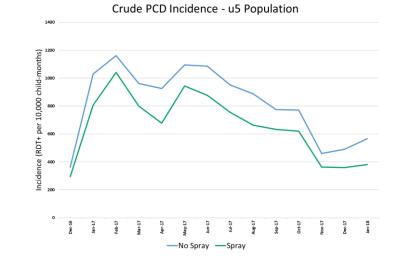




Bunkpurugu - Yunyoo district, Northern Ghana

- Mosquitoes Susceptible in 2010 Resistant by 2012
- Surveys of 824 children under-five.
- Data collected on IRS, ITN ownership and usage, fever in children under-five and antimalarial treatment.

Cluster randomised trial of Actellic Mozambique 2017



- An. funestus densities were reduced by 50%
- <u>Passive case incidence of under 5-year old RDT+</u> <u>malaria</u> reduced by 20% (RR 0.81; 0.79 – 0.83)

Cluster randomised trial of PBO nets Tanzania 2015

				-4 months portion	ost		Dec 2015- 9	month	hs post interv	ventior
		% prevalen					%		Ċ.	
rm	N	ce	OR	95%CI	p	Ν	prevalence	OR	95%CI	р
N-S	997	55.5	1			932	55.3	1		100
N-PBO	971	45.8	0.68	0.39 - 1.18	0.163	883	31.1	0.37	0.21 - 0.65	0.001
N-S & IRS	994	38.5	0.50	0.31 - 0.82	0.007	877	28.7	0.33	0.19 - 0.55	<0.00
N-PBO & IRS	955	37.0	0.47	0.28 - 0.79	0.005	969	26.4	0.29	0.17 - 0.49	<0.00
N-PBO & IRS Standard LLIN > 4 months	955 I: LN-S	37.0 (Olyset No interven	0.47 et), LLII tion: R	0.28 - 0.79 N with PBO (0	0.005 Diyset plu: prevaler	969 s) : LN-P		0.29 s Meth	0.17 - 0.49 Iyl : IRS	

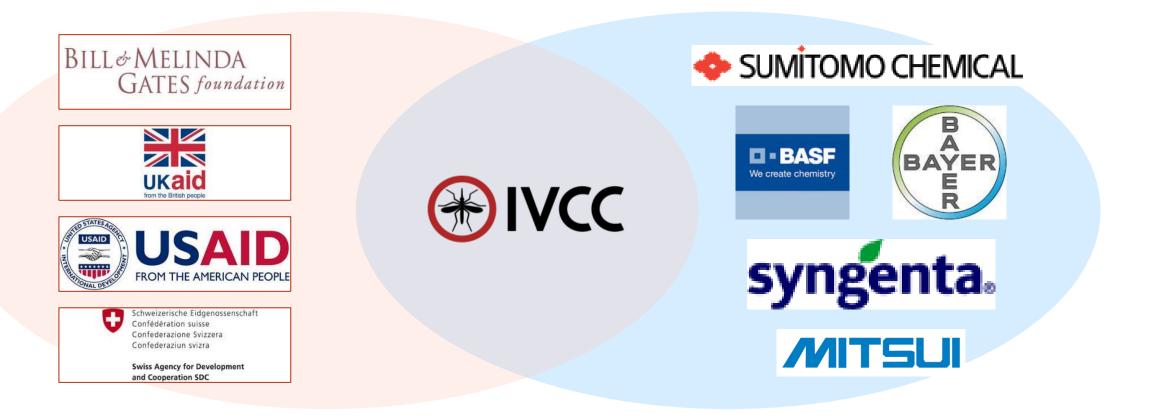
No difference between LN-PBO and LN-PBO & IRS arms (OR:0-80, 95%CI: 0.49-1-28, p:0-336) at 9 months

Protopopoff and Rowland LSHTM

30-50% reduction in prevalence

Product Development Partnership for New Active Ingredients



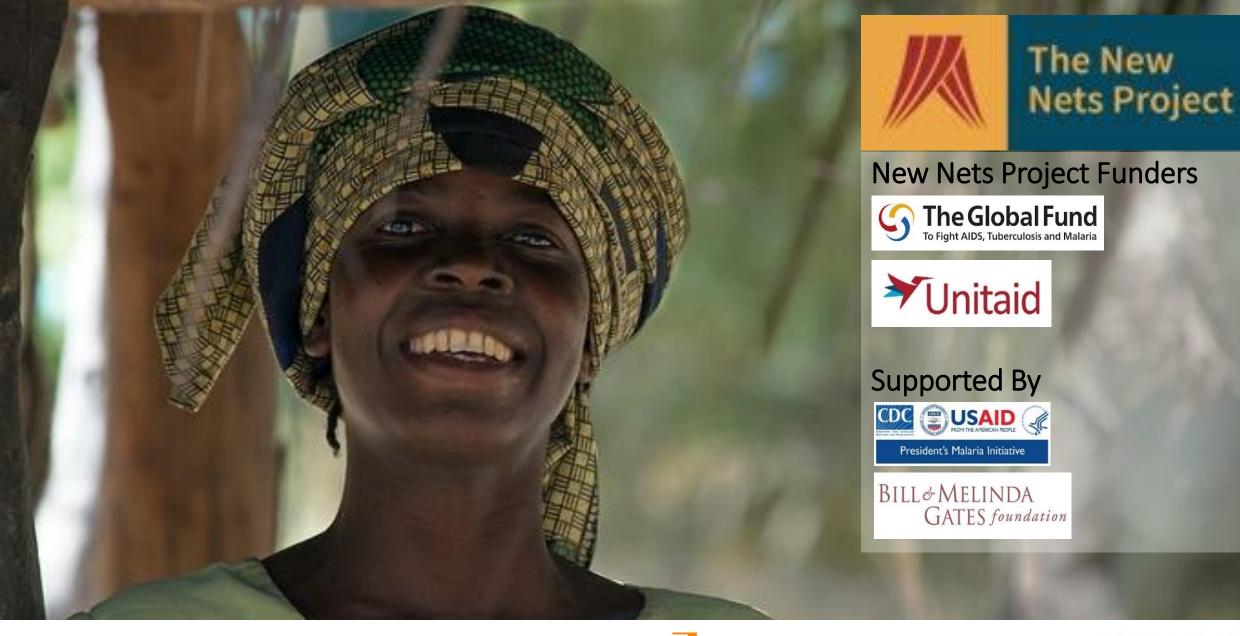


Formulation of AI into product will engage many others

IVCC portfolio



Research	Proof of concept/ Optimisation	Pre-development/ Development	WHO PQ/ Registration	Access and Delivery
Novel chemistry screening (Various partners/IVCC)	Alternative Als	AI 1	Royal Guard (DCT)	Actellic CS (Syngenta)
Repurposing/reformulation of crop protection Als	Proof of Concept Studies from a wide range of early stage novel interventions	AI 2	Sylando (BASF)	Fludora Fusion (Bayer)
	XLLIRS (IVCC / ZERO by 40 Consortium)	AI 3		Sumishield (Sumitomo)
		AI 4		Interceptor G2 (BASF)
		Novel AI IRS		
		ATSB (Westham)	In partnership with IVCC	Novel AI for ITN and IRS Insecticide Treated Net (ITN) Indoor Residual Spray (IRS)
		Application technology (Various)	Lindustry/Academia	Outdoor transmission
4			- Building Partnerships	Creating Solutions • Saving Lives



IVCC



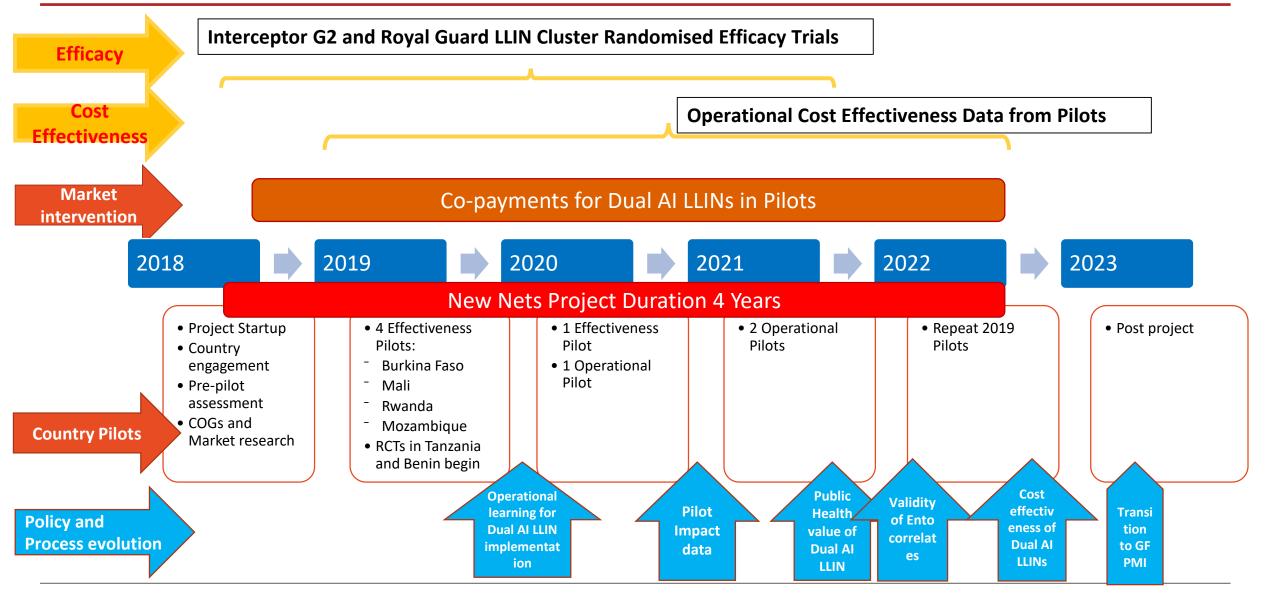


The Alliance for **Malaria Prevention**



New Nets Project Overview





The aim and current scope of NNP



The NNP is an initiative established by Unitaid and the Global Fund in partnership with PMI and BMGF, working with other key stakeholders to catalyse the market introduction of next generation ITNs, those with two active ingredients aka dual AI ITNs

NNP countries

Effectiveness pilots

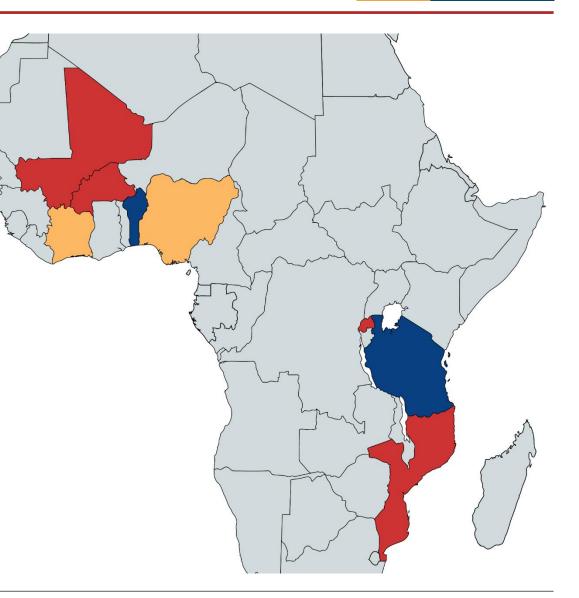
- Burkina Faso
- Mali
- Mozambique
- Rwanda

Pilots pending MOUs

- Nigeria
- Cote d'Ivoire

RCTs

- Benin
- Tanzania*



New Nets Project Team Roles







The Alliance for **Malaria Prevention**





IVCC Lead and Coordinator

- Negotiations with industry partners,
- Co-payment system and contracts to reduce price.
- COGs understanding and ability to get industry to cooperate on COGs.
- Links to the vector control product development pipeline.
- Links to Ag Chem CEO forum and the ask from industry.

PATH

Cost effectiveness determination from pilot implementations

AMP

Technical assistance to pilot implementations

PSI

Compilation of cross-country lessons learned from pilot studies, funding for process evaluations

LSHTM

Cluster Randomised trials of Dual AI LLINs and Entomological Correlates in trials

Tulane

Cost effectiveness trials and data collection design

Imperial College

Modelling of trials design and implementation impact

LSTM

Entomological correlates of epidemiological Impact



In each pilot district (new net and standard LLIN comparator), enhanced surveillance activities will monitor the impact of mass distribution on 3 components, feeding into a broader analysis on cost-effectiveness



Epidemiological component – measure impact of new nets and standard ITNs, and if feasible PBO ITNs, through observational studies comparing trends in:

- Malaria incidence rates passively reported to the national health system (passive case detection (PCD)).
- Malaria infection prevalence, measured through Rapid Diagnostic Tests (RDTs), from annual crosssectional surveys during peak transmission periods.



Entomological component – evaluate the impact of new nets and standard ITNs, and if feasible PBO ITNs, on vector population density, behavior, infection and resistance status



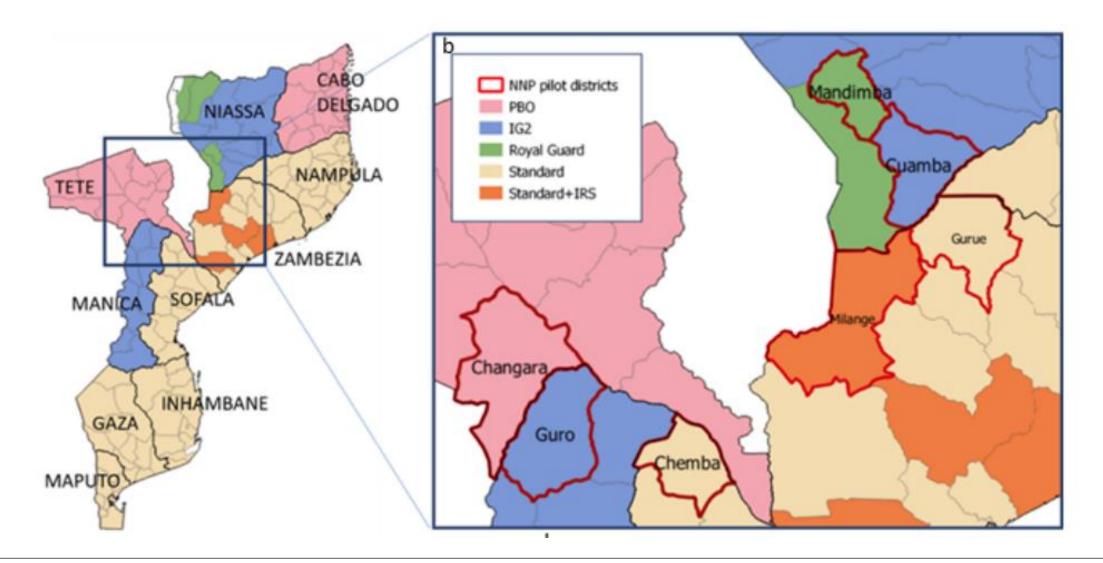
Anthropological component – map social determinants of impact for new nets and determine transmission risk through gathering evidence on ITN uptake and usage; collecting data on patterns, both indoors and outdoors, becomes an essential component of the evaluation of the ITN pilots for both modeling and contextual analysis of impact



Costing and cost-effectiveness component – estimate the cost and cost-effectiveness of new nets through data on product price, delivery and deployment costs, and effectiveness based on incidence rates

Current pilot plan: Mozambique

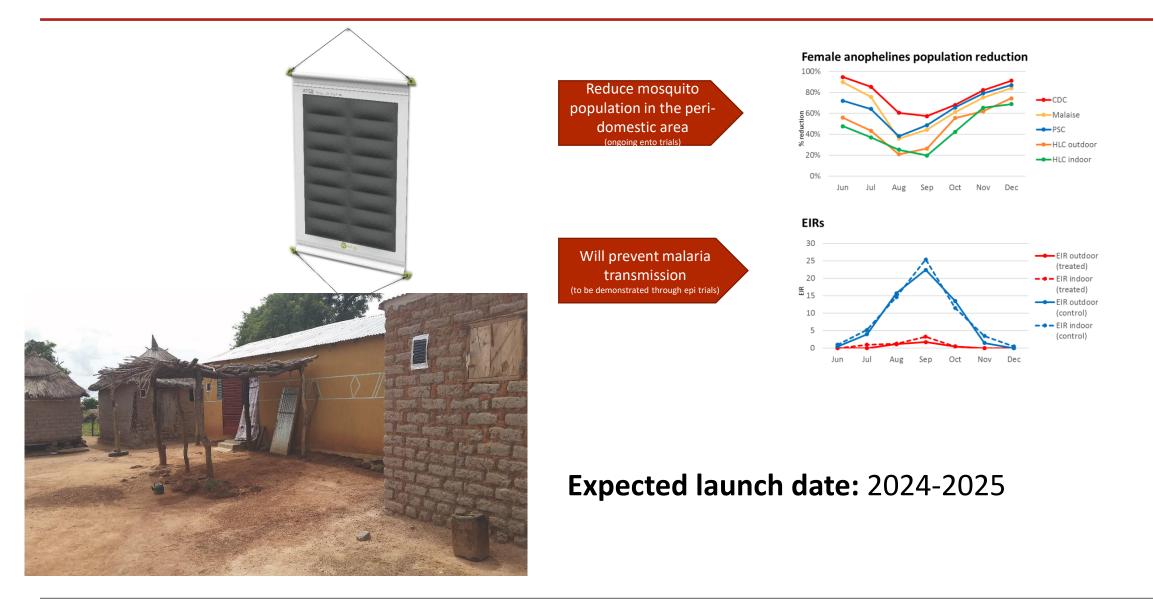




Note that project team is working to standardize map formats/colors

Attractive Targeted Sugar Baits (ATSB)

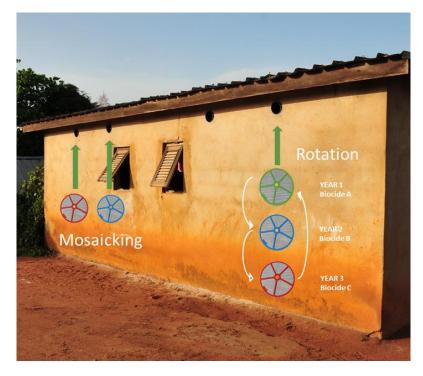






How they work

- 1. Human odour
- 2. Attracts mosquitoes to Eaves
- 3. Blocked by EaveTubes
- 4. Pick up lethal dose insecticide
- 5. Leave the House
- 6. Die due to insecticide



are easy-to-install ventilation tubes and removable mesh inserts that are installed in the wall under the roof of houses.



Next steps

- 2019: PQ process started
- 2019: Operational manual large scale campaigns finalized
- 2020: Setup large scale production
- 2020: National registration in Tanzania and Ivory Coast
- 2021: National registration in 4 additional African countries

https://youtu.be/DGyl9i4fpyQ





Ivermectin is a *complementary* strategy against:

- Outdoor biting
- Outdoor resting
- Day / Night Biting
- Early exit
- Feeding upon livestock

Trial Name	Lead Researcher	Country	Dose	Drug Combination	First results
MASSIVE	Umberto D'Alessandro	The Gambia	3 x 300	DHA-P MDA	2019
RIMDAMAL II	Brian Foy	Burkina Faso	3 x 300	SMC	2020
ТВС	Kobylinski & Sattabongkot	Thailand	1 x 400	Ivermectin alone	2020
ТВС	Anna Last	Guinea-Bissau	3 x 300	DHA-P MDA	2021
BOHEMIA	Rabinovich & Chaccour	Tanzania, Mozambique	1 x 400	Ivermectin alone + ivermectin to livestock	2021

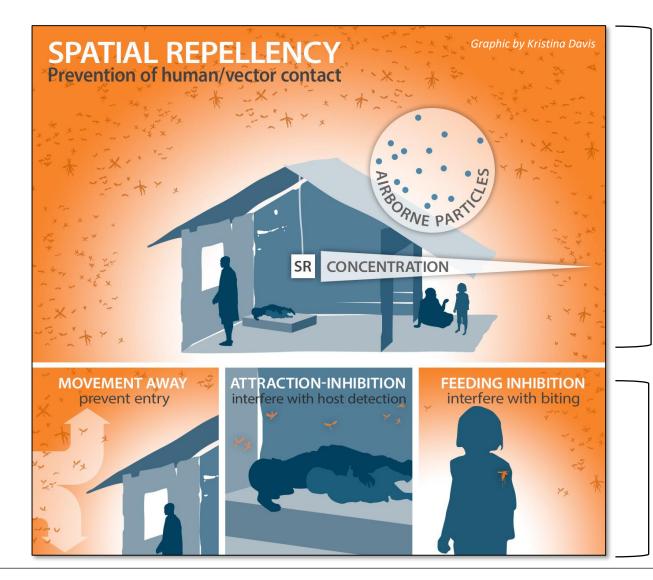
- BOHEMIA aims at creating an enabling environment for a WHO Policy recommendation by 2023
- Evidence generation in two independent trials
- Parallel work with manufacturers to help ensure supply of quality-assured product by 2023
- Parallel work with stakeholders to facilitate policy adoption



Spatial Repellent – Mode of Action



NCC Update – Achee NL Sep 2019



Continuous release

Added Value:

Addresses daytime, early-evening and indoor/outdoor vector biting

Varied modes of action

Innovation:

New actives, alternate target sites, exploitation of post-exposure effects

Spatial Repellent products for Public Health: SC Johnson & Son, Inc.

- Global dossier complete by Dec 2019 to support registration across a broad range of malaria-endemic countries
- In process with VCAG evaluation + PQT-VC



2014-2019

- Sealed film containing a volatile insecticide that emanates once opened, for a 2-week duration of protection indoors
- Product evaluated in clinical trials in Indonesia and Peru



2019-future

- Improved version of our 2-week product that provides 1-month of protection indoors
- Will be evaluated in upcoming clinical trials in Kenya, Mali, and Sri Lanka
- Country registrations for this product starting in 2020



Next generation

 New spatial repellent product in SC Johnson development pipeline to extend duration of protection to an entire transmission season

Barriers to adoption



	Workstream	Non Pyrethroid IRS	Dual Al LLINs	New AI IRS / LLINs	ATSB
	Use Case / Entomology				
IGN	Target Product Profile				
CH DEVELOPMENTDESIGN	Technology /IP Development				
	User compliance/ acceptability Implementability				
	Regulatory / Safety / Environmental impact Qualification				
	Manufacturability Delivery				
	Epidemiology				
LAUNCH	Economics / Funding stream / Demand Forecasting				
	Policy / Strategy / Resistance management				

- Proximate barrier to adoption of new products in the pipeline is the time needed for epidemiological evidence.
- Most severe barrier is the availability of funding for new products and new intervention classes
- Secondary barrier is policy Strategy and insecticide resistance management implementation



- There is a rich potential pipeline of new products
- The pipeline may dry up if product development barriers are too high.
- Some of the much discussed development plans are higher risk than is acknowledged
- Market interventions will be required to bring the products through development

2019 LLINs Suppliers and Partners Meeting

UNICEF Supply Division 26 September 2019



© UNICEF/UN043567/Lister

Presentation Outline

About UNICEF Supply Division

Overview of UNICEF LLINs Procurement

2019-2021 LLINs Procurement Strategy, Objectives and Tender Outcomes

2019 LLINs Procurement

UNICEF Suppliers Performance Evaluation

UNICEF Supply Division

UNICEF's **Supply & Logistics** headquarters located in Copenhagen, Denmark

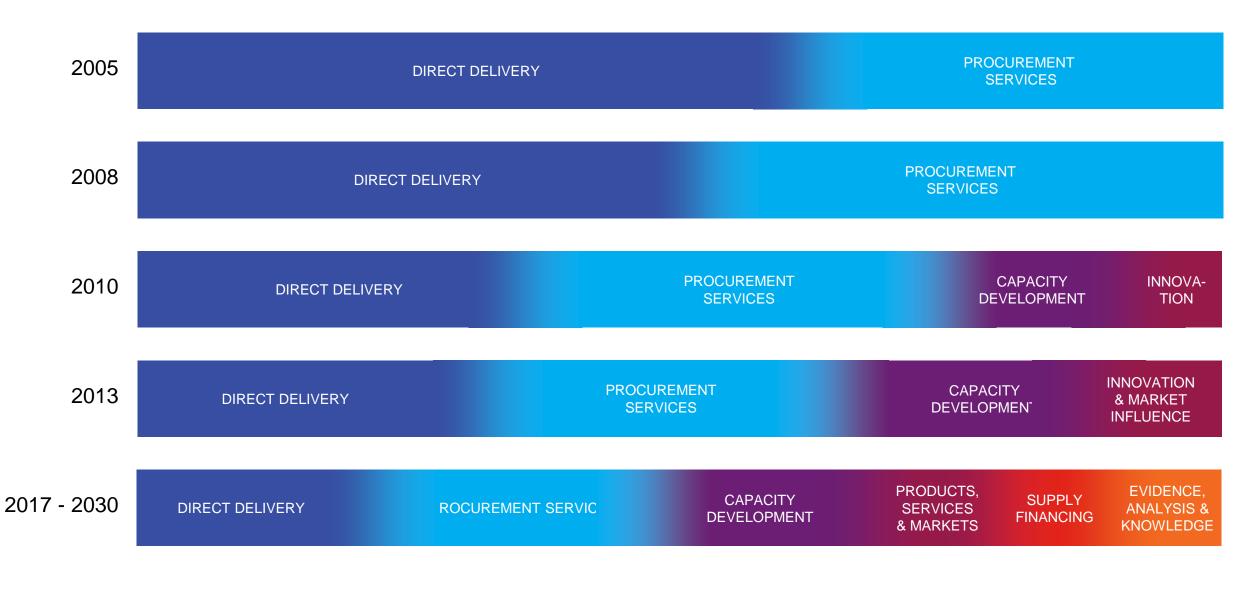
It is also home to the largest humanitarian warehouse

Other UNICEF warehouse hubs are located in **Dubai**, **Panama** and **Shanghai**

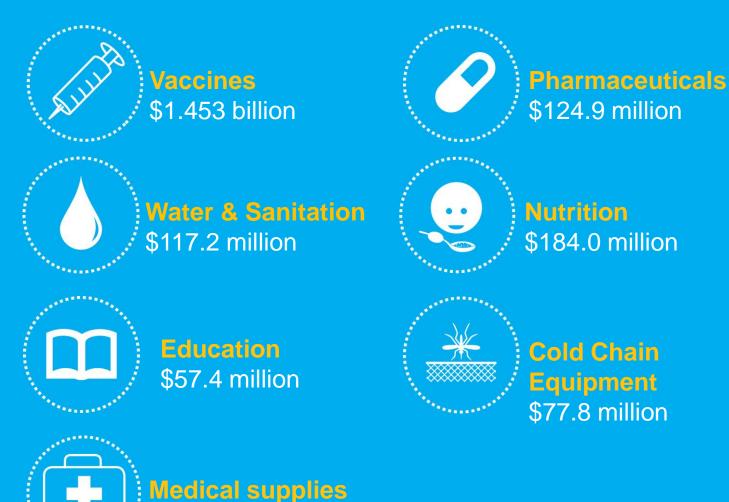
UNICEF's Supply Community of 1036 supply and logistics staff serve children in 97 countries

- Supports results for children with an effective, efficient supply operation
- Helps meet UNICEF's Core Commitments for Children in emergencies by providing rapid response to emergency supply and logistics needs
- Contributes to influencing markets to ensure sustainable access to essentials supplies for children
- Serves as a centre of expertise and knowledge on essential supplies for children and supply chains and build capacities of national governments
- Provides procurement services to governments and development partners on strategic-essential supplies
- Establishes policies for supply chain activities
- Uses product innovation to increase results and decrease costs

UNICEF Supply Function – high level vision



UNICEF procurement value by major commodity groups (2018)



\$106.0 million

\$3.480 billion

of supplies + services for 150 countries and areas

\$1.556 billion

in procurement on behalf of 107 self-financing governments and partners

\$2.379 billion supplies

\$1.101 billion services

78% of UNICEF procurement is in collaboration with other UN agencies and partners

Key modality for market communication with public

Market notes & Manufacturer specific pricing

71 market notes published during 2014-16 covering 31 essential commodities/groups

Aims

- Inform demand (e.g. from COs, partners)
- Provide market signals (to suppliers, developers)

Content

- Product standards and specifications
- Market trends (procurement, pricing, products)
- Market deficiencies to be addressed

Manufacturers specific prices by product posted for vaccines, RUTF, LLIN, devices

UNICEF guiding procurement principles (1 of 2)

Each UN organization has a different mandate

but

all UN organizations share the same procurement principles Fairness, integrity and transparency through competition (clear & appropriate regulations/rules applied to all suppliers, fair process, equal treatment of suppliers, transparent system)

Economy and effectiveness

(meet requirement in terms of quantity, quality, timeliness at the right place. Economy=minimize cost, Effectiveness=meet end-user interest)

Best value for money

(Consider the optimum combination of factors in meeting the end user needs; BVM does not mean lowest cost but best ROI)

 Promotion of objectives of UNICEF (fulfilling the mandate, goals and objectives)

UNICEF guiding procurement principles (2 of 2)

UN Supplier Code of Conduct

Children's Rights and Business Principles

No Child Labor, No Landmines

UNICEF's Policy on Conduct Promoting the Protection and Safeguarding of Children

UN Supplier Code of Conduct

Zero-tolerance for all forms of fraud and corruption.

Zero tolerance to all forms of sexual harassment and exploitation

Information disclosure policy

Zero tolerance policy on gifts and hospitality from suppliers

All UN and UNICEF registered suppliers sign on to the UN Code of Conduct.

Based on the UN charter, the principles of the Global Compact and ILO standards;
 The UN expects that these principles apply to suppliers and their employees, parent, subsidiary or affiliate entities, and subcontractors; that they are seen as minimum standards that suppliers strive to meet and exceed them.

The code addresses:

- **Labour conditions**: Freedom of Association, no force or compulsory, no child labour, discrimination, standards for working conditions.
- Human Rights: No Harassment, Harsh or Inhumane Treatment, no manufacture or sale of mines.
- Environment: Compliance with regulations, manage chemical and hazardous materials; waste and air emissions, Minimize Waste, Maximize Recycling.
- Ethical conduct: No corruption, conflict of interest declaration, no gift and hospitality, post employment restrictions.

Presentation Outline

About UNICEF Supply Division

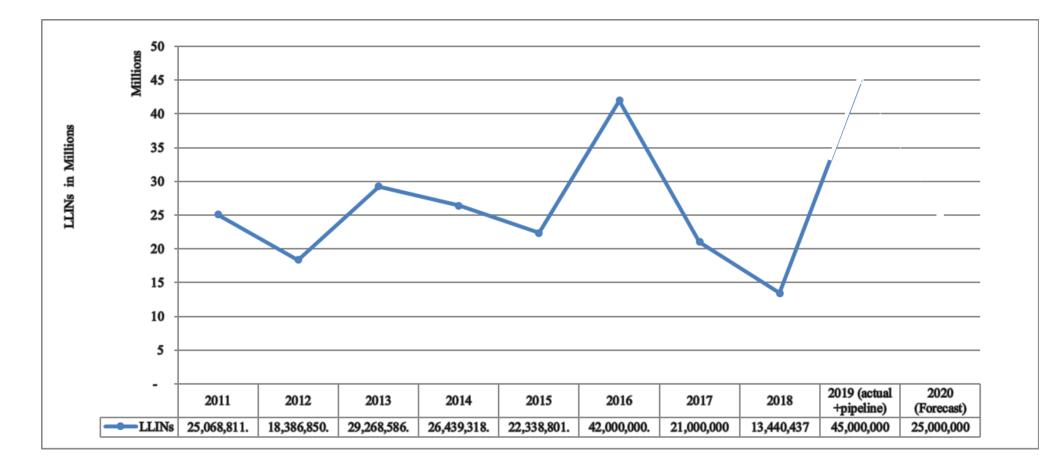
Overview of UNICEF LLINs Procurement

2019-2021 LLINs Procurement Strategy, Objectives and Tender Outcomes

2019 LLINs Procurement

UNICEF Suppliers Performance Evaluation

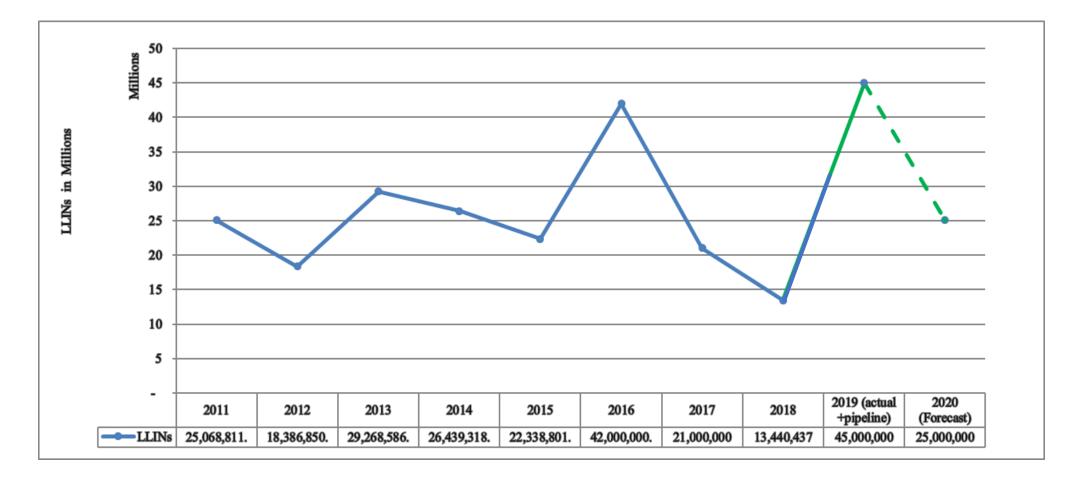
UNICEF's procurement up to Q3 2019 reached 32 million LLINs for 26 countries and is expected to reach 45 million by the end of 2019 according to the available forecast.



Actual pipeline

forecast

UNICEF's procurement up to Q3 2019 reached 32 million LLINs for 26 countries and is expected to reach 45 million by end of 2019 according to the available forecast.

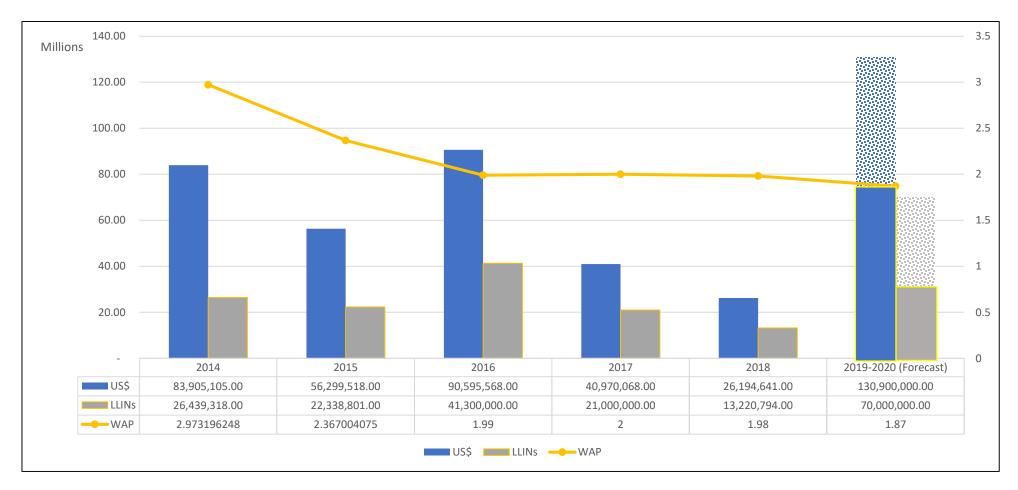


Actual pipeline

forecast

Overview of UNICEF procurement of LLINs, - UNICEF | for every child

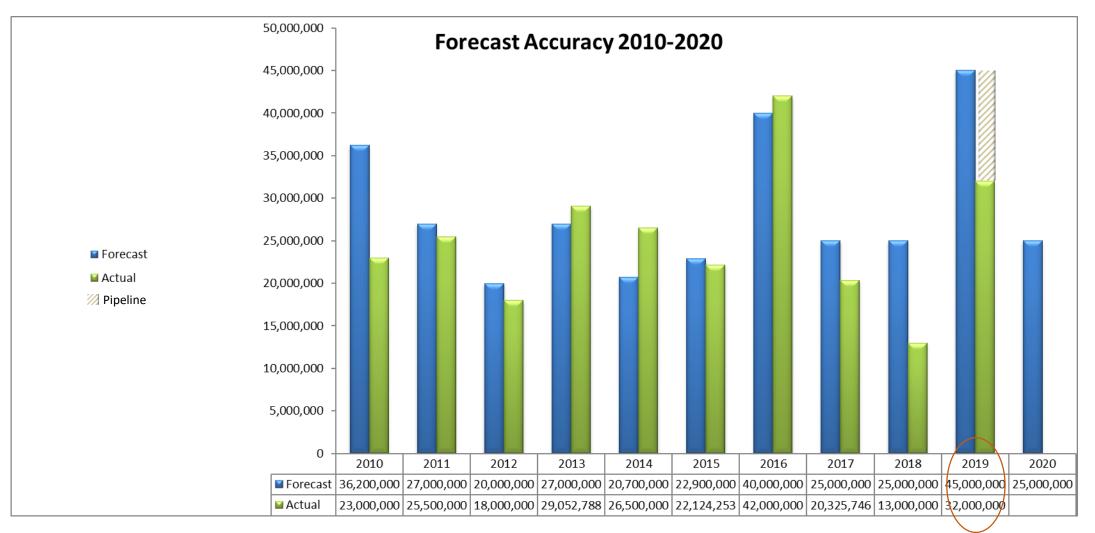
Clear decrease in the weighted average prices for all LLINs procured irrespective of the size, colour or denier.



In the last five years we have witnessed a higher demand for commonly manufactured products, which also results in lower weighted average price. Joint industry meeting and joint forecast presentation to industry have also contributed to this achievement.

Overview of UNICEF procurement of LLINs, - UNICEF | for every child

UNICEF LLINs Forecast Accuracy 2010-2020



Increase in UNICEF forecast for 2019

Overview of UNICEF procurement of LLINs, - UNICEF | for every child

Presentation Outline

About UNICEF Supply Division

Health Technology Centre

Overview of UNICEF LLINs Procurement

LLINs 2019-20 Procurement Strategy, Objectives and Tender Outcomes

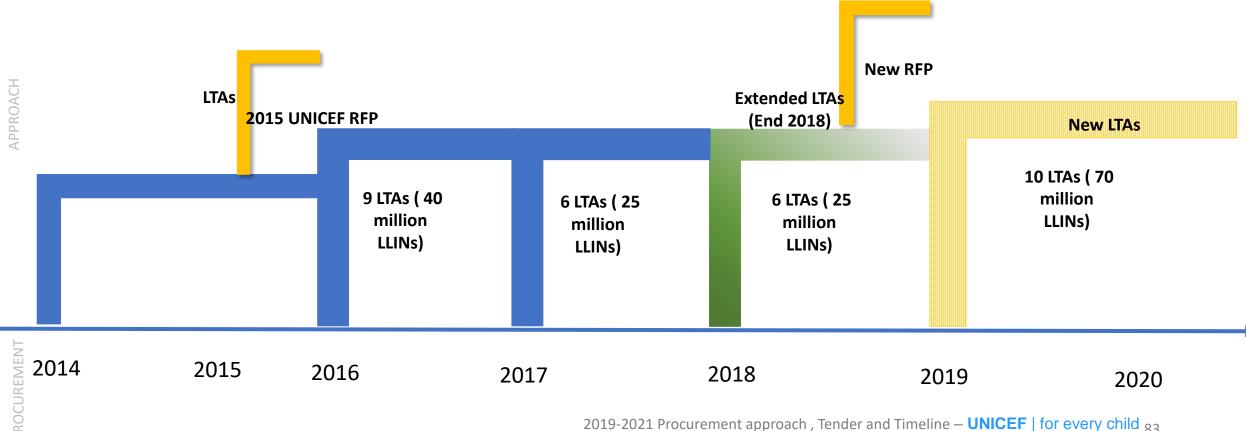
2019 LLINs Procurement

UNICEF Suppliers Performance Evaluation

UNICEF LLINs Procurement Strategy objectives for 2019-2021



2014-2020 Procurement Approach for the LLINs Procurement



2019-2021 Procurement approach, Tender and Timeline – UNICEF | for every child 83



• 2018 LLINs Suppliers Meeting was held in Supply Division on 27th August , 2018

- UNICEF Request for Proposal was issued on 27th Sept , 2018
- Industry Webinar was held on 5th October 2018
- Tender closed on 18 October 2018
- Contract awards 18 December 2018
- LTAs commenced on 1st January 2019

Updates

Key Changes / highlights in UNICEF 2019-2021 Tender

- The adaption of the WHO PQ as a mandatory criterion instead of WHOPES phase 2 evaluation status > to ensure individual products are supported by existing specification and evaluation reports
- 2 years Validity of proposals (allocations of quantities were done for 2 years) possible extension for additional 12 months
- The tender included price adjustment mechanism (optional) >> as a result of the consultation with industry)
- Change in standard sizes : Rectangular (L)190x(W)180x(H)150cm, Rectangular (L)180x(W)160x(H)150cm, Rectangular (L)190x(W)180x(H)180cm, Colors: White, Blue, Green
- The tender included an option to Include an offer for any LLIN product currently in the WHO PQ pipeline >>Conditional awards for products currently in the WHO PQ pipeline

Sustainability Focus in UNICEF 2019-2021 Tender

- Maintain using the expanded tender evaluation criteria to consider supply chain elements, i.e. optimized container loading, which would impact on not only on freight and container costs but also on carbon footprints associated with freight (economic and environmental pillar) >>container loading capacity and landed cost as evaluation criteria in the tender document
- Eco-friendly packaging: e.g. bio/Oxo degradable bag are considered as UNICEF standard primary packaging with an option of Bulk packaging (without individual bags)
- Explore opportunities for **local procurement in the countries** where WHO PQed LLINs are being produced or finalized (economic and social pillar)
- As the WHO PQ process does not consider issues around sustainability and sustainable procurement, UNICEF SD are likely to still conduct site visit to determine suppliers Social Responsibility and Environmental impact

Progress towards the Procurement strategy objectives

1: Ensure reliable, uninterruptable supply of LLINs to countries;

- The new tender allowed access to all PQ LLINs with updated commercial information prices, production capacities, container stuffing .
- 10 LTAs with more than 12 different production facilities (FCA points) were established for more than 70 million LLINs
- The awarded suppliers have a total annual production capacity of more than 300 million LLINs with 170 millions offered to UNICEF
- Stock levels will be monitored during the implementation of the LTAs >>few suppliers offering a free-of-charge stockpiling solution to UNICEF

2: Secure access to affordably priced LLINs in situations of increasing and uncertain demand;

- Overall WAP was reduced by 5%
- LTAs are valid for 2 years including Price adjustment mechanism
- All forecasted countries will have access to supply as per the requirement

3: Secure access to quality LLINs;

- •The new tender allowed the adaption of the WHO PQ as a mandatory criterion instead of WHOPES phase 2 evaluation status, to ensure individual products are supported by existing specification and evaluation reports
- •The tender linked the validity of any subsequent LTAs/award to the validity of the product PQ status
- •The PQ will include inspection of manufacturing sites and assessment of relevant information
- •PDI -Inspection guidelines under review
- •PDIs Will be monitored during the implementation of the LTAs

4: Secure access to newly innovative LLINs products;

• PBO LLIN item was added to UNICEF supply catalogue- (4 new PBO nets options)

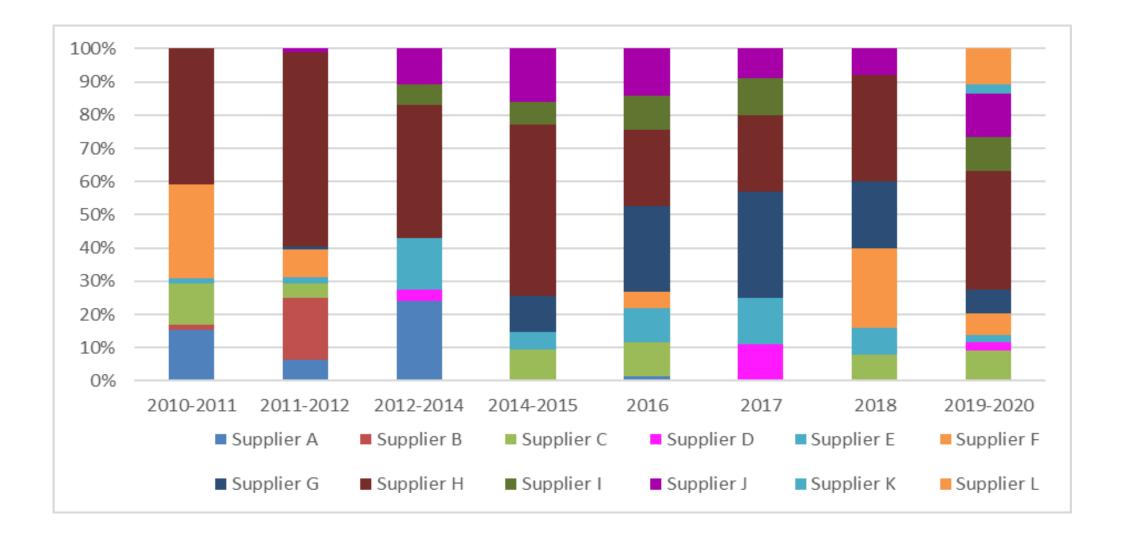
5: Continue to reduce the overall cost of LLINs supplied to programs through the continued application of supply chain cost considerations to UNICEF's LLIN procurement;

- Landed cost analysis was part of the evaluation of offers and factored in the allocation of quantities to the recommended suppliers
- Bidders were requested to provide their stuffing capacity for 40ft and 20ft container and that was the basis of calculation of the landed cost
- landed cost analysis will continue to be implemented during the LTAs period 2019-2020

6: Improve LLINs deliveries by engaging Industry to address programmatic and supply challenges and reduce environmental sustainability risk associated with LLINs shipments and packaging;

- Stuffing capacity provided by suppliers was improved compared to the previous tender cycle, however, actual savings will be monitored throughout the LTA
- Landed cost calculation was included as explicit tender / quantity allocation criteria
- Biodegradable bags offered as standard and included in tender adjudication and landed cost calculation
- Awards included manufactures with local facilities in Africa

Supplier percentage of LLIN awards 2010 – 2020



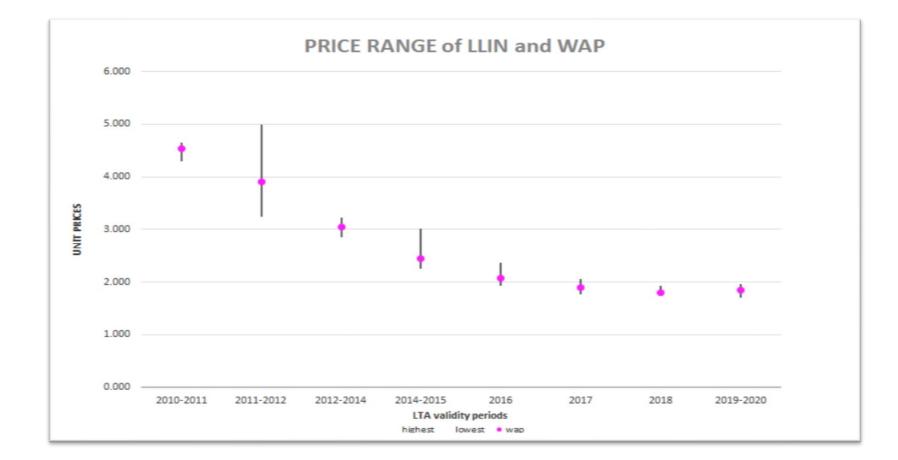
2019-2021 Procurement approach , Tender and Timeline – UNICEF | for every child

UNICEF LLINs WAP Data 2010-2020

The price range between the lowest and the highest unit price is less compared to the last 5 cycles of LTAs

The estimated WAP for the 2019/2020 LTA Period for the standard size (190X180x150) white will be USD 1.85

The estimated WAP is also 5% less than that estimated after UNICEF"s last tender awards for 2016/2017 which was USD 1.94

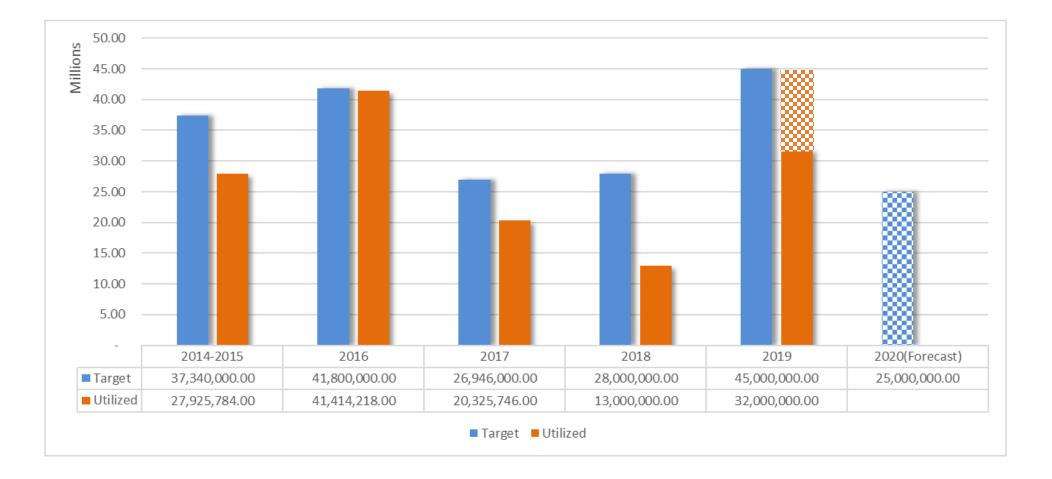


Container Stuffing Capacity per Supplier



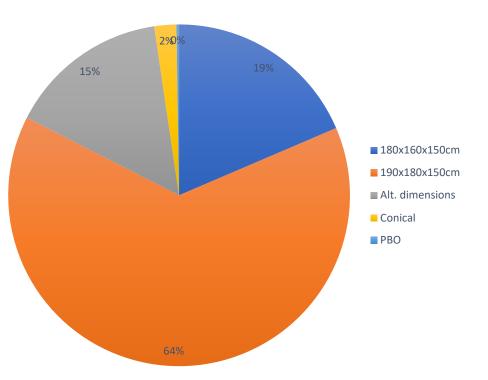
Increase in polyester nets stuffing capacity and slight improvement in polyethylene stuffing capacity

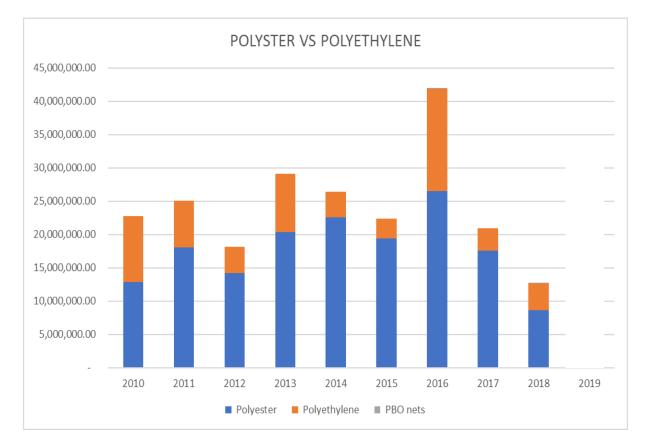
UNICEF LLINs LTAs utilizations 2014-2020



2019 LLINs Procurement trends (Sizes, net type)

Distribution of sizes 2010-2019

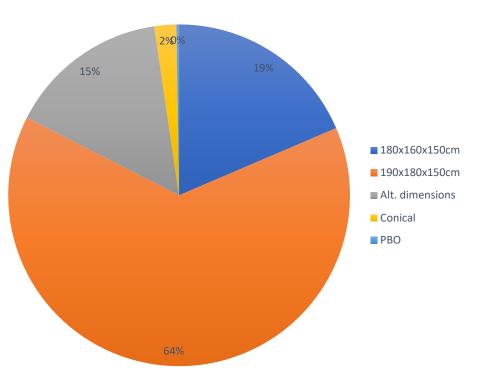


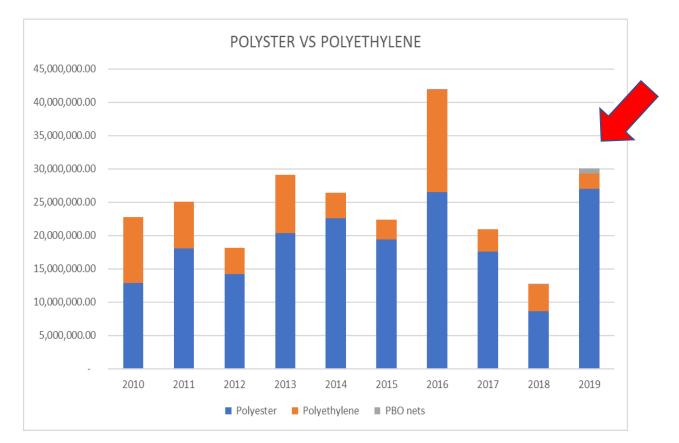


The procurement of conical nets has been reduced due to its higher price than the other standard sizes and the longer lead times for manufacturing. *Continued trend of preference for polyester vs polyethylene nets .. especially during mass campaigns*

2019 LLINs Procurement trends (Sizes, net type)

Distribution of sizes 2010-2019

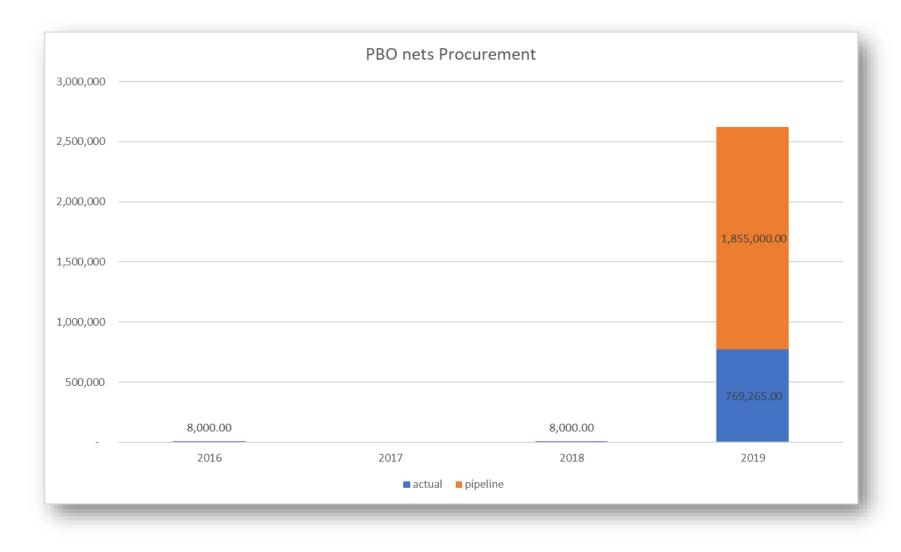




The procurement of conical nets has been reduced due to its higher price than the other standard sizes and the longer lead times for manufacturing. Continued trend of preference for polyester vs polyethylene nets .. especially during mass campaigns

UNICEF Procurement of PBO nets

- 8000 PBO nets were procured in 2016 and in 2018
- We have procured more than 700K PBO nets in 2019 to 3 countries from 2 suppliers
- Additional 1.8 M LLINs are on our pipeline (for 2 countries)



Presentation Outline

About UNICEF Supply Division

Overview of UNICEF LLINs Procurement

LLINs 2019-20 Procurement Strategy, Objectives and Tender Outcomes

2019 LLINs Procurement

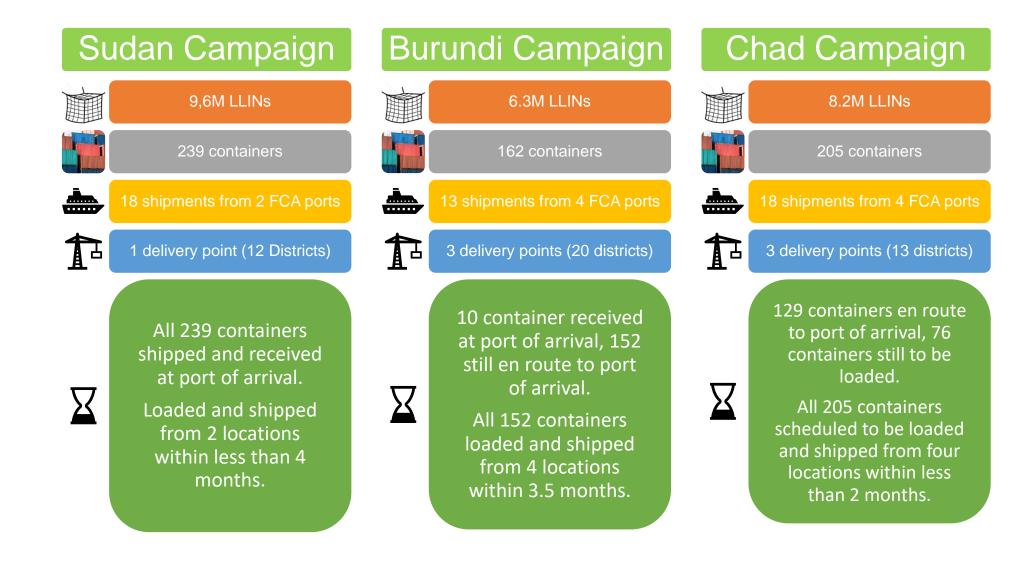
UNICEF Suppliers Performance Evaluation

PO Quantity by Receiving Country and FCA Port

FCA 🌒 Chennai, India 🌒 Dar Es Salaam, Tanzani 🔴 Ho Chi Minh, Vietnam 💛 Shanghai, China 🌒 Shenzhen, China 🌒 Tianjin, China



Progress of UNICEF 2019 LLINs campaigns



Emergency Orders

- Fast response on emergency requirements
- Availability for smaller quantities
- In-country registration requirements

Campaigns

- Availability of large quantities at time of PO placement
- Propper markings on shipment and documents for easy identification
- In country registration requirements

Transportation

- Availability of larger amounts of containers
- Close co-ordination of loading to avoid delays
- Congestion at port of arrival

Presentation Outline

About UNICEF Supply Division

Overview of UNICEF LLINs Procurement

LLINs 2019-20 Procurement Strategy, Objectives and Tender Outcomes

2019 LLINs Procurement

UNICEF Suppliers Performance Evaluation

UNICEF Suppliers performance evaluation

PO Delivery date

The date when the Freight forwarder receives the goods at port with the full set of documents -as per the PO INCOTERMS.

Goods readiness date

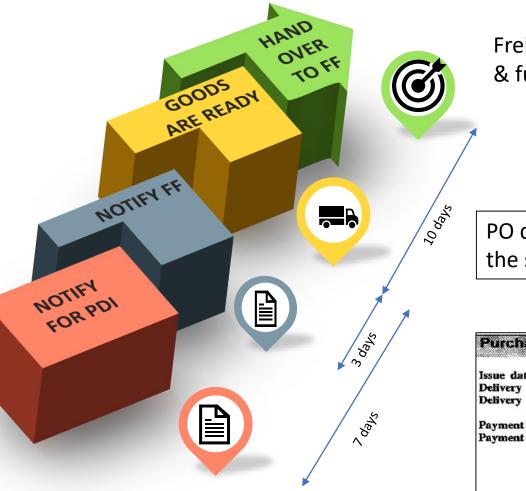
The date when the supplier will make the goods and related documents available including PDI and ready for pick up as per the PO INCOTERMS

Notification of Goods readiness date

Complete the NGR form of the PO 3 days before the goods are ready, send to FF copy SD

Notification for PDI/QAC

Send notification to SD -7 days before the goods readiness date



Freight forwarders receives the goods & full doc

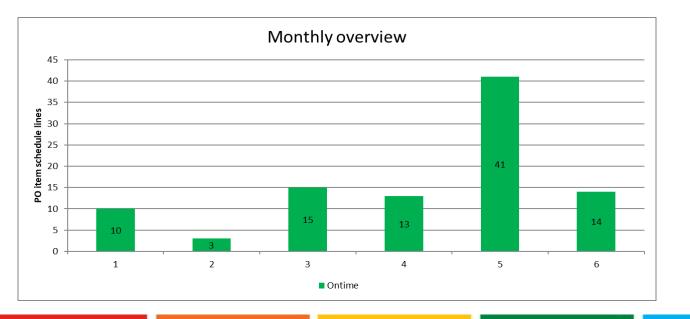
PO delivery date accepted by the supplier

Issue date	: 18 September 2014
Delivery date	: 13 October 2014
Delivery terms	: INCOTERMS 2010 FCA Dublin Airport, Ireland
Payment currency	: EUR .
Payment terms	: within 30 days Due net

Evaluating and monitoring supplier performance against their contractual obligations

KPI12 –% Timeliness of Supplier Deliveries (PO item schedule lines) Jan-June 2019





- Evaluating and monitoring supplier performance against their contractual obligations
- KPIs per supplier are closely monitored by SD
- UNICEF will check with the LTA holder(s) the availability for a given LLINs quantity prior to issuing any Purchase Orders – which should be aligned with the production capacity / Lead times mentioned in the LTA



Thank you

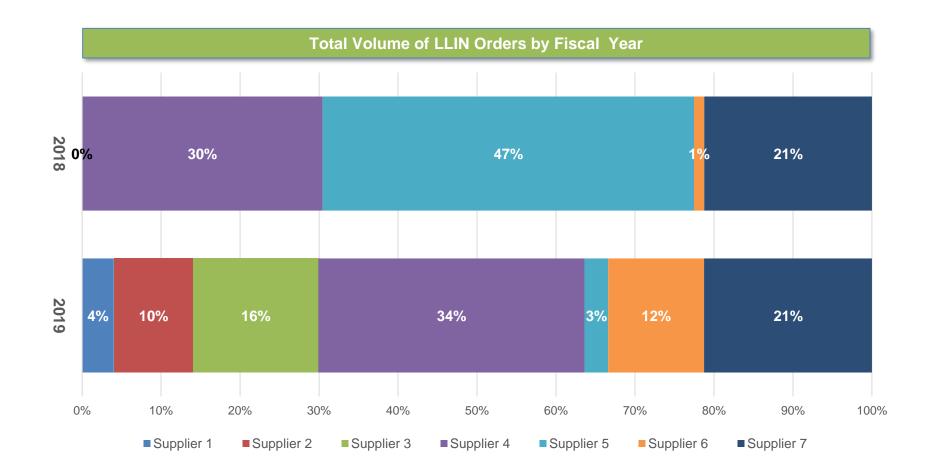
PMI LLIN Sourcing and Procurement Update

September 26, 2019

President's Malaria Initiative Fighting Malaria and Saving Lives

PMI's current goal is to help countries reach and maintain universal coverage of long-lasting ITNs for all individuals living in malaria endemic areas, with a specific target that at least 90% of households with a pregnant woman and/or children under five years of age own at least one ITN.

Changes to Market Landscape and Procurement Processes Result in Shifting Market Share and Increased Market Health



President's Malaria Initiative Fighting Malaria and Saving Lives

LLIN Standardization

- Rationalization of LLINs sized offered (8 specifications):
 - Rectangular, Polyester, 190x180x150, white
 - Rectangular, Polyester, 190x180x170, white
 - Rectangular, Polyester, 180x160x170, white
 - Rectangular, Polyester, 180x160x150, white
 - Rectangular, Polyethylene, 190x180x170, white
 - Rectangular, Polyethylene, 190x180x150, white
 - Rectangular, Polyethylene, 180x160x170, white
 - Rectangular, Polyethylene, 180x160x150, white
- Eliminated redundant sizes that add complexity
 E.g. 190x180x170 vs. 180x190x170 (L x W x H)
- Ceased the procurement of hooks and strings packaged with LLINs
- Limited artwork to a single, standard PMI packaging logo
- Maintain 100 denier minimum standard for polyester nets

Four essential dimensions evaluated to assess "healthy market," specific output metrics tailored to individual markets

	Key questions and output metrics	Opportunities
Global capacity	 Is there sufficient supply to meet demand? Supply and demand gap Existence of demand forecast Forecast accuracy Lead times, stock out rate 	 Standard nets: More than sufficient global capacity, however not all eligible per PMI standards. New nets: Information about country demand and potential for new manufactures to enter depends on efficacy studies required to qualify suppliers .
Affordability & funding	 Is pricing affordable? Price relative to substitute and peer markets % Supply base utilized Funding and demand gap Projected funding 	Standard nets: Opportunity to reduce COGS and bring down overall costs New nets: Lack of demand visibility and unknown adoption timelines inhibit forecast accuracy. Minimum volume guarantee and/or other subsidies could bring ITNs into a more affordable range.
Supply risk	 Is there sustainable, secure supply of these products? Number and diversity of suppliers Margins / price relative to cost Product registration coverage Scalability of capacity 	Standard nets: Evaluation criteria is weighted using a best value approach with emphasis is placed on minimizing supplier concentration. New nets: Shifting demand should produce incentive for suppliers to innovate new effective nets to combat resistance. It is important that global market deals with first mover suppliers do not eliminate incentive for new entrants.
Product quality & appropriateness	 Are there quality products that meet user needs? Effective products with regulatory approvals Quality of products Appropriateness based on target customer needs Incentives for innovating improved products 	Standard nets: Potential to become ineffective due to increasing pyrethroid resistance. New nets: Additional data required to ensure appropriateness based on efficacy compared to alternatives. Emphasis will be placed on providing the opportunity and incentive for suppliers to pursue production of new nets.

President's Malaria Initiative Fighting Malaria and Saving Lives

Strategic Procurement Objectives

- Promote **competition** to the maximum extent practical
 - Competition among IDIQ holders for share of total PSM procurement
- Deliver critical health commodities **on time**
 - Supplier performance monitoring, staggered GADs, potential for make to stock
- Operate an **efficient** and effective supply chain
 - Reduced procurement lead time through reduced tendering burden, potential for improved planning resulting in cost savings across supply chain
- Retain **flexibility** in order to be agile and responsive to changing needs and priorities
 - Option to compete orders and re-solicit pricing or proposals
- Pursue near and long-term **best value** in accordance with program objectives
 - Best value determination per evaluation criteria

"Best Value" Determined across multiple Criteria in Support of Near and Long-Term Programmatic, Market, and Supply chain objectives

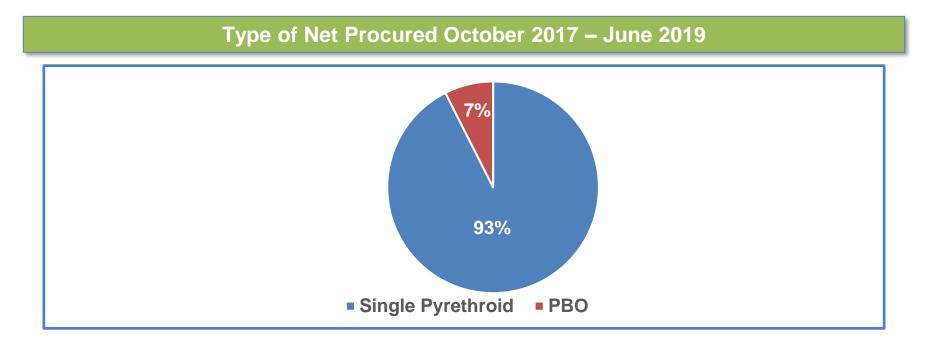
				Q	
Total Landed Cost	Supplier Performance	Registration Coverage	Product Portfolio	Quality	Market Health Considerations
Suppliers that offer competitive pricing minimize cost burden on recipient countries, enabling increased coverage and available funding for other life saving medical supplies. Additional benefit is derived when supplier(s) are able to make goods available closer to the destination, thereby minimizing the burden of the freight cost.	 Inclusive of: On-time delivery (GAD adherence) Avoidance of incidents impacting on- time in full delivery Quality control (nets that are in- line with product specifications 	Many countries impose varying levels of registration requirements. Suppliers that invest in broad registration coverage provide greater value by increasing the ability to import the required product(s)	Certain products may have infrequent or uncertain demand. But Suppliers' investment in developing and maintaining such products within their portfolios increase the project's ability to respond when the needs arise.	Strict minimum eligibility standards maintained for all nets procured for recipient countries to ensure that a manufacturer can produce product(s) capable of achieving the desired result for the end user.	PMI aims to limit supply risk while ensuring sufficient capacity exists to meet current and future global demand, as well as drive value through competitive market dynamics by procuring from multiple suppliers

Allocation and Order Assignment Processes are Designed to Reward Suppliers Offering Best Value Without Compromising Project Goals

	Process	Communication
Market Share Allocation	 Awarded suppliers are evaluated against each other to determine allocation (market share) targets Evaluation objective is to score suppliers in terms of best value to PMI and thereby determine appropriate market share Depending on demand/breadth of supply base, not all suppliers that were awarded LTAs will receive an allocation 	 Supplier-specific volume forecasts are provided at the product level for the coming fiscal year Suppliers are informed of strengths/weaknesses of offering that primarily influenced its allocation
Order Assignment	 Following receipt of firm orders from recipient countries, each order is assigned either individually or in bulk, depending on factors such as urgency, funding, etc. Individual order assignments take into consideration a variety of constraining factors, such as country registration and shelf life requirements, production capacity, market share targets, etc. 	 Suppliers are informed of assigned orders, subject to confirmation of ability to meet GAD(s), registration status, etc. Period between order assignment and GAD can range from 1-18 months If confirmed, PO will be issued upon availability of funding

President's Malaria Initiative Fighting Malaria and Saving Lives

Demand for PBO Nets Slowly Materializing

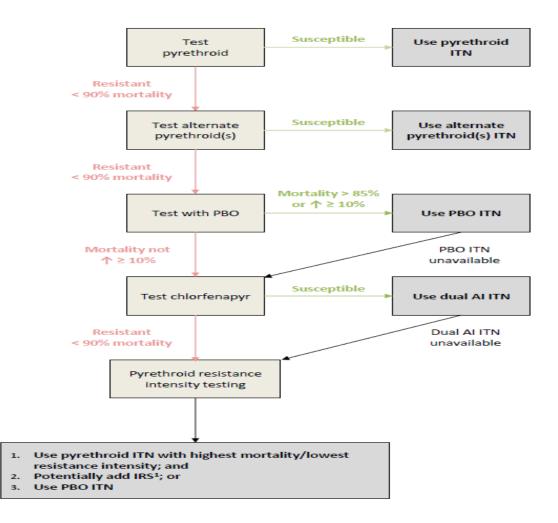


More than100 million nets PMI procured in FY2018 through Q2 of FY2019: 93% were single pyrethroid.

Given expected demand increase for the PBO nets, additional PBO net suppliers being evaluated by PMI for QA approval and addition to the PSM list of eligible suppliers.

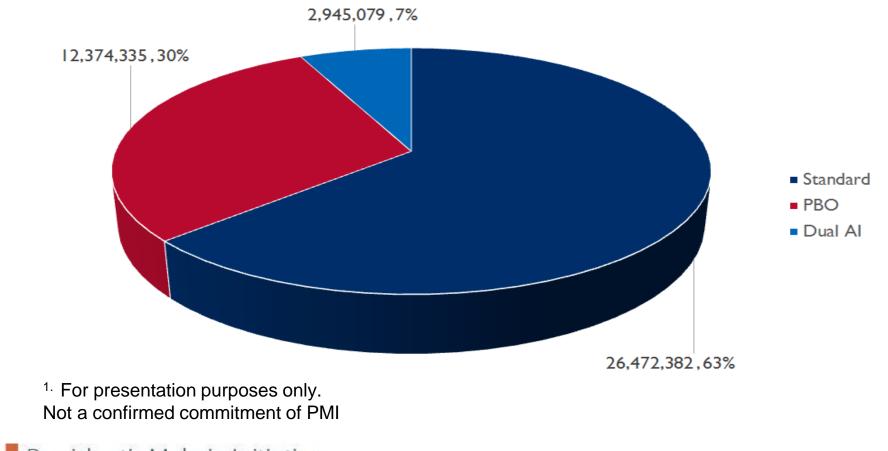


PMI Decision Tree for Selection of ITNs Based on Insecticide Resistance Monitoring Data



President's Malaria Initiative Fighting Malaria and Saving Lives

Demand for PBO and Dual AI Net is Projected to Increase Substantially¹ in FY20



President's Malaria Initiative Fighting Malaria and Saving Lives

Thank You



PRESIDENT'S MALARIA INITIATIVE



Long-lasting Insecticidal Nets Supplier & Partner Consultative Meeting

Global Fund LLIN Strategy

26 September 2019 Singapore Global Fund Team



Disclaimer

The Global Fund Procurement Strategy on LLINs is currently under development and will be finalized in the forthcoming weeks.

This document presents the Global Fund's current intention which is subject to change.

The data and information herein are provided for illustrative purposes and derived from a limited and preliminary analysis of the Global Fund.

The present document shall not be considered as the Global Fund's representation or commitment of any kind.



The Global Fund: Introduction, Market Shaping Strategy & Strategic Sourcing

- LLIN Market Observations
- LLIN Procurement Strategy: 2020 2021
- Global Fund 2019 LLIN Tender Approach and Timelines

Key contacts on the LLIN Procurement Strategy



Philippe François Head, Sourcing & Supply Chain Dept.



Lin (Roger) Li Senior Manager, Strategic Sourcing



Azizkhon Jafarov Manager, Global Sourcing, Health Technologies



Alain Prat

Team Leader, Quality Assurance, Health Product Management, Sourcing & Supply Chain Dept.



Clarisse Morris

Specialist, Global Sourcing, Health Technologies, Vector Control



Tulin Kontente Adiyaman Legal Counsel



Artem Lazurenko Integrity Due Diligence Specialist

The Global Fund

A 21st-century partnership organization to accelerate the end of HIV, tuberculosis and malaria as epidemics

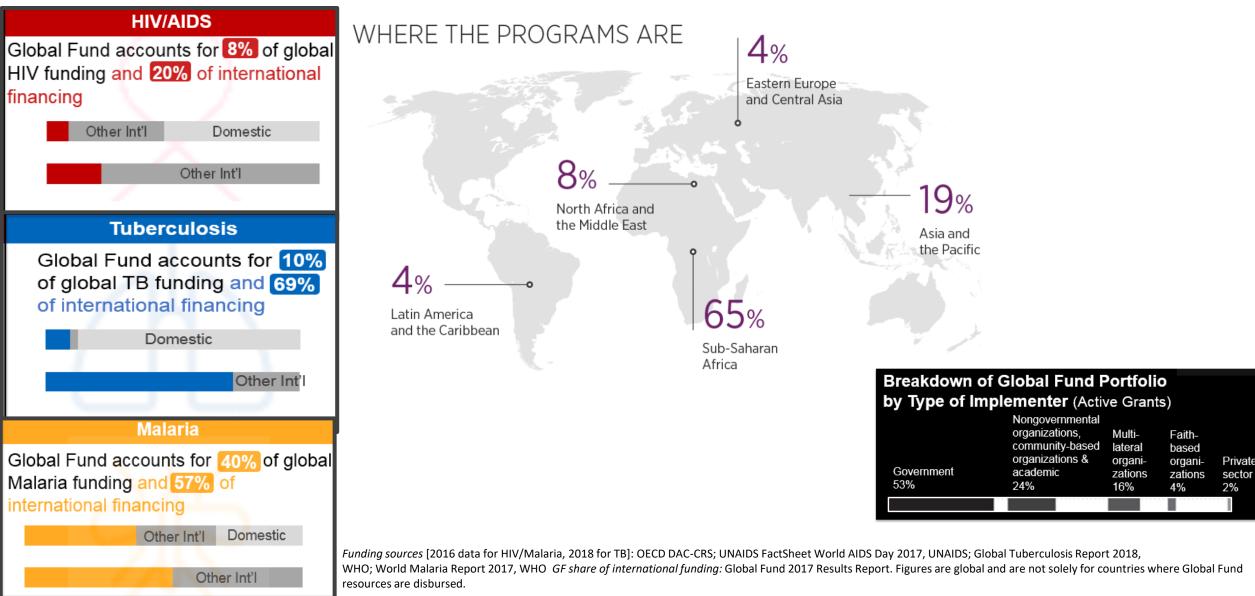


Founded in 2002, the Global Fund is the **leading contributor of resources in the fight against AIDS, tuberculosis and malaria.** It **mobilizes and invests nearly US\$4 billion a year** to support countries and communities most in need. It has an active portfolio of **over 430 active grants in over 100 countries**, implemented by local experts.

The Global Fund is calling on the world to step up the fight against HIV, TB and malaria. In October 2019, President Macron will host the Global Fund's Sixth Replenishment Conference in Lyon. This Replenishment seeks to raise at least **US\$14 billion** to help save 16 million lives, **avert 234 million infections** and help the world get back on track to **end these diseases**. Of the at least US\$14 billion, the Global Fund is calling on the private sector to mobilize at least US\$1 billion to step up the fight.

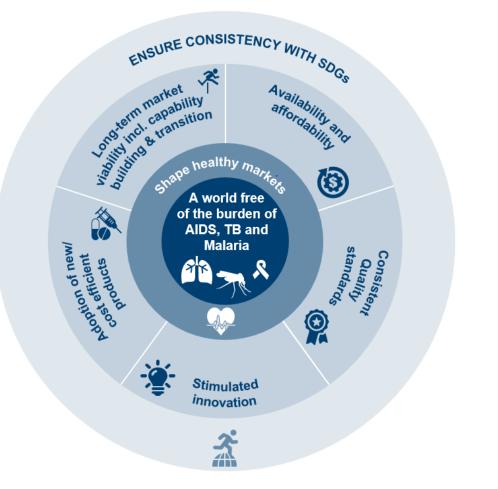
S The Global Fund

The USD 4 billion per year spent by the Global Fund is critical in the fight

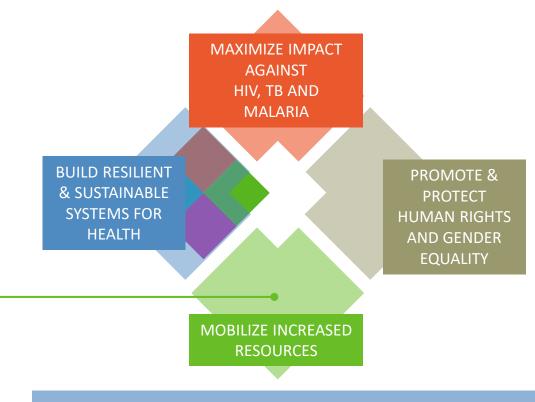


The Global Fund's Market Shaping Strategy extends beyond its direct spend to help ensure healthy markets and value for money

Mission of the Global Fund's Market Shaping Strategy: Leverage our position to facilitate healthier global markets for health products – today and in the future

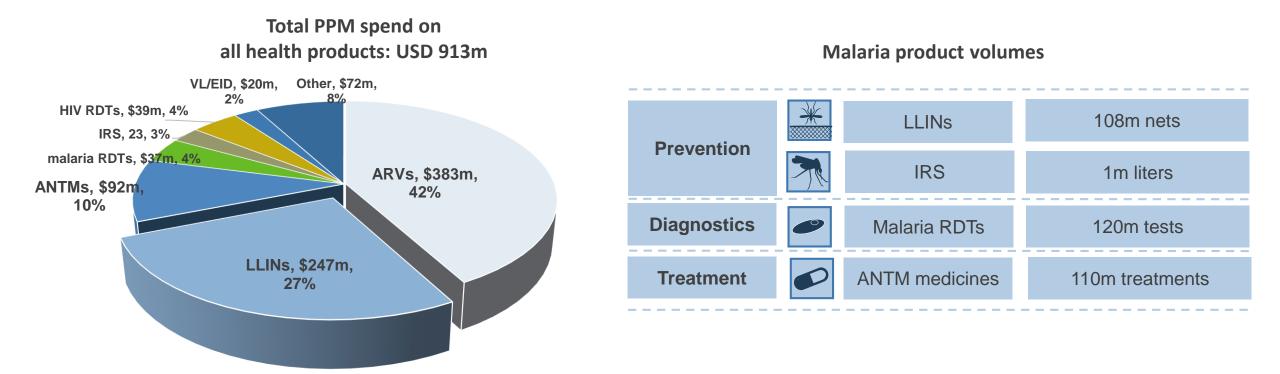


Global Fund Strategy 2017-2022



STRATEGIC ENABLERS: Innovate and differentiate along the development continuum + Support mutually accountable partnerships

44% of the Pooled Procurement Mechanism (PPM) health product spend is for malaria-related products and 27% is spent on LLINs



Acronyms:

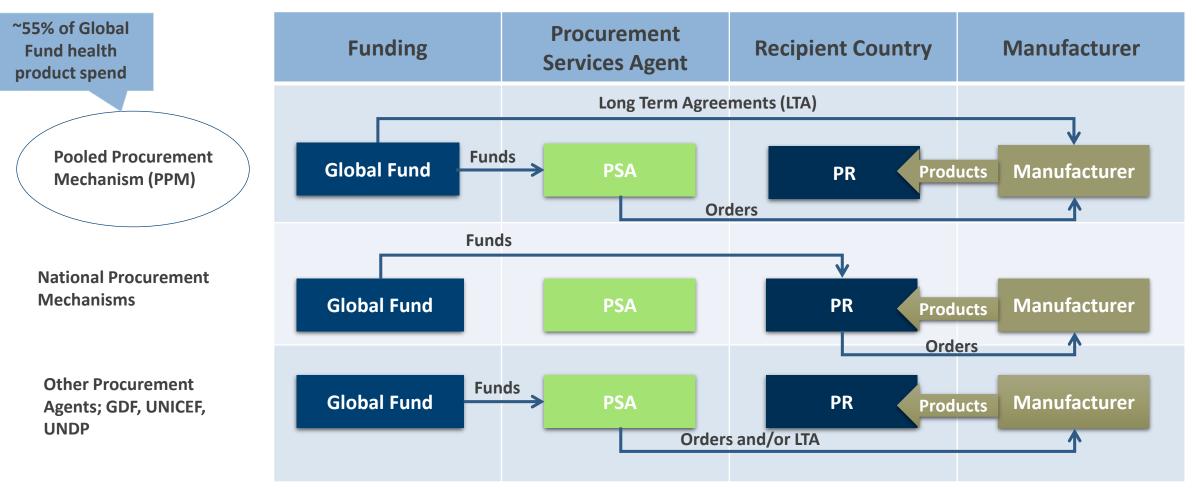
ARVs:	Antiretroviral medicines
ANTMs:	Antimalarial medicines
IRS:	Indoor Residual Spraying
LLINs:	Long-Lasting Insecticidal Nets

RDTs:Rapid Diagnostic TestsVL/EID:Viral Load/Early infant diagnosisOther:General lab equipment & supplies, essential
medicines, condoms, and other diagnostics

S The Global Fund

Data source: 2018 Procurement Services Agent data, includes product cost, freight, logistics and other costs.

The Pooled Procurement Mechanism is the largest of the Global Fund's procurement channels, representing just over half of the Global Fund health product spend, depending on the category



Partners, donors and other stakeholders expect the Global Fund to deliver a responsible procurement approach that supports the Sustainable Development Goals



In 2015, countries gathered and committed to end poverty, protect the planet and ensure prosperity for all. Increasingly, partners and donors are keen to see how they can leverage their investments to deliver on shared objectives of the SDGs.

SOURCE: WHO

Responsible procurement features in the Global Fund's market shaping work

		Description	_
	Economy	 Provide additional economic benefits to in- country community Empower community by sharing knowledge 	
DIMENSIONS	Ecology	 Mitigate effect on environment along the end-to-end supply chain Use knowledge and skills to contribute to a constant rise in eco-efficiency 	 Principles for building holistic standards Build on existing guidelines Provide practical guidance Include phased approach Focus on procurement
	Society	 Promote fundamental human rights, e.g., — Advocate for decent labor conditions — Promote children rights Promote workers' health and safety 	
Q	Business practices	Promote best business practices among suppliers and other buyers	Align with GF objectives

S The Global Fund

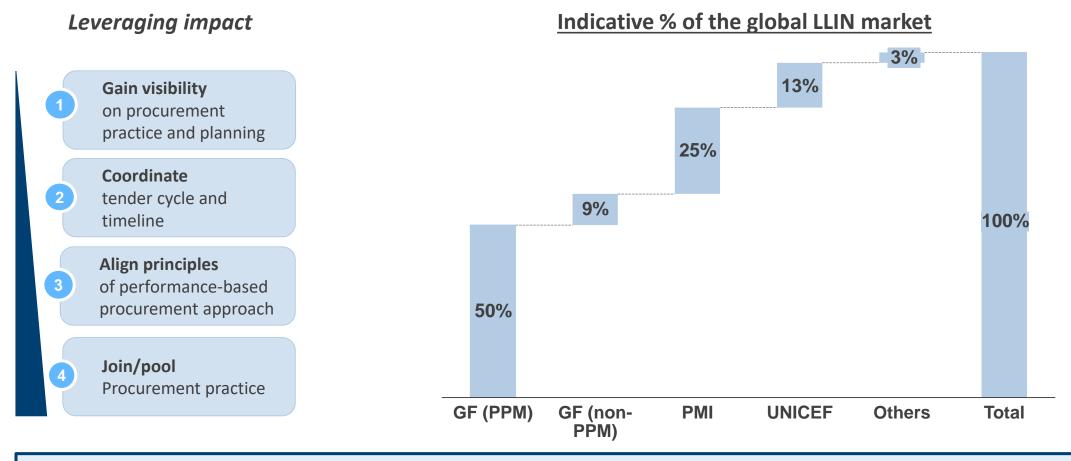
The Global Fund addresses each dimension of the responsible procurement framework through a case-by-case approach

Dimensions

addressed	Case examples	Issues	Solutions
	LLIN	 LLIN manufacturing countries have weak regulators' focus on textile Plastics and insecticides used for LLINs present high chemical risks for environment Historical reputational issues related to corruption, environment and disposal 	 GF mandated social and environmental assessment by a 3rd party for 7 LLIN production sites in 3 countries. GF provided action plans for each assessed site to implement environmental and labor regulations GF encouraged Principal Recipients to order bulk packaging of LLINs for campaigns, reducing plastic waste by an estimated 940 tons in 2018
	Artemisinin	 Agricultural artemisinin prices are volatile due to: Overproduction capacity because of low technical barrier to entry Lack of harmonized quality standards Agricultural artemisinin price volatility causes supply interruptions to ACT suppliers 	 GF mitigated price volatility and environmental risks by visiting agricultural artemisinin producers and reviewing Environmental, Health and Safety (EHS) practices: GF conducted agricultural artemisinin manufacturer qualification through 3rd party GF incentivized best practices by manufacturers through 3 year volume allocations
	ARV R	 Prior reliance on spot tenders contributed to an important reliance on delivery by air Poor performing suppliers lobby when losing volumes Outer/secondary paper cartons traditionally included for multi-month ARV packs increase transportation weight and waste 	or encouraged rincipal helpfents to switch to carton less
③ The Global Fund		Society C Ecology	Economy Business 127

practices

We have been working with other buyers and partners to deliver market shaping value



Moving forward, we are seeking for strengthening collaboration to further leverage volume and deliver Market Shaping Value collectively.

S The Global Fund

Agenda

• The Global Fund: Introduction, Market Shaping Strategy & Strategic Sourcing

LLIN Market Observations

- LLIN Procurement Strategy: 2020 2021
- Global Fund 2019 LLIN Tender Approach and Timelines

Global Fund's balanced supply system, embedded in its strategic sourcing work, has brought impressive results and helped shape the LLIN market

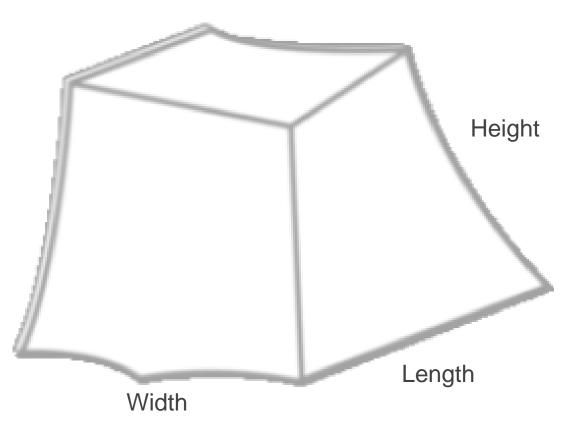
- Provided 100m nets per year at the lowest possible affordable and sustainable price
- Achieved an average price reduction of 5% over the past 3 years
- Supplied 90% of LLINs timely and in full in 2016-2019
- Created a resilient supplier base with production in 6 different countries
 Promoted responsible and sustainable business practices:
- **50% of nets** were supplied without bags resulting in **940 tons** of plastic waste avoided
- Met the Global Fund's and national quality requirements
 Mitigated implementation risks including supply continuity risks
- Published reference prices
- Provided access to PPM long term agreements to other partners
- Incentivized a broad national registration footprint

In simplified terms the LLIN production process involves 3 steps

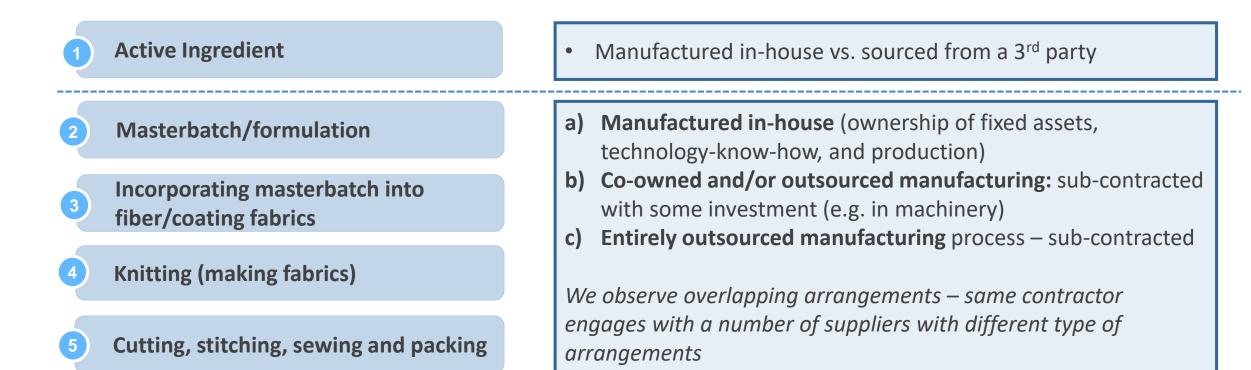
1. Active ingredients (AI) - Insecticide

- Most manufacturers source Als rather than produce them in-house
- 2. Formulation key supplier know-how
 - Coat the polyester (PES) fibers with insecticide; or
 - Incorporate insecticide into the High Density polyethylene (HDPE) fibers
- 3. Manufacturing nets Textile
 - In-house process, outsourced or a mix of both

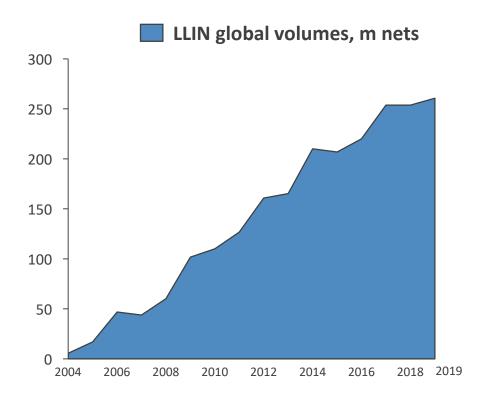
Example: 180x190x160cm (LxWxH)



There is a wide variety of **production arrangements** across the end-to end production process creating concerns about **supply continuity**, **transparency**, **consistent quality management**, **anti-competitive practices** and **business commitment**



Additional market observations



- LLIN volumes have increased significantly over the past 15 years.
- Barriers to market entry are low leading to an increasing number of suppliers of pyrethroid nets. Excess capacity has resulted in fierce competition.
- LLIN regulatory process is still relatively new, LLIN quality concerns are not fully addressed.
- WHO PBO guidelines are challenging to implement and product specifications vary significantly. In addition demand for PBO nets is increasing, while only few PBO nets are prequalified.
- Prequalified dual AI nets are not eligible for mainstream Global Fund procurement.
- **Peaks in LLIN demand** are a continuing challenge.
- In response to the Global Fund's previous procurement strategy, production capacity in Africa has increased over the past 3-6 years.
- Inappropriate business practices (disingenuous lobbying, predatory pricing, unreported non-compliance with MFN clause, anticompetitive behavior)

S The Global Fund

Data Source: Net Mapping Project as of Q2 2019 (trend line) 2019 volumes are a projection, H1 2019 volumes are multiplied by 2

Agenda

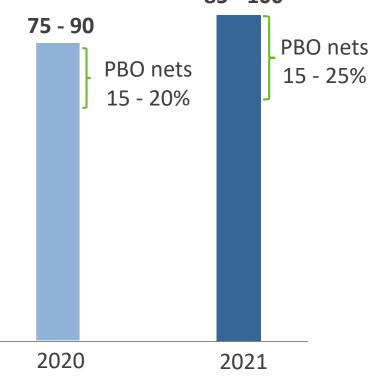
- The Global Fund: Introduction, Market Shaping Strategy & Strategic Sourcing
- LLIN Market Observations
- LLIN Procurement Strategy: 2020 2021
- Global Fund 2019 LLIN Approach and Timelines

Product scope and indicative product volumes* LLIN Bridging Procurement Strategy (2020 – 2021)

Indicative volume split across Product set product sets 1. Pyrethroid nets 75 - 85% 15 - 25% 2. PBO nets There is interest in increasing the demand for PBO nets Demand is currently managed through catalytic funding 3. Dual AI nets Explore synergies for mainstream procurement

Tender Product Scope

LLIN Demand projection (millions)



85 - 100

S The Global Fund

Strategic objectives

Leverage volume and joint effort to maximize market shaping value delivery with an emphasis on 5 dimensions, and provide data to support future regulatory and policy implementation.

- 1. Quality assured products
- 2. Greater **affordability** and improved **delivery** performance
- 3. Supply continuity and long-term supply base sustainability
- 4. Foster **innovation**, facilitate adoption and accelerate scale-up of new products
- 5. Promote **responsible procurement**

A Bridging Strategy Evolving the LLIN Procurement Strategy in a shifting product and policy landscape



Provide a volume commitment to recognize supplier investment to ensure supply continuity and to prompt sustainable business practices

Indicative

Degree of ownership/investment in these 5 steps	Commitment as % of supplier allocation
1. Al production	15%
2. Masterbatch/formulation technology	15%
3. Incorporating/coating	15%
4. Knitting (making fabrics)	15%
5. Cutting, stitching, sewing and packing	15%
Total:	75%

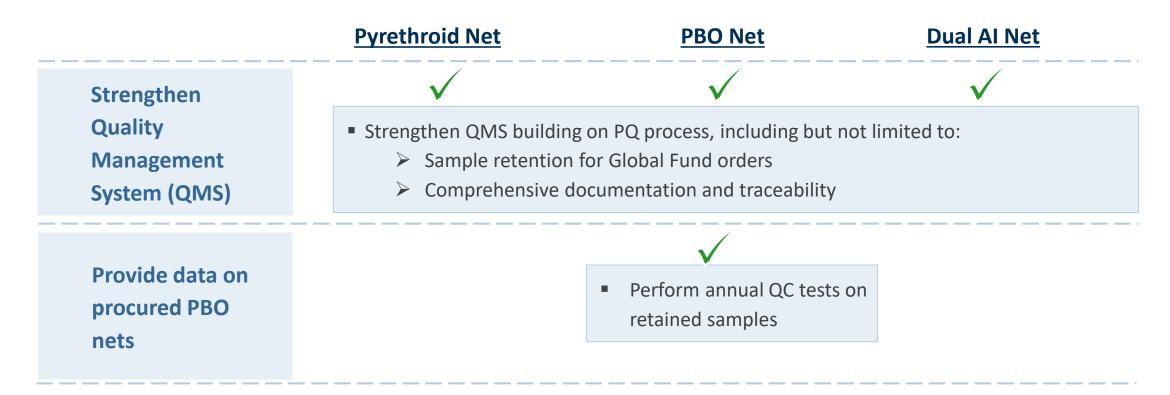
Suppliers will need to provide evidence for each claimed level of ownership/investment.

During contract implementation:

Suppliers are required to provide evidence against Global Fund requirements as illustrated above. Subject to evaluation and review, the Global Fund may commit up to 75% of annual supplier allocation according to the level of the ownership.

S The Global Fund

2 Joint effort to support WHO PQ process implementation with a focus on QMS strengthening



During contract implementation:

- Failure to demonstrate QMS strengthening may lead to significant reduction of annual allocation and commitment
- A non-conforming product may lead to termination of the allocation and commitment or other commercial implications, as appropriate

3 Gradually address Environment, Health and Safety (EHS) concerns through the Responsible Procurement Framework

	Pyrethroid Net	PBO Net	Dual AI Net
Enhancing	\checkmark	\checkmark	\checkmark
Environment,	We will require a gradual im	provement of the Environme	ntal Management Systems (EMS)
Health and	and Occupational Health & Safety Management Systems (OH&S) from corporate		
Safety (EHS)	standards to national standa	ards and towards internationa	l standards

During contract implementation:

□ Failure to demonstrate progress of EMS and OH&S strengthening may lead to significant reduction of annual allocation and commitment.

Strategic projects to address concerns around LLIN plastic in terms of recycling, reuse and introducing environmentally friendly materials

The projects will be assessed along the following dimensions:

Effort/Investment	Is there additional significant effort or investment required to execute the project?
Feasibility	Are these strategic projects feasible to be implemented within the course of the implementation period? Are there any dependencies on other stakeholders (Global Fund, WHO, countries, etc.)?
Ability	Is the supplier able to implement these strategic projects within the course of the implementation period?
Potential value/impact	What is the total potential value/impact that can be yielded by these projects within the course of the implementation period?

During contract implementation, remaining cautious about the cost implications and country ability to implement Up to 10% of annual Global Fund volume may be reserved for strategic project implementation

Agenda

- The Global Fund: Introduction, Market Shaping Strategy & Strategic Sourcing
- LLIN Market Observations
- LLIN Procurement Strategy: 2020 2021
- Global Fund 2019 LLIN Tender Approach and Timelines

Principles of our approach

Tender Eligibility

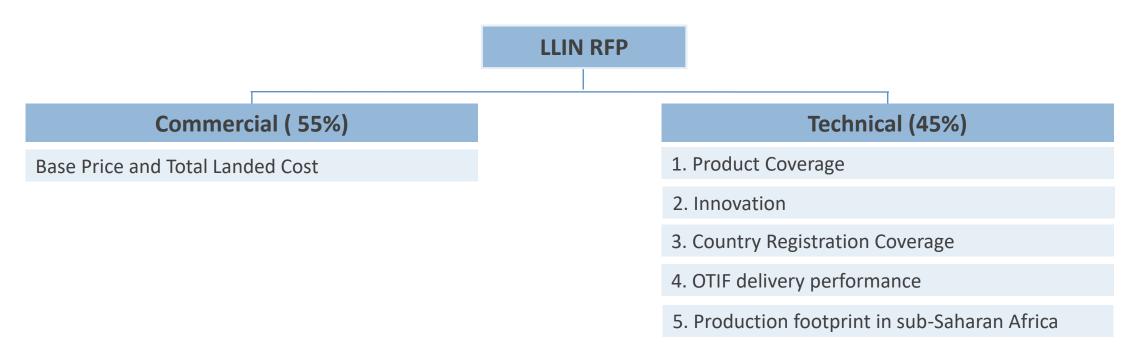
Global Fund Quality Assurance requirements for LLINs

The tender also incorporates legal requirements and an Integrity and Due Diligence Process to assess threats and risks to values, objectives and reputation of the Global Fund.

Performance Principles

- **1.** Volume allocations and commitments will be managed throughout contract implementation via a performance-based approach
- 2. On Time In Full (OTIF) delivery against promised lead times is also part of the performance-based approach
- **3.** Sustainable supply and good business practices will be key focus areas during contract implementation
- 4. The Global Fund values **responsible procurement** and will factor this during implementation

Tender Evaluation Structure

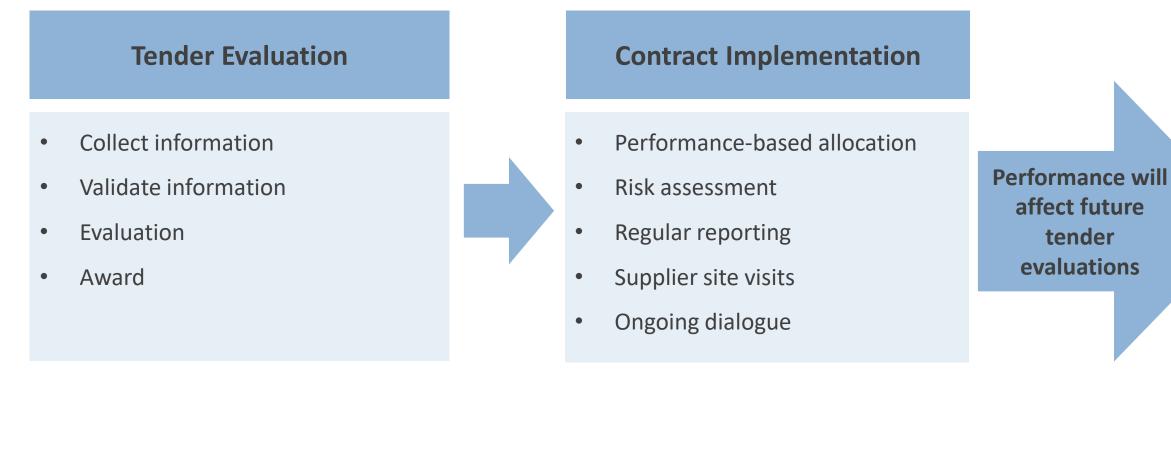


• The full scope of evaluation criteria will be reapplied at annual performance reviews for subsequent allocation periods

- There will be a process to consider new entrants and/or new products that become eligible for procurement after tender closure (subject to review)
- Volume discount will not be part of tender evaluation, but will be considered in implementation

Evaluation ratios commercial (55%) vs. technical (45%) have remained the same as in the previous tender in 2015 The Global Fund

During contract implementation our focus will be on generating value through supplier relationship management



Key measures – Most Favored Nation (MFN) Clause

- MFN clause in contract supports our efforts to ensure best value for Global Fund
- We will proactively manage the principles and implementation of the MFN clause
- Suppliers are required to notify the Global Fund of all their tender price submissions within 7 days
- These notifications will not automatically trigger the MFN clause. Rather the Global Fund will review the submissions and accompanying justifications and decide accordingly.

2019 LLIN tender approach and timelines (indicative)

Phase I: Supplier and Partner Consultation (Sep – Oct 2019)

- LLIN Partner & Supplier Consultative Meeting in Singapore
- 2. Invite feedback from suppliers and partners to finalize the LLIN strategy

Phase II: RFP issued and submissions received (Mid-Oct – Mid-Nov 2019)

Global Fund issues RFP

- RFP on Sourcing Platform, including both technical and commercial sections
- Two rounds of questions/answers prior to the tender submission deadline

Technical and commercial submissions due

Phase III: Evaluation (Mid-Nov – Early Dec 2019)

- 1. Initial evaluation of bid submissions
- 2. Finalization of technical and commercial evaluation
- 3. Internal approvals
- 4. Award

Phase IV: Contracting and implementation Plan (Dec 2019 – Jan 2020)

 Contract finalization and signing

2020-2021 Contract implementation

- Supplier performance measurement
- Risk assessment
- Regular reporting
- Supplier onsite visits
- Ongoing dialogue

Request for Proposal Preparation

- 1. RFP Documentation will be available through the Sourcing Platform and posted on the Global Fund website for downloading
- 2. There may be a number of documents:
 - Main RFP document
 - Schedules
 - Certificate of Conformance
 - Confidentiality agreement
 - Integrity Due Diligence questionnaire
 - Draft Framework Agreement
- 3. To submit a complete response to RFP, bidders will need to comply with all requirements as specified
- 4. We will request a significant amount of information. We will clearly advise which information will be evaluated and which info is for implementation purposes only

Objectives for individual supplier meetings on 27 September

- ✓ Ensure the procurement strategy and approach are understood
- ✓ Listen to your views, and advise on any gaps and/or concerns
- ✓ We are listening through 4 October 2019 on any further clarifications on the overall strategy

Thank you!



(5) The Global Fund