<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter(s)</th>
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<tbody>
<tr>
<td>08.30 – 09.30</td>
<td>Registration (coffee and tea available)</td>
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<tr>
<td></td>
<td>Venue: Foyer Rive Gauche</td>
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<tr>
<td>09.30 – 09.45</td>
<td>Welcome and agenda</td>
<td>Aziz Jafarov, The Global Fund</td>
</tr>
<tr>
<td></td>
<td>Venue: Crans Classroom</td>
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</tr>
<tr>
<td>09.45 – 10.00</td>
<td>Strategic overview: key achievement and priorities</td>
<td>Christopher Game, The Global Fund</td>
</tr>
<tr>
<td>10.00 – 10.15</td>
<td>DFID Perspective</td>
<td>Colette Whigham, DFID</td>
</tr>
<tr>
<td>10.15 – 11.00</td>
<td>Core health products – update and the future through five lenses</td>
<td>Mariatou Tala Jallow, The Global Fund</td>
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<td>Venue: Crans Classroom</td>
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<tr>
<td>11.00 – 11.30</td>
<td>Break</td>
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<tr>
<td></td>
<td>Venue: Foyer Rive Gauche</td>
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</tr>
<tr>
<td>11.30 – 12.15</td>
<td>Core health products – update and the future through five lenses (Case study)</td>
<td>Martin Auton and Lin (Roger) Li, The Global Fund</td>
</tr>
<tr>
<td></td>
<td>Venue: Crans Classroom</td>
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<tr>
<td>12.15 – 12.30</td>
<td>Key note message</td>
<td>Mark Dybul, Executive Director, The Global Fund</td>
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<tr>
<td>12.30 – 13.30</td>
<td>Lunch</td>
<td></td>
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<tr>
<td></td>
<td>Venue: Zermatt 1</td>
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<tr>
<td>13.30 – 14.00</td>
<td>Core health products – update and the future through five lenses (Q&amp;A and Discussion)</td>
<td>Mariatou Tala Jallow, The Global Fund</td>
</tr>
<tr>
<td></td>
<td>Venue: Crans Classroom</td>
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<tr>
<td>14.00 – 14.45</td>
<td>Update on Wambo.org</td>
<td>Anna Van Nieuwenhuizen, The Global Fund</td>
</tr>
<tr>
<td>14.45 – 15.15</td>
<td>Guest speaker</td>
<td>Jonathan Webb, Procurement Leaders</td>
</tr>
<tr>
<td>15.15 – 15.45</td>
<td>Break</td>
<td></td>
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<tr>
<td></td>
<td>Venue: Foyer Rive Gauche</td>
<td></td>
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<tr>
<td>15.45 – 16.45</td>
<td>Introducing the new Supply Chain vision</td>
<td>Martin Ellis, The Global Fund</td>
</tr>
<tr>
<td></td>
<td>Venue: Crans Classroom</td>
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<tr>
<td>16.45 – 17.00</td>
<td>Q&amp;A and Closing remark of Day 1</td>
<td>Christopher Game, The Global Fund</td>
</tr>
<tr>
<td>17.00</td>
<td>Reception</td>
<td></td>
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<tr>
<td></td>
<td>Venue: Zermatt 1</td>
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</tr>
</tbody>
</table>
## November Strategic Review Meeting
### AGENDA
#### Starling Hotel, Geneva
#### Day 2 - Thursday, 3 November 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter(s)</th>
</tr>
</thead>
</table>
| 08.30 – 09.00 | Coffee and tea  
Venue: Foyer Rive Gauche |                                           |
| 09.00 – 09.20 | Opening remarks; Agenda for the day  
Venue: Crans Classroom | Christopher Game  
The Global Fund |
| 09.20 – 10.30 | Parallel Break-out sessions (focused discussions):  
1. Vector Control: What do we need to speed up the scale-up of new the next generation LLINs and Insecticides?  
Venue: Zinal  
2. ARVs – how can we assure sufficient reliable supply of the ARVs to support scale-up to reach the international treatment targets?  
Venue: Leysin, Nendaz | Facilitators |
| 10.30 - 11.00 | Break  
Venue: Foyer Rive Gauche |                                           |
| 11.00 – 12.30 | Parallel Break-out sessions  
1. Procurement Game  
Venue: Zinal  
2. Wambo.org Demo  
Venue: Leysin | Christopher Game and Steve Hornsby  
The Global Fund  
Mathieu Courtois  
Wambo.org |
| 12.30 – 13.00 | Next steps and closing remarks  
Venue: Crans Classroom | Christopher Game  
The Global Fund |
| 13.00 – 14.00 | Lunch  
Venue: Zermatt 1 |                                           |
Annual Sourcing Strategy Review

November 2016
Geneva

Christopher Game – Chief Procurement Officer
The Global Fund raises & invests nearly US$4 billion/year

<table>
<thead>
<tr>
<th></th>
<th>Proportion funds</th>
<th># countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV/AIDS</td>
<td>53%</td>
<td>105</td>
</tr>
<tr>
<td>Malaria</td>
<td>30%</td>
<td>74</td>
</tr>
<tr>
<td>TB</td>
<td>17%</td>
<td>98</td>
</tr>
</tbody>
</table>

Medicines and health products = 40% spend
A reminder of where we started

The dreaded Silos. Even when working in partnership, partners all too frequently have to revert to the day job or are constrained by their own rules

- Reducing speed
- Adding complexity
- Reducing leverage
- Adding fragmentation
- Pilots often stay pilots

And then we all hire a consultant, very often from the same pool

36.8%

Simplicity

Our Focus is so often on the Mechanism or process for delivery that we lose sight of both the objective and speed to deliver in a simple and yet effective manner

- Same old black suits
- Slow
- Can be dated in terms of drug lifecycles
- Difficult to refresh
- Academic focus
- Limited private sector experience
What did this mean for us?

1. Insourcing of Sourcing
2. Pooled disbursement
3. Scale & Leverage
4. Organization and Tools
Do you think that industry considers us easy to work with as a sector?

Being a Customer Of Choice

Or perhaps they do?

- We are silo’d
- We are fragmented
- We are impeded by process / bureaucracy
- We have poor funds flow
- Inadequate planning & forecasting
- Much of what we do is outsourced/ lacks accountability
- Regulatory barriers

How can we use SRM* To drive compliance?

- All of these carry a $$$ premium
- Risk increases with fragmentation, and we pay for that risk
- Long lead times may reduce system stress at manufacturers

* Supplier Relationship Management
What we set out to do 2 ½ years ago

Relevant treasure to this discussion:

- Strategy driven by market and supplier analysis
- Collaborative approach with other agencies
- Cost of Goods Sold based
- Direct payment
- Leveraged volumes
- Long-term agreements
- Piggy Backing
- WAMBO
Procurement 4 Impact (P4i) followed 6 objectives fully aligned with the Global Fund’s strategy — with the focus on industrialising thought leadership

1. The Global Fund will become the benchmark organisation in the sector for Sourcing and Procurement

2. Using simple, clear leading edge processes and tools designed by and for the organisation

3. With measurable performance in value and lives saved

4. Building collaborative relationships with partner agencies, suppliers and donors

5. Ensuring effective governance and watertight compliance

6. Minimising waste and eliminating non-value adding activities
Supplier performance

- Increased the on-time and in-full delivery of core health products purchased through pooled procurement from 36% to over 80%
- Approaching same performance as private sector in emerging markets (86% in 2013)

Availability and supply security

- Implemented rapid supply mechanism through vendor managed inventory allowing fast response to product shortages
- Supplier panels selected to ensure diversity, resulting in increased number of suppliers for LLINs and ACTs; 8 suppliers retained for ARVs

Innovation

- Level of innovation included as tender evaluation criteria
- Volume explicitly set aside for new entrants and new products in recent ARV tender
- Collaborative supplier projects focused on new products or formulations

Affordability and savings

- Nearly $600 million in estimated savings achieved through tenders so far. Spend penetration up to $1.5 Billion
- In LLIN and ACT tenders, largely through volume discounts
- ARV tender also used lifecycle segmentation and COGS-based benchmarking to inform negotiations
Year to date allocation of procurement volumes to manufacturers exceeds annual commitment.

The value driven out of our first half-year 2016 spend which includes pooled procurement and the co-payment mechanism $64.4M or 12.5% against a target of 7%.

LLIN’s contribute $29.8M, ARV’s contribute $25.8M and ACT’s contribute $5M

Malaria ACT’s have experienced a cost increase of $885K due to unexpected emergency orders, which means that to fulfill the requirement we have to source from a more expensive originator who manufactures to stock.

Pooled procurement ACT savings are 2.5% and Co-payment mechanism is 7.8%. We face an unexpected 40% ACT volume increase in 2016.

Non- ACT Anti-Malarials have gone up by 6.3%, is driven by Artesunate injectable price increases in Q4 2015. This was mitigated by a pre-negotiated 7% unit price reduction.

The first half-year 2016 Procurement services agent (PSA) fees saving is $4.5M.

This was driven by the sourcing transformation, with the exception of PSA Fees for LLINs where fee reduction had already been achieved in 2013 (PSA Fees for LLINs range 1-1.5%)
Delivery Performance – First half-year 2016

Measure

ii. **On Time In Full Delivery Rates (OTIF):** Percentage of pooled procurement and IDA orders delivered on time

Performance

2016 Target: 75% on time deliveries at each reporting period
Q2 2016 Result: 77%

- Level of on-time product delivery remains consistently high over 2015 and into 2016
- Recipient confirmation of receipt has been implemented in 2016 in order to provide better information on “In Full” deliveries
- IDA OTIF data not available due to ongoing systems upgrade; data will again be available in Q3 2016

NOTE: IDA OTIF data not available in Q2 as a system upgrade is currently taking place – data will again be available in Q3 2016. Calculated by shipments delivered on time rather than weight. IDA carries 90% tonnage. Includes core and non-core products. On Time defined as due date + 14 days.
How much of our spend is managed?

Period: Jan-Jul 2016

**INDIRECT BY BUDGET CATEGORY**

<table>
<thead>
<tr>
<th>Category</th>
<th>Direct</th>
<th>Indirect</th>
</tr>
</thead>
<tbody>
<tr>
<td>LFA</td>
<td>21%</td>
<td>7%</td>
</tr>
<tr>
<td>Prof. Fees</td>
<td>19%</td>
<td>19%</td>
</tr>
<tr>
<td>Office Infra</td>
<td>56%</td>
<td>4%</td>
</tr>
<tr>
<td>Travel</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Communication</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>Meetings</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>55%</td>
<td>1%</td>
</tr>
</tbody>
</table>

**AMFm**

- **Spend:** $120.7 M
- **Percentage:** 16%

**Entire Managed Spend**

- **Direct:** 81%
- **Indirect:** 14%
- **AMFm:** 3%

**Data source Direct:** Spend data based on Pooled Procurement Mechanism (PPM) financial database, with dates reflecting the confirmation of orders by the Global Fund.

**Data source Indirect:** Spend data reflecting Purchase Order amount ordered on the Global Fund System (GFS) and recorded in Oracle Bi Application tool.

**AMFm:** Affordable Medicines Facility - malaria (now CPM – ACT subsidy program) health products recorded in GFS.
Our definition of “market shaping”

Market shaping supports health outcomes by...

- Leveraging the Global Fund’s position to facilitate healthier global markets for health products, today and in the future

- Implies proactive approach

- Focused on global market outcomes, not limited to outcomes for the Global Fund

- Market shaping extends to future possibilities, not limited to current market conditions
wambo.org: An innovative online procurement platform with several expected benefits

Wambo.org is built upon the vision of an online procurement platform which can tackle several challenges faced by PRs

- **Search and compare** price and lead time across suppliers
- **Select** desired specifications, order terms **and** place order
- **Track and trace** order, direct payment
- **Easy reporting**, allowing for **better**, more specific forecasting

- **Decreases** administrative burden; for PPM PRs, automates PPM ordering
- **Acceleration** of the procurement process
- **PRs able to** procure more efficiently

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Local Manufacture – Another area of focus

Considerations for local manufacture:-

- Leverage will determine how far you can proceed up the value chain and be viable
- Global is better than regional which is better than local
- Asia builds enormous capacity with which it is difficult to compete
- IP is a barrier
- WAMBO is an enabler

working backwards………

Logical Manufacturing Flow in simple terms

1. Starting Materials
2. Intermediates
3. Advanced Intermediates
4. API
5. Formulation
6. Primary Packaging
7. Secondary Packaging
8. Distribution

Logical next step
Builds on experience
Allows for smaller batch runs / greater variation when needed
Quicker responses

- Logical next step
- Builds on experience
- Allows for smaller batch runs / greater variation when needed
- Quicker responses

- Map and leverage supply chains irrespective of source
- Amalgamate demand
- Common Regulatory landscape
- Harmonize identification and recognition platforms
- Rigid KPI driven track & trace

Local Manufacture in simple terms

1. Map and leverage supply chains irrespective of source
2. Amalgamate demand
3. Common Regulatory landscape
4. Harmonize identification and recognition platforms
5. Rigid KPI driven track & trace
Imagine our world where:

**Outcomes based procurement**

- Funds flow is flat, we pay per year’s sustained good performance
- We are output based
- We free up funds for new advanced more effective interventions

**Source plan generator**

- We have optimal source plans for every country, totally data driven
- We can access sourcing and pipeline data immediately, by country, supplier, by intervention or disease type.
Thank You

Questions?
DFID’s Perspective

Global Fund
2nd November 2016
DFID Commercial Roadmap – 2016 & Beyond

DFID’s commercial expertise stretches beyond providing a good service for DFID programmes to understanding the markets and influencing the wider sector.

First Class Commercial and Procurement Service within DFID

Maximising and Shaping Markets

Our Commercial Influence and Impact on the wider sector
Reforming the System

- **DFID’s Commercial Capability Review** made the following recommendations:
  - To strengthen delivery route selection
  - To strengthen DFID’s strategic commercial focus
  - To enable DFID to be an intelligent customer
  - To strengthen our commercial oversight of delivery partners
  - To improve availability and accuracy of commercial information

- **DFID’s Commercial Expertise Review with the Global Fund**:
  - Partnership Approach
  - Constructive engagement to enable DFID to be an intelligent customer
  - To strengthen our commercial oversight of delivery partners
  - To identify best practice, recommend key commercial focus areas for improvement.
  - Agree key commercial performance measures
  - Shared experience and learning.

**Increase Efficiency**

- Efficiency: Resources, planning, administration, consolidation

**Reduce Duplication**

- Duplication: Working on the same areas delivering the same benefits

**Accelerate Collaboration**

- Collaboration: Co operate and work together (joined up procurement and supply chains)
Commercial effectiveness is about delivering the best development impact and influence for target populations as well as the UK taxpayer.
Follow The Money
DFID’s Spending in 2014-15

Total Spending £10,058m

- Administration costs £227m
- UN agencies £441m
- European Commission £1,096

Bilateral Aid £5,524m
- Delivered through Multilateral Organisations £1,437m
- Delivered through an NGO £1,000m
- Technical cooperation £901m
- Humanitarian Assistance £866m
- Other Financial Aid £603m
- DFID Debt Relief £9m
- Other Bilateral Aid £142m
- Poverty Reduction Budget Support £567m

Other Multilateral £4,307m
- World Bank £1,206m
Supply Chain Complexity
Follow The Money.........

Across the International Development System?
Intelligent Client

- Increase Efficiency
- Reduce Duplication
- Collaborate
Multilateral Organisation by Sector

2015 Procurement Spend by Category (USD millions)

- UNDP
- UNHCR
- WFP
- UNICEF
- UNFPA
- Gavi
- GF
- WB

Categories:
- Pharmaceuticals incl Contraceptives
- Food and Beverage Products
- Motor vehicles and parts
- Engineering and Research and Technology Based Services
- Management and Business Professionals and Administrative Services
- Medical equipment
- Transportation and Storage and Mail services
- Building and Facility Construction and Maintenance Services
- Management and Business Professionals and Administrative Services

Note: Spend includes $6.6 bn Civil Works

Gavi - http://www.theglobalfund.org/en/sourcing/ pro rata over 3 years
Expand and Grow Our Markets But Deliberately and Controlled

*Market Creation* is the process of **stimulating the marketplace** to ensure that all required levers are triggered leading to the development and maintenance of a **healthy competitive supply base** to meet organisational requirements for the longer term.
The Opportunity

- Increase Efficiency
- Reduce Duplication
- Collaborate
Areas of Collaboration

- TGF Sourcing
- Understand Partner Landscape
- Category Specific Engagement
- Working Groups
- Annual Strategy Meeting
- Viral Load Diagnostics Decision Tree
- Indirect Spend UN Agencies
- Focused Strategies
- UN Agency MOUs
- Market Shaping UNITAID, MPP
- Integrated Supply Chain
- RSM Mechanism
- Tb MOU
- Shared Data
- Malaria ACT's LTAS
- Malaria LLIN's LTAS
- Malaria LTAS
- ARV's LTAS
- Viral Load / Diagnostics
- Decision Tree RDT's
- INTEGRATED Supply Chain
- UNITAID, MPP
- WAMBO E-Marketplace
- Shared Partner Strategy
# Existing Collaboration Forums

<table>
<thead>
<tr>
<th>Group</th>
<th>Membership</th>
<th>Remit/Objectives</th>
</tr>
</thead>
</table>
| HLCM Procurement Network     | All UN orgs                                     | • Vendor Management  
• Sustainable procurement  
• Framework for harmonisation  
• Procurement prioritisation  
• Collaborative Procurement Prioritisation Exercise (led by UNHCR) |
| MDB’s                        | All MDB’s                                       | • 2015 Agenda  
• Procurement policy development/reform  
• Capacity building & professional development |
| Inter-agency Supply Chain Group (ISG) | DFID, USAID, Norway, GF, GAVI, WB, UNICEF, UNFPA, WHO, BMGF | • Global Development  
• Health focus  
• Procurement and Supply |
| People that Deliver          | Wide membership led by UNICEF                   | • Health Supply Chain Workforce Capability |
| World Humanitarian Summit    | Donors Mulit-laterals NGO’s (not MSF/Oxfam)     | Procurement commitments within much wider humanitarian remit  
• Shared procurement should leverage the comparative advantage of the aid organisations and promote innovation. |
The Frameworks....

The Objectives....

The Outcomes....

Are we speaking the same language?
Healthy Markets Framework (Vaccines)

Market attributes that may be only partially, impacted by market shaping efforts, depending on market. Attributes are total system effectiveness, long term competition and product innovation.

Supply security attributes that may be directly influenced by procurement and other market interventions. Attributes are buffer capacity, individual supplier risk and NRA risk.

The second building block is to meet country preferences for specific vaccine characteristics such as vial size, packaging volume, etc.

The foundational building block of a healthy market is supply meets demand.

Markets with inadequate supply meets demand.

1. OBJECTIVES: To have a common way of thinking about the health of a market
2. To better communicate how we assess individual markets and their ability to best meet the needs of the system
3. To improve analysis of potential trade-offs between different market elements
The Result:

Aid is becoming more transparent

We need to do more......Responsibility and accountability.....

Aid transparency by country

<table>
<thead>
<tr>
<th></th>
<th>2013 Index</th>
<th>2014 Index</th>
<th>2016 Index</th>
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<tbody>
<tr>
<td>Total</td>
<td>67</td>
<td>68</td>
<td>46</td>
</tr>
<tr>
<td>Very Poor</td>
<td>26</td>
<td>22</td>
<td>5</td>
</tr>
<tr>
<td>Poor</td>
<td>16</td>
<td>15</td>
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</tr>
<tr>
<td>Fair</td>
<td>16</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>Good</td>
<td>5</td>
<td>8</td>
<td>10</td>
</tr>
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</table>

The top ten publishers:
- UNDP
- U.S. – MCC
- UNICEF
- UK – DFID
- The Global Fund
- World Bank – IDA
- IADB
- AsDB
- Sweden
- AfDB

Source: Publish What You Fund Aid Transparency Index 2013-16
High Level Push on Transparency

Donor taxpayers and citizens

Donor governments and agencies

Partner country governments

Partner taxpayers and citizens

Greater accountability and better results

More predictable aid flows
Performance and Results

System Wide......
Performance and Results

Examine the System; comparative advantage

Knowing Where the Strengths are; play to them

Be true to our profession; duty to collaborate and reform?

Drive the commercial agenda as leaders...
Key results achieved in 2015

38 bridges designed, constructed or rehabilitated

more than 2.2 million labour days created for beneficiaries

2,572 km of roads designed, constructed or rehabilitated

more than $717 million worth of goods and services for partners

nearly 39,000 units of machine and equipment procured

more than 40 million medical supplies were handled

over 37,000 days of technical assistance and advice

more than 6,200 vehicles procured

more than 240 million doses of medicine were procured or distributed

46 schools and 2 universities constructed, designed, or rehabilitated

2 airstrips and 2 ports constructed designed or rehabilitated

25 hospitals and 105 health clinics constructed, designed, or rehabilitated
Questions?
Global Fund Sourcing of Health Products Strategy Review 2016

November 2016
Geneva, Switzerland
Global Fund has proactively shaped markets to improve health outcomes since 2004

Changing market dynamics, context, and new Global Fund strategy prompted revision of Market Shaping Strategy
Implementing the Board-approved (2015) Market Shaping Strategy

**Vision**

*Market shaping supports health outcomes and access to critical health products by…*

...**Leveraging the Global Fund’s position to facilitate healthy global markets; generate cost savings and improve procurement and delivery conditions** (lead time; on time and in full (OTIF))

**Scope**

- All pharmaceuticals and health technology products financed by Global Fund
- **Sourcing strategies for core products** (ARVs, Antimalarials, LLINs, diagnostics including RDTs; essential medicines used in HIV) through Long Term Framework Agreements (LTAs) with suppliers
- Procurement methods for non-core products through PSAs and catalogues

**Process**

- Managing Supplier allocations and PR requests & demand of core health products through framework agreements
- Execution of PPM orders from requests to deliveries
Introduction

Previous reviews highlighted updates on sourcing of product categories.

The focus today is on the objectives common to all the product categories as basis of our sourcing strategy.

The Private Sector uses different terms but the principles are the same, however public sector procurement rules are embedded in our strategies and daily implementation.
"By 2016, the Global Fund had achieved three-year savings worth more than $600 million through a more effective pooled procurement mechanism, by working with partners and negotiating directly with manufacturers.

The price of long-lasting insecticidal nets to prevent malaria has decreased by 38 percent since 2013, and the price of combination ARV therapy for HIV has been reduced by 25 percent since 2014.

The medicines and health products purchased through the pooled procurement mechanism were delivered more swiftly than in the past, with on-time delivery improving from 36 percent in 2013 to 84 percent in 2016."

Behind the headlines it is not all about price, there is more going on......
The Global Public Health Market characteristics

- High Volume / low margin operations
- Spot tendering is common
- A few large buyers
- Few large suppliers and a few emerging suppliers
- Short term, largely price focused contracting models
- A culture of over promise and under delivery
- A sense of entitlement for an 'equitable share' of the business
- A lack of co-ordination and an absence of meaningful data.
## Sourcing through 5 lenses

The Global Fund Sourcing objectives are value based

<table>
<thead>
<tr>
<th>Lense</th>
<th>Objectives</th>
</tr>
</thead>
</table>
| **Cost Competitiveness**     | • Best price BUT not always or necessarily the lowest  → affordable and sustainable pricing  
• Reducing price **volatility**  
• Eliminating predatory pricing,  
• A fair return for suppliers |
| **Performance**              | • **Reliable** On Time delivery  (OTIF)  
• Continuous Performance Improvement through **supplier relationship management**  
• **Responsive** - Delivering all the needed products irrespective of demand or volume  
• **Shorter lead-times**       |
| **Sustainability**           | • Both across the Supply chain and within individual suppliers  
• Supporting manufacture close to the customer and welcoming **new entrants**  
• Ensuring **continuity of supply**  
• Coping with unexpected demand – both high & low |
| **Risk Management**          | • Risk based assessments  
• **Extending best practice across** the Supply Chain  
• Ensuring **responsible** procurement |
| **Benefit sharing**          | • Volume allocation is made on **performance based value creation**  
• **Reference pricing** published and utilized globally  
• **Access to framework agreements** extended to interested partners  
• **Building Capacity**  
• Vendor Managed Inventory (VMI) to respond to **emergency needs** |
The Journey

There is a recognition that it is a journey and much is still to be done.

Phase I
- Price and Lead time based
- Spot tendering
- Minimal performance monitoring
- Building Market Knowledge including supplier visits
- Understanding cost
- First Framework Agreements
- Simple KPIs

Phase II
- Performance based contracting
- Supplier Relationship Management
- Improved data management
- Value creation by optimizing demand
- Outcome based contracting
- Cross supplier collaboration
- A focus on responsible procurement

Phase III

Legacy
- Tender and Framework Agreement Profiles
- LLIN
- ACT/antimalarials
- ARV
The Starting Point: Market Analysis

A focus on facts, wherever possible engaging with the key actors directly, based on key parameters:

1. The overall market make up including both direct and their up stream suppliers, the costs of entry and the overall capacity.

2. A full understanding of cost structures at each stage of the process, the forces behind these and the historical and future trends.

3. Individual supplier capability and maturity, the challenges they face and the constraints imposed by institutional business.

4. The level of product evolution, where it sits in its lifecycle curve, what new introductions or innovations are forecast.

5. Where the spend is large – what needs to be done to leverage it but not abuse the position.

... as a custodian of this broad commercially sensitive information, we are obligated under competition law principles to ensure that this information doesn’t leak into the market and potentially have an unintended and damaging anticompetitive effect!
Basis of the Global Fund's Approach: Performance Based Contracting

- Longer term contracts to enable a reliable and sustainable return on investment.
- Reliable payment

The Global Fund demands a competitive process.
- Responses to specific objective elements including affordability, supply security and market sustainability (Reliable; Responsive & Responsible)

In return the Global Fund will offer a defined committed volume based on tender evaluation.
- BUT suppliers have to perform or this volume may be adjusted or removed

Performance is measured and managed
- Performance results are included in future tender evaluations
- Allocations may be adjusted in mid-contract if necessary to

Reliable payment
The Approach in Practice

Since 2013 there has been a reduction in the commercial weighting during tender evaluation reflecting the specific category objectives and market situation.
Maximising Value through Supplier Relationship Management

Previous approaches only focused on the price value lever. Value creation has been extended across a range of levers which will increase in importance as cost is optimized.

... a case study follows...
Improving the Global Fund’s Internal Performance

Internal processes have also been reviewed and improved:

1. Managing the strategic sourcing process up to placing Purchase Orders (PO) to suppliers

2. Rigorous and regular performance management – both Supplier & Procurement Service Agents

3. The team has been re-structured to provide greater focus and to support the new ways of working
Benefit Sharing and Capacity Development

1. Reference prices are published and as benchmark for The Global Fund and others

2. Framework Agreements extended to partner agencies (PAHO; UNDP; UNITAID) and to Governments with national funding (e.g. Cameroun, Georgia, Guyana)

3. Underwriting the implementation of Wambo.org

4. Enabling manufacturing close to the customer and encouraging new entrants.

5. Sharing procurement expertise and experiences as part of capacity development. The Openshare – Procurement Portal for procurement practitioners is scheduled to go live in 2017.
Building Sustainability

Extending best practice upstream and downstream in the Supply Chain to reduce volatility and mitigate risk

In 2013 The Global Fund engaged solely with FPP Manufacturers

Today that approach is being extended through a process that includes ongoing market investigation and in many cases supplier education.
The Global Fund is working to deliver on its mission, which drives our procurement strategies and implementation approach.

“Investing the world’s money to defeat AIDS, tuberculosis and malaria”
The Global Fund Pooled Procurement addresses only small segment of the total ARV spend – but accounts for 24% of patients

1 Numbers are estimated and may not add up to 100%
NOTE: ARV = Anti-Retroviral Treatment; PEPFAR = U.S. President's Emergency Plan for AIDS Relief; LMIC = Low and Middle-Income Countries
SOURCE: Clinton Foundation, WHO, Global Fund, PEPFAR, Avert
Supplier OTIF for ARV products is low and highly variable – creating potential risks for patients

<table>
<thead>
<tr>
<th>Supplier</th>
<th>OTIF Q1 2016 – Q3 2016 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier 1</td>
<td>88%</td>
</tr>
<tr>
<td>Supplier 2</td>
<td>84%</td>
</tr>
<tr>
<td>Supplier 3</td>
<td>74%</td>
</tr>
<tr>
<td>Supplier 4</td>
<td>71%</td>
</tr>
<tr>
<td>Supplier 5</td>
<td>69%</td>
</tr>
<tr>
<td>Supplier 6</td>
<td>67%</td>
</tr>
<tr>
<td>Supplier 7</td>
<td>40%</td>
</tr>
</tbody>
</table>

Average: (77%)

LZN example: one supplier in 2013/2014 had 76% of product deliveries late, with ~10% of product deliveries being late 100 or more days

Number of stockouts have reduced over the past 3 years

Note: LZN is an first-line HIV treatment drug, a combination of Lamivudine, Zidovudine and Nevirapine
Two factors drive overall supply performance: demand management and performance of suppliers
The Global Fund knows about issues in demand management, and is currently reviewing its processes.

Order volume fluctuates significantly...

Order placement lead time and order fulfillment lead times, %, 2016

- **< 3 months**
  - Order placement lead time: 13%
  - Order fulfillment lead time: 37%
- **3 - 6 months**
  - Order placement lead time: 21%
  - Order fulfillment lead time: 30%
- **6 - 9 months**
  - Order placement lead time: 13%
  - Order fulfillment lead time: 37%
- **> 9 months**
  - Order placement lead time: 13%
  - Order fulfillment lead time: 21%

**NOTE:** Lead time is defined as a time between purchase order being sent to vendor, and a shipment delivery date. Includes planned delivery.

**Better demand management needed**

**Planned procurement, enabling best value (product and freight costs)**
The Global Fund has introduced a more balanced supply system based on 5 elements to improve supplier performance:

A. Cost competitiveness
   - Providing products at the lowest possible affordable and sustainable price to reach the maximum number of patients
   - Reducing price volatility and eliminating predatory pricing

B. Performance
   - Supplying product timely and in full
   - Incentivizing suppliers to introduce better formulations

C. Sustainability
   - Supporting new suppliers to ensure sufficient supply and mitigate geographic supply risks
   - Investing in suppliers with sustainable manufacturing practices

D. Risk management
   - Maintaining well-diversified supplier base
   - Meeting The Global Fund and national quality requirements
   - Mitigating implementation risks

E. Benefit sharing
   - Publishing reference prices
   - Building capacity and implementing rapid supply mechanisms
Why a more balanced supply system makes sense

1. It is possible to "buy" good supply performance
2. Good performance is available at a reasonable price
3. Low price does not always equal good value
4. Our approach maintains robust supplier base
Changes introduced in 2015 improved supply performance

**Supplier delivery performance (OTIF) has improved …**

- **Supplier OTIF increased by 35-45%** (15-25 percentage points) for all suppliers
- **Volume-weighted OTIF improved from 41% to 75%**

**… and lead times and urgent orders reduced**

- Since implementing vendor managed inventory (VMI) in 2015, **average lead time to delivery decreased by 47%** (from 142 to 75 days)
- Number of urgent orders went down from over 25% in 2015 to under 20% in 2016

---

1 Simple non-weighted average across top 7 suppliers
2 For Rapid Supply Mechanism (RSM) products, time of order to time of demanded delivery by PR
3 Less than 3 months between ordering and time of demanded delivery by PR
Price reduction was achieved through managed collaboration with the suppliers – prices dropped even further since

### Supplier behaviors

<table>
<thead>
<tr>
<th>Quoted tender price, TLE, USD per pack</th>
<th>Actual price, TLE, USD per pack</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 –</td>
<td>11 –</td>
</tr>
<tr>
<td>10 –</td>
<td>10 –</td>
</tr>
<tr>
<td>9 –</td>
<td>9 –</td>
</tr>
<tr>
<td>8 –</td>
<td>8 –</td>
</tr>
</tbody>
</table>

**Initial** 1H 2015 2H 2015 2016

**The Global Fund target pricing**
- Red line: Suppliers who responded to target price
- Green line: Suppliers who did not respond to tender price

- Some suppliers responded to Global Fund target pricing, but others could not or would not – offering 15% higher than the target price
- After the allocation, suppliers who could not offer target pricing subsequently reduced prices by up to 14% below the target pricing, which were captured through the “most favored nation” clause

**SOURCE:** The Global Fund TLE pack prices **NOTE:** TLE = combination of tenofovir (TDF) in combination with lamivudine (3TC) and efavirenz (EFV)
3. Lowest price often means poor performance

- Low-price supplier consistently **undercuts prices** in the market...
- ... which allows them to secure **high share of orders** (~50%)...
- ... however, the **delivery performance** is low

**Product price, LZN, 2013-2014, USD per pack**

<table>
<thead>
<tr>
<th></th>
<th>Low-price supplier</th>
<th>Median supplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Share of orders, %**

<table>
<thead>
<tr>
<th></th>
<th>Q1 2013</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>0%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>~50%</td>
</tr>
</tbody>
</table>

**Average delay, days**

<table>
<thead>
<tr>
<th></th>
<th>Median</th>
<th>Low-price</th>
</tr>
</thead>
<tbody>
<tr>
<td>+39% (+13 days)</td>
<td>33</td>
<td>45</td>
</tr>
</tbody>
</table>

**Maximum delay, days**

<table>
<thead>
<tr>
<th></th>
<th>Median</th>
<th>Low-price</th>
</tr>
</thead>
<tbody>
<tr>
<td>+79% (+75 days)</td>
<td>95</td>
<td>170</td>
</tr>
</tbody>
</table>

**Note:** LZN is an first-line HIV treatment drug, a combination of Lamivudine, Zidovudine and Nevirapine
Robust supplier base maintained, minimizing supply risks

### Supplier base evolution

**Suppliers’ allocation shares, %, before and after the changes**

<table>
<thead>
<tr>
<th>Supplier</th>
<th>2014 Actual (PPM)</th>
<th>2015 Actual (PPM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier 1</td>
<td>29%</td>
<td>56%</td>
</tr>
<tr>
<td>Supplier 2</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td>Supplier 3</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>Supplier 4</td>
<td>12%</td>
<td>7%</td>
</tr>
<tr>
<td>Supplier 5</td>
<td>25%</td>
<td>7%</td>
</tr>
<tr>
<td>Supplier 6</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Supplier 7</td>
<td>0%</td>
<td>small</td>
</tr>
<tr>
<td>Supplier 8</td>
<td>small</td>
<td>small</td>
</tr>
<tr>
<td>Others suppliers</td>
<td>8%</td>
<td>small</td>
</tr>
</tbody>
</table>

- In 2015, the Global Fund worked with 11 suppliers, and had **framework agreements** with 8 of which **six had substantial volumes** relative to their product offering.
- More suppliers have **multiple API sources**
- **New entrants and diversification of the geographical** supplier base are encouraged.
- Top 4 low-and-middle income countries suppliers **had a combined market share of 71%** in 2015 – and Global Fund allocation to them is **81% in 2014** (before tender), **and 90% in 2015**.
7 key causes of fluctuating artemisinin prices

1. Over-capacity as there are low technical barriers to entry; lack of harmonized quality standards and inconsistent in-house EHS controls
2. Poor demand visibility aggravates price volatility
3. Most extractors are 80-100% dependent on artemisinin
4. API and FPP manufacturers’ buying practices
5. Opportunities for trading companies to stockpile cheap materials and sell at high price when supply is short
6. A speculative market with mixed and inconsistent messages; some interventions and studies drove price expectations
7. Unforeseen injection of additional funding with “urgent” procurements

Historical Artemisinin Pricing

Data Source: Agricultural Artemisinin price is based on Chinese export to India
### RFI Responses indicate

- All types of manufacturers expressed an interest to engage with the Global Fund on the supply of Artemisinin
- Demand visibility of Artemisinin is short term
- Artemisinin manufacturers face challenges with margin
- Total volume declared to sustain all Artemisinin manufacturers is much greater than GF PPM and CPM demand
- Some manufacturers indicate they need very high volumes to be sustained

### Observations

- Continuous availability of Artemisinin supply is uncertain
- There are different regulatory and safety requirements for different manufacturers/technologies and in different locations (e.g. GMP)
- The extraction process is high risk in terms of Environment, Health and Safety (large volumes of Petroleum ether)
- A number of Artemisinin manufacturers are willing to work with The Global Fund to secure supply and agree ceiling price for up to 3 years
- The price difference between Semi-synthetic and agricultural Artemisinin is narrowing

Example: Addressing Price Volatility in ACT supply
Example: Addressing Price Volatility in ACT supply

One of the Key measure to manage Artemisinin products implementation

Encourage good business practices across the production supply chain (1/2)

For finished product manufacturers:

<table>
<thead>
<tr>
<th>Long term agreements with Artemisinin manufacturers (directly or indirectly through their API sources)</th>
<th>Volume Allocation</th>
<th>Volume Commitment</th>
<th>Finished product manufacturers need to disclose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unable to prove</td>
<td>Can be a panel supplier but without allocated volumes</td>
<td>None</td>
<td>N/A</td>
</tr>
<tr>
<td>12month contract</td>
<td>12month allocation</td>
<td>25% of volume allocation</td>
<td>• Artemisinin contracts are in line with volume and price elements of FPP contract</td>
</tr>
<tr>
<td>24month contract</td>
<td>24month allocation</td>
<td>50% of volume allocation</td>
<td>• Initial volume allocation split to Artemisinin manufacturers and length of the associated contract</td>
</tr>
<tr>
<td>36month contract</td>
<td>36month allocation</td>
<td>80% of volume allocation</td>
<td></td>
</tr>
</tbody>
</table>

New RFP
Challenges & Implications

In re-shaping the market for sustainability, we provide longer term commitments and unapologetically performance-based contracting.

In return we require suppliers to be Reliable; Responsive and Responsible.

1. Level of understanding and maturity of some suppliers
2. Disingenuous lobbying - those who believe that "entitlement “ and to cover for poor performance
3. Price centric approach of some buyers risks predatory price and very late delivery
4. Demand management including major buyer alignment will enhance sustainability of the market
5. We acknowledge that some suppliers may better placed to respond to spot tenders
Looking Ahead...More Focus on Outcomes

Today:
1. The product specification is determined.
2. The results are estimated
3. The quantities are contracted.
4. Performance is measured based on INPUTS

Future:
1. The characteristics of the need are determined.
2. The required results are contracted
3. The quantities and services necessary are determined by the provider.
4. Performance is measured based on OUTCOMES

This approach would require the evolvement of both buyers and suppliers with broader skill sets and capabilities.
Agenda

wambo.org concept and vision

Development in 2015

Roll-out in 2016

Future steps for advancement
wambo.org: What is it?

• The Global Fund’s on-line procurement platform designed to
  – Facilitate **sustainable access** to **quality assured** products at **affordable prices**
  – **Automate** PPM processes
  – Contribute to a faster scale-up of **innovative products**
  – Increase **transparency** by providing easy access to information at the right time
  – **Extend benefits** to a larger set of stakeholders

• Health products (core & non-core)

• Non-health products & services
The wambo.org concept

wambo.org is built upon the vision of an online procurement platform which can tackle several challenges faced by PRs

An innovative online procurement platform with several important benefits

- **Search and compare** price and lead time across suppliers
- **Select** desired specifications, order terms and place order
- **Reduces market complexity and need for intermediaries**
- **Track and trace order, direct payment**
- **Decreases administrative burden; for PPM PRs, automates PPM ordering**
- **Acceleration of the procurement process**
- **Easy reporting, allowing for better, more specific forecasting**
- **PRs able to procure more efficiently**

The wambo.org concept is designed to provide PRs with a platform that streamlines the procurement process.
wambo.org: the benefits to PRs *(beyond those already available through PPM)*

**Increased visibility; ability to track where requisitions are at any given point in time**

**Data for analytics**

**Enhanced range of products & improved visibility**

**Full audit trail, transparency**

**Simplifies the procurement process**
**wambo.org mechanisms**

PRs can purchase from long term agreements, catalogues (including partner catalogues), as well as initiate competitive processes using the system.

<table>
<thead>
<tr>
<th>wambo.org mechanisms</th>
<th>Description of mechanisms</th>
<th>Selected examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>e-ordering from LTA</strong></td>
<td>• Electronic ordering process leveraging internal catalogues that are a result of Global Fund negotiations (automate PPM)</td>
<td>LLINs, ACTs, ARVs, Malaria/HIV diagnostics, Viral Load</td>
</tr>
<tr>
<td><strong>e-catalogue</strong></td>
<td>• Electronic ordering process leveraging external catalogues of partners / suppliers</td>
<td>Other Anti-Malarials, TB medicines, medical supplies, Vehicles, condoms</td>
</tr>
<tr>
<td><strong>e-RFQ and e-auction</strong></td>
<td>• Electronic quotation process for products and services</td>
<td>Other</td>
</tr>
</tbody>
</table>
wambo.org currently operating as a facilitator of Global Fund grant implementation, with a long term view to evolve to a global public good

From a Global Fund e-marketplace…

- Coverage of countries funded by the Global Fund
- Coverage of Malaria, HIV, and Tuberculosis health products only
- More accessible and affordable products with access to more suppliers, substantial savings, stricter lead times, and more sustainable supply

… to a global public good

- Coverage of countries funded by global public health institutions as well as transitioned countries
- Coverage of products beyond malaria, HIV, and tuberculosis
- Global, transparent prices for all stakeholders

Referred to as Phase 1

Referred to as Phase 2 and subject to Board approval
Agenda

wambo.org concept and vision

Development in 2015

Roll-out in 2016

Future steps for advancement
2015: From idea to reality in one year

• Inclusive consultative process
  – Countries / PRs, multiple rounds as the process/system was developed
  – Suppliers and PSAs
  – Board constituencies and partners
• Coupa Software-as-a-service selected as backbone
• Strategic partnerships (UNITAID, CHAI)
• Procurement transformation and system design
  – Design principles
  – Target Operating Model
  – Detailed business requirements
  – Platform configured and integrated with GF systems
• Extensive testing completed (2 rounds of unit testing, system integrations testing and 2 rounds of user acceptance testing)
In 2015, in-depth country consultations have been conducted with over 120 PR representatives in 9 countries to gather feedback on the platform:

- Zambia, March 2015
- Ghana, April 2015
- Thailand, June 2015
- System Consultation, Geneva, October 2015
- Senegal, April 2015
- Indonesia, May 2015
- Georgia, June 2015
- Mozambique, October 2015
- Bangladesh, November 2015
Agenda

wambo.org concept and vision

Development in 2015

Roll-out in 2016

Future steps for advancement
2016 Roll-out: Product Roadmap – focus on Health Products

Category launch prioritization | 2016 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec | 2017 Jan Feb Mar Apr May Jun

E-order from Global Fund LTA
- LLINs
- ACTs
- ARVs
- HIV Viral Load & EID

Wave 1 products – completed
Wave 2 products – close to finalization

e-catalogue leveraging offering of Partners / procurement agent
- Condoms and lubricants
- Malaria and HIV RDTs¹
- Non-core health products

Includes non-core pharmaceuticals such as medicines for opportunistic infections and OST; other diagnostics; lab and medical supplies; leveraging procurement agent catalogues pending potential future Global Fund tenders
Wide and growing range of products and manufacturers now available on wambo.org to-date

PRs able to search, browse, compare items based on specifications

- **LLINs**: 15 standardized options from 10 manufacturers
- **ACTs** and other anti-malarials: 13 items from 9 manufacturers
- **ARVs**: 60 items from 9 manufacturers
- **Condoms** and lubricants: 23 items from 12 manufacturers

~76% of PPM spend now available on wambo.org

Orders channeled via 2 procurement agents, with UNFPA close to operationalization. Total **37** manufacturers included in the background

---

The numbers above represent the products available through specific catalogue items on wambo.org. Catalogue items in wambo.org represent products that are available and recommended by WHO. PRs have a separate channel in the system to request any QA-eligible products that they do not find in the catalogue.
2016 Roll-out: Country engagement approach

- **General strategy for 2016:** focus on PPM PRs, with openness to non-previously PPM PRs

- 8 regional workshops

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ 31 May – 2 June</td>
<td>Bangkok</td>
<td>Indonesia, Pakistan, Sri Lanka, Laos, Timor Leste, Solomon Island, Fiji***</td>
</tr>
<tr>
<td>✓ 12-14 Jul</td>
<td>Dar es Salaam</td>
<td>Ghana, Malawi, Mozambique*, Tanzania, Uganda, Zambia*, Zanzibar, Zimbabwe, Cape Verde, Angola, Ethiopia***</td>
</tr>
<tr>
<td>✓ 31 Aug – 2 Sept</td>
<td>Panama</td>
<td>Dominican Republic, Guyana, Haiti, Honduras, Jamaica***, Nicaragua, Belize***, El Salvador***, Panama***, Paraguay***</td>
</tr>
<tr>
<td>✓ 20-22 Sept</td>
<td>Abidjan</td>
<td>Benin, Burkina Faso, Cameroun, Cote d’Ivoire, Mauritania, Niger, Togo</td>
</tr>
<tr>
<td>✓ 4-6 Oct</td>
<td>Singapore</td>
<td>Bangladesh*, Bhutan, India, Mongolia, Nepal, Philippines, Vietnam, Myanmar***</td>
</tr>
<tr>
<td>✓ 6-7 Oct</td>
<td>Tblisi</td>
<td>Armenia, Belarus***, Georgia</td>
</tr>
<tr>
<td>8-10 Nov</td>
<td>Dakar</td>
<td>Burundi, Guinea-Bissau, Guinea (Con.), Mali, Senegal, Comoros, CAR</td>
</tr>
</tbody>
</table>

* Already on-boarded  
*** New/non-previously-PPM.

**Typical agenda includes:**
- Presentation on Global Fund sourcing strategies and tender/LTA processes consultation on procurement capacity building initiative (~1 day)
- Hands-on training on wambo.org (~2 days)
- Country-by-country dedicated interactions on all aspects, including wambo.org onboarding documentation

- In addition, direct 1:1 engagement with top 20 PPM countries
Country Engagement Progress
As at 29 Oct 2016

No. of PR organizations*

- Planned 2016 engagement
- Pending engagement (next workshops)
- Engaged
- Finalizing onboarding docs
- Onboarded**
- Not yet ordered
- Ordered

PR organizations that have attended training, completed onboarding documents*** and received access rights, such that they are ready to place orders onto wambo.org as needed

KPI target: 35 PR org onboarded

* Where National Programs are listed as PRs individually, we’ve counted MoH once
*** Onboarding documents include: authorized users, approval hierarchies and approval method recognized by in-country legislation (fully electronic or requiring paper back up); delivery information; acceptance of wambo.org terms of use; for full membership, PPM registration letter if not already signed

** Includes 3 basic memberships
### Purchase requisitions throughput

**As at 1 Nov Oct 2016**

<table>
<thead>
<tr>
<th>Country</th>
<th>ARVs</th>
<th>LLINs</th>
<th>Antimalarials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mozambique</td>
<td>34.8</td>
<td>111.4</td>
<td>-6.8</td>
</tr>
<tr>
<td>Tanzania</td>
<td>16.6</td>
<td>71.7</td>
<td>6.8</td>
</tr>
<tr>
<td>Zambia</td>
<td>4.9</td>
<td>-5.7</td>
<td>23.0</td>
</tr>
<tr>
<td>Ghana</td>
<td>5.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malawi</td>
<td>3.7</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td>0.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>0.2</td>
<td>0.1</td>
<td>0.3</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19.8</strong></td>
<td><strong>228.7</strong></td>
<td><strong>250.0</strong></td>
</tr>
</tbody>
</table>

→ Of which ~114 million USD released as Purchase Orders

*Note: The diagram illustrates the distribution of purchase requisitions submitted, million USD, for various countries.*
Agenda

- wambo.org concept and vision
- Development in 2015
- Roll-out in 2016

Future steps for advancement
From a Global Fund e-marketplace…

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REMINDER
wambo.org currently operating as a facilitator of Global Fund grant implementation, with a long term view to evolve to a global public good

Referred to as Phase 1

Referred to as Phase 2 and subject to Board approval
Establishing solid foundations in Phase 1 context is the current priority, before moving on to global public good preparations and consultations.

Priority for 2016: focus on Phase 1 roll-out, including building product offering and on-boarding PRs with adequate support.

As a result, Phase 2 preparations not expected to be launched before 2017 – Fact based and inclusive consultations.

Nevertheless, specific opportunities are emerging to advance towards the global public good in a controlled way:

- Interest to access wambo.org with domestic funding – Phase “1b” subject to Board approval
- Enhancing existing collaboration with partners, e.g., UNFPA on condoms and lubricants
- Facilitating the introduction and roll-out of new, innovative health products in collaboration with UNITAID
- Enhancing existing collaboration with PAHO on procurement for LAC countries

Not duplication other partners’ efforts or ordering systems

BUT: Collaboration, leverage of comparative advantages and system integration among partners, for the benefit of the same end beneficiaries.
Supply Chain Management – Increased Focus

Geneva, Switzerland
02 November 2016
We know that we need to offer more help to countries which lack national supply chain capabilities & capacity

- OIG reports have indicated that there are many failings in national supply chain operations
- A thematic report highlighted a need for The Global Fund to influence downstream supply chain activities to make them more efficient
- The countries we provide funds to have varying degrees of Supply Chain knowledge and operational maturity
- National supply chain inefficiencies are resulting in a number of significant issues ranging from stock-outs and expirations to overstocking with associated high working capital and inventory management costs
There are many common / typical issues with national supply chains

- **High degree of paper systems** in place which take time to review and fill in with opportunities for human error
- **Inaccurate Inventory data**
- **High Buffer Stocks** = High Working Capital = Risk of Expiration = High Inventory Carrying Costs
- **Inefficient warehousing** leading to excessive intra-warehouse transportation and cost due to satellite warehouses
- **Manual / Excel ordering** not integrated into warehouse management systems
- Practical and meaningful **KPIs are not being properly utilised**
- **Too many parallel supply chains**!
- Many countries depend on **Pharmacies and Health Facilities** collecting supplies rather than scheduled delivery service
- **Not enough supply chain professionals** managing national supply chain
- **Long replenishment frequency / periodicity** at all supply chain levels is not conducive to optimising levels of inventory which leads to high levels of inventory & expired product
- **Unsafe transportation** from District Pharmacies to Health Facilities - unsafe for the people transporting the product and for the products
- **Stock-outs!**
What should The Global Fund’s supply chain management scope and approach be?

<table>
<thead>
<tr>
<th>In-country operating model</th>
<th>Technical assistance (e.g., provision of know-how, convening)</th>
<th>Technical assistance &amp; operations (e.g., owning/running supply chain)</th>
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<tbody>
<tr>
<td>Concentrated (e.g., selected diseases, geographies)</td>
<td>Broad (e.g., many countries, diseases)</td>
<td>Focus</td>
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Sub optimal supply chains can often be a symptom of poor processes up stream

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<tr>
<th>Quantification</th>
<th>Quality</th>
<th>Ordering</th>
<th>Stock Policy</th>
<th>Warehousing</th>
<th>Transport</th>
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Sub optimal supply chains can often be a symptom of poor processes up stream

To ensure you are efficient here ....

.... means you have to start being efficient here
### Monthly Replenishment Model

- **Stock to expire within 6 months**
- **Monthly Replenishment**

With regular monthly deliveries, only a smaller buffer stock is required—ensuring better availability for the patient.

### 3 Monthly Replenishment Model

- **Stock to expire within 6 months**
- **Replenishment Up to every 3 Month**

Some facilities aspire to hold up to 6 months of stock!

### Increasing the Frequency of Deliveries has a Direct and Proportionate Effect on Reducing Inventory Costs and Expiration

- **CENTRAL WAREHOUSE**
- **REGIONAL WAREHOUSE**
- **DISTRICT PHARMACY**
- **HEALTH FACILITY**

**High Stock Value (Working Capital)**

**High Expiration**

**Less Space Required**

**Fewer Emergency Deliveries**

**More Deliveries**

**Big Warehouses (Capital Expenditure)**

**High Inventory Carrying Costs**
Excess inventory is used to protect (hide) against inefficiencies in the Supply Chain
Supply Chain transformational interventions will eliminate or reduce the problems to improve efficiency.
Operating a monthly delivery with a one month buffer stock, saves 2 months of District Pharmacy DP inventory (+ associated inventory carrying cost saving) Instead of 3 months of working capital outlay every 3 months, only 1 month of capital outlay is required each month which is more acceptable to the Districts
Less inventory:
- Requires less management
- Requires less space
- Reduces the potential for expiration
If a DP stocks out of a product early in the ordering cycle, they know they will receive stock in less than a month rather than waiting up to 3 months or having to send in an emergency order

Average Stock Holding can be significantly reduced with more frequent deliveries
Every $1,000,000 of Inventory, costs us approximately $150,000 per annum in Inventory Carrying Costs.

In under 7 Years you have spent the equivalent of the inventory value on unrecoverable inventory carrying costs.

~5% Bank Interest (fluctuates) if the money was in the bank rather than tied up in inventory “Working Capital”

~10% in Warehouse management Costs:
- Management & Labour Salaries
- Rents
- Utilities – Lighting, Water, Cooling etc.
- Racking
- Material Handling Equipment
- Cleaning
- Cycle Counting

1,000k
950k
900k
850k
800k
750k
700k
650k
600k
550k
500k
450k
400k
350k
300k
250k
200k
150k
100k
50k

Inventory

$150k / Annum Inventory Carrying Costs

5%

10%
Vision at the Health Facility

At the Health Centre

Booking In Accuracy
Accurate Physical Inventory
Easier Expiration Identification
Mobile Upload to Cloud
Real time data

+ Fast & Accurate Identification of Product to Patient
Quick identification of whether Patient is consuming to plan
Real Time Consumption Data which can be fed back to MoH
Better data on which to make forecasts

If package / strip breakdown is required then this can be manually entered

If the ID card is not available, manual entry of Patient Name or Number can be used but this is not optimal.
Vision at the Warehouse...... and beyond!

1. District Pharmacy (DP) Online order received at Central Supply Organisation (CSO) and accepted – Information is integrated with WMS and LMIS

2. Order sent wirelessly to Hand Held Terminal (HHT) on date and time programmed in system

3. HHT Info directs operator to shelf location of each line item. Line items are sorted to optimise distance walked

4. Operator takes items to designated Marshalling Area location also indicated on HHT

5. DISTRIBUTION Monthly Weekly

   - NMS Truck takes order to DPs
   - DP Truck takes order to Health Facilities

   All transactions are logged by eLMIS

All shelves and boxes are barcoded

Inventory levels are automatically reviewed and replenished as required

Next available operator is selected and they acknowledge receipt of order and starts to pick

Operator scans items as they are picked and enter number of items pick using the key pad on the HHT

NO PAPER

WMS is automatically updated as items are picked

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We need to drive towards consolidated supply chain owned nationally…. and is sustainable!
Supply Chains succeed when resource, discipline and hard work are combined to make positive change

People typically say they want change
Supply Chains succeed when resource, discipline and hard work are combined to make positive change

People typically say they want change

Right up to the point when you ask them to do something differently
Supply Chain progress made so far

Supply Chain Organisation

• We have established a new department within the Grant Management Division and are staffing it to supply chain strategy and implement pragmatic transformational solutions

• The department will include three specialized teams: strategy design; tactical team; and MAP (metrics, analysis and performance)

• Two supply chain loanee have started one year secondments responsible for coordinating the Supply Chain Strategy and Transformations - these senior executives have deep experience in the public and private sectors and are enabling us to engage more effectively across our partnerships and to support countries maximize impact
Developing supply chain strategy will help focus our in-country diagnostics & optimization of selected countries

**SC Strategy framework**
- Overarching supply chain strategy defining operating model and involvement in SCM
- Developing blue print for supply chain archetypes
  - Focus: Countries, clustered by archetype

**SC Country diagnostics**
- Country-specific supply chain diagnostic, assessing current state performance and capacity
  - Focus: High priority countries

**SC Optimization approach**
- Country-specific optimization
- Application of SC strategy blue print by archetype

**EXAMPLES**
In a three phase process from now to mid of next year we will develop the Global Fund in-country supply chain strategy.

I. Diagnose and assess current state
II. Develop vision and strategy
III. Create detailed implementation plan
IV. Communicate and align strategy with stakeholders via change and stakeholder management
Focus of the supply chain strategy development will be on in-country supply chain with light touch on global logistics.

Country processes, resources and technology will be the main focal area of the supply chain strategy.
Summary and Next Steps

Supply Chain Strategy
• Currently in the first phase of strategy development – current state base lining in progress

Diagnostics for Transformational Interventions
• Supply Chain diagnostic methodology development is in progress
• RFP responses for external support is in progress
• Strategy consultancy current state phase will cover five diagnostics

Supply Chain Catalytic Funding Preparation
• Capacity Building
  • Consulting a number of partners to discuss grass roots degree level academic programs for Supply Chain Management in Africa
• Innovation Challenge
  • Process to set challenges and assess for funding is being developed
  • Discussions taking place regarding mobile data collection of consumption data at Health Facilities
  • Discussions taking place regarding use of drones for deliveries
Supply Chains succeed when resource, discipline and hard work are combined to make positive changes

Who wants change?

Let embrace change!

Who wants to change?