Report on Quantification of Needs for HIV and AIDS Commodities and the Revised PSM Plan for the CTG/NACC under the Global Fund's New Funding Model in Cameroon

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Systems for Improved Access to Pharmaceuticals and Services

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Key Words

quantification, HIV and AIDS commodities, new funding model

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ACRONYMS AND ABBREVIATIONS

3TC	lamivudine
ABC	abacavir
AFD	Agence Française de Développement (French Development Agency)
ART	antiretroviral therapy
ARV	antiretroviral
ATV	atazanavir
AZT	zidovudine
CBC	complete blood count
CD4	Cluster of Differentiation 4 (Glycoprotein)
CDC	US Centers for Disease Control and Prevention
CHAI	Clinton Health Access Initiative
CTG	Central Technical Group
ddI	didanosine
ECF	Emergency Commodity Fund
EFV	efavirenz
EID	Early Infant Diagnosis
ESTHERAID	ESTHERAID Project (Ensemble pour une Solidarité Thérapeutique Hospitalière en Réseau contre le SIDA)
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria
HIV	human immunodeficiency virus
LPV	lopinavir
mg	milligrams
MSH	Management Sciences for Health
NACC	National AIDS Control Committee
NFM	new funding model
NVP	nevirapine
OI	opportunistic infection
PEPFAR	President's Emergency Plan for AIDS Relief
PFSCM	Partnership for Supply Chain Management
PIB	public investment budget
PLHIV	people living with HIV
PMTCT	prevention of mother-to-child transmission
PSM	Procurement and Supply Management
R10	Round 10
SIAPS	Systems for Improved Access to Pharmaceuticals and Services
TDF	tenofovir
UNICEF	United Nations Children's Fund
VPP	Voluntary Pooled Procurement
WBC	white blood count

INTRODUCTION

Needs for antiretrovirals (ARVs) and other HIV commodities on a national scale have increased significantly over the years in line with the increase in patient register of HIV-positive people on treatment, rising from a few hundred in 2001 to 78,000 at the end of 2009, and to about 122,783 at the end of 2012.

Within the funding framework for Phase 1 of Round 10 (R10) of the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), Cameroon initially received a total amount of €18,337,801, allocated to purchase pharmaceutical commodities.

This contribution of 36 percent from the Global Fund for purchasing commodities requires additional funding to make them available to beneficiaries. Between 2012 and 2013, the country reported periods of stock-outs caused by delayed disbursement of additional funding, such as the 2013 public investment budget (PIB13) and funding from the President of the Republic.

In this context of supply tensions, the country has had to buy commodities for the HIV program through the supply mechanisms of Voluntary Pooled Procurement (VPP) and the Emergency Commodity Fund (ECF) of the President's Emergency Plan for AIDS Relief (PEPFAR) for a total amount of €11,859,053.

Financial partners such as the World Bank, the French Development Agency (Agence Française de Développement; AFD), and PEPFAR have committed their support alongside technical partners—the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program implemented by Management Sciences for Health, the Clinton Health Access Initiative (CHAI), the US Centers for Disease Control and Prevention (CDC), the United Nations Children's Fund (UNICEF), the ESTHERAID Project (Ensemble pour une Solidarité Thérapeutique Hospitalière en Réseau contre le SIDA), and others—to make HIV commodities available.

All this funding has made it possible to quantify needs in commodities, and contracts have already been issued.

During the second year of Phase 1 of the Global Fund R10, Cameroon also received an additional amount of €15,294,107 (US$20,000,000) though the new funding model (NFM). This latest funding and the remainder of Phase 1 of R10 justify these quantification activities and revision of the Procurement and Supply Management (PSM) Plan that was initially validated.

The quantification of needs covered by this funding will make it possible to obtain HIV and AIDS commodities for the orders identified as Orders A, B and C to improve monitoring with the procurement officer for VPP and the Global Fund.

OBJECTIVES

- Quantify needs for NFM funding
- Quantify funding needs for the remainder of Phase 1 of R10
- Plan commodity shipments
- Revise the PSM Plan

METHODOLOGY

- Perform an inventory to assess the availability of HIV commodities
- Assess outstanding inventory and available funds
- Collect useful epidemiological data
- Reach an agreement with Permanent Secretary on budget allocation
- Develop a forecasting tool for commodity consumption and availability
- Use the CHAI tool for quantification of pediatric ARVs
- Design quantification tools for first- and second-line ARVs and other commodities
- Formulate assumptions for each order
- Use prices applied by VPP procurement officers (Partnership for Supply Chain Management; PFSCM)
- Use Order A to cover the period July 2013 to June 2014
- Use Orders B and C to ensure the availability of commodities for as long as possible while maintaining regimen balance

ORDER A

Order A Assumptions

Order A was based on the first 10 million dollars (USD) that the Global Fund granted to Cameroon to cover the period July 2013 to June 2014. The budget of USD 10 million is divided as follows—

Budget Allocation for Order A

Category	Percentage	Amount (USD)	Comments
Adult first-line ARVs	70	7,000,000	
Adult second-line ARVs	10	1,000,000	
Pediatric first-line ARVs	4	400,000	
Pediatric second-line ARVs	2	200,000	
ARVs for the prevention of mother-to-child transmission (PMTCT) of HIV and AIDS	0	—	Included in adult ARVs
HIV screening tests	0	—	Covered by PEPFAR
CD4 reagents	10	1,000,000	
Biochemical and hematology reagents	0	—	Not included for cost-efficiency reasons
EID (early infant diagnosis)	0	—	There is enough funding to cover needs until June 2014
Medicines for opportunistic infections	4	400,000	
Total	**100**	**10,000,000**	

First- and Second-Line ARVs for Adults

Data from the December 2012 report of the National AIDS Control Committee (NACC) were used, which correspond to the program's best performance, given reports of stock-outs for these products between January and July 2013.

Thus, the number of existing adult patients was set at 117,872 with—

- A recruitment rate of 1,358 and 1,426 patients, respectively, for 2013 and 2014
- A one-year coverage period, between July 2013 and June 2014
- A 1 percent migration rate
- Percentage of patients on didanosine (ddI) 250 mg at 50 percent
- No safety stock

Distribution by regimen is as follows—

Distribution by Regimen for Adult ARVs

First line					Existing patients (%)	New patients (%)
AZT	+	3TC	+	NVP	37.48	
AZT	+	3TC	+	EFV	10.57	
TDF	+	3TC	+	NVP	16.34	
TDF	+	3TC	+	EFV	31.71	100
Sub-total					**96.10%**	**100%**
Second line					**Existing patients (%)**	**First-line patients switched to second-line (%)**
TDF	+	3TC	+	LPV/r	2.10	
TDF	+	3TC	+	ATV/r	0.20	70
AZT	+	3TC	+	LPV/r	0.70	
AZT	+	3TC	+	ATV/r	0.20	30
ABC	+	ddI	+	LPV/r	0.80	
Sub-total					**3.90%**	
Total					**100.00%**	**100.00%**

ABC = abacavir, ATV/r = atazanavir/ritonavir, AZT = zidovudine, ddI = didanosine, EFV = efavirenz, LPV/r = lopinavir/ritonavir, NVP = nevirapine, TDF = tenofovir, 3TC = lamivudine

For each regimen, distribution of patients taking three monotherapies (S + S + S) or a fixed-dose dual therapy + one monotherapy (D +S) or lastly one fixed-dose triple therapy (T) combination is presented in the following table.

Distribution by formulation, years 1 and 2

First line					S+S+S (%)	D+S (%)	T (%)
AZT	+	3TC	+	NVP			100
AZT	+	3TC	+	EFV		100	
TDF	+	3TC	+	NVP		100	
TDF	+	3TC	+	EFV			100
Second line					**S+S+S**	**D+S**	**T**
TDF	+	3TC	+	LPV/r		100	
TDF	+	3TC	+	ATV/r		100	
AZT	+	3TC	+	LPV/r		100	
AZT	+	3TC	+	ATV/r		100	
ABC	+	ddI	+	LPV/r	100		

ABC = abacavir, ATV/r = atazanavir/ritonavir, AZT = zidovudine, ddI = didanosine, EFV = efavirenz, LPV/r = lopinavir/ritonavir, NVP = nevirapine, TDF = tenofovir, 3TC = lamivudine

Pediatric ARVs

Data from the same December 2012 report were used for the above-mentioned reasons. Hence, the number of existing pediatric patients is set at 5,331, with—

- A recruitment rate of 861 and 904 patients, respectively, for 2013 and 2014
- A one-year coverage period, between July 2013 and June 2014
- A 1 percent migration rate
- No safety stock

Distribution by regimen is as follows—

Distribution by Regimen for Pediatric ARVs

First line					Existing patients (%)	New patients (%)
AZT	+	3TC	+	NVP	65.9	55.0
AZT	+	3TC	+	EFV	20.3	20.0
AZT	+	3TC	+	LPV/r	6.3	13.0
ABC	+	3TC	+	NVP	1.5	7.0
ABC	+	3TC	+	EFV	2.0	5.0
Sub-total					**96.0%**	
Second line					**Existing patients (%)**	**First-line patients switched to second line**
ABC	+	ddI	+	LPV/r	2.0	
ABC	+	3TC	+	LPV/r	2.0	50.0
AZT	+	3TC	+	LPV/r		50.0
Subtotal						
Total					**100.0%**	**100.0%**

ABC = abacavir, ATV/r = atazanavir/ritonavir, AZT = zidovudine, ddI = didanosine, EFV = efavirenz, LPV/r = lopinavir/ritonavir, NVP = nevirapine, TDF = tenofovir, 3TC = lamivudine

For each regimen, distribution of patients taking three monotherapies (S+S+S), or one fixed-dose dual therapy + one monotherapy (D + S), or lastly one fixed-dose triple therapy (T) combination is presented in the following table.

Distribution by formulation of pediatric ARVs

First line					S+S+S (%)	S+D (%)	T (%)
AZT	+	3TC	+	NVP			100
AZT	+	3TC	+	EFV		100	
AZT	+	3TC	+	LPV/r		100	
ABC	+	3TC	+	NVP	40	60	
ABC	+	3TC	+	EFV	40	60	
Second line							
ABC	+	ddI	+	LPV/r	100		
ABC	+	3TC	+	LPV/r	40	60	
AZT	+	3TC	+	LPV/r		100	

ABC = abacavir, ATV/r = atazanavir/ritonavir, AZT = zidovudine, ddI = didanosine, EFV = efavirenz, LPV/r = lopinavir/ritonavir, NVP = nevirapine, TDF = tenofovir, 3TC = lamivudine

CD4 Tests

Assumptions		
Estimate related to regimen, existing patients on antiretroviral therapy (ART) for more than two years take one test per year		
New patients (adults) and existing patients (less than two years of ART) after their first test take one test every six months (two per year)		
Pregnant women, one test per year		
Children take two tests per year		
Overall HIV prevalence = 4.30%		
	2013	**2014**
Target population for HIV tests	1,571,762	1,825,170
Number of persons to test for HIV, goal: adults, children, and pregnant women	67,586	78,482
Estimate of the percentage of HIV-positive adults who are not yet patients who will take a CD4 test	45	50
Estimate of the number of existing and new adult patients who will take a CD4 test	71,788	117,872
Pregnant women	11,150	18,917
Estimate of the number of existing and new pediatric patients who will take a CD4 test (two CD4 tests)	6000	7330
Adult people living with HIV (PLHIV) on ART for over two years	72,212	58,048

Source: 2011–2015 Operational Strategic Plan, page 62.

Medicines for Opportunistic Diseases

Adult PLHIV on ARVs to Be Treated for Opportunistic Infections (OIs)

Assumptions	2013	2014	2015	2016	2017
Existing PLHIV adult patients on ARVs	117,872	144,000	175,920	214,916	262,556
Number of HIV-positive pregnant women on prophylaxis	27,876	37,835	48,209	59,183	70,606
New PLHIV patients (adult and child)	26,128	31,920	38,996	47,640	58,200

Patients considered/Disease	Drug	Regimen (%)	Target (%)	2013
Prophylaxis for pregnant women	Co-trimoxazole 480 mg pill	100	100	27,876
Adult prophylaxis for PLHIV on ARVs	Co-trimoxazole 480 mg pill	100	15	17,681
New patient	Co-trimoxazole 480 mg pill	100	100	26,128
Pneumocystis carinii pneumonia (new)	Co-trimoxazole 480 mg pill	100	5	1306
Total co-trimoxazole				**72,991**
Esophageal candidiasis (new)	Fluconazole 200 mg pill	100	10	2613
Cryptococcosis/new patient	Fluconazole 200 mg pill	100	2	523
Total				**3136**
Toxoplasmosis/new patient	Sulfadiazine 500 mg pill	100		
	Pyrimethamine 25 mg pill	100	4	1045
	Folic acid 15 mg pill	100		
	Clindamycin 150 mg pill	100	5	1306
Total for toxoplasmosis				**2351**
Oral candidiasis (all)	Nystatin 500,000 IU pill	100	40	57,600
Mycosis/existing + new	Nystatin 500,000 IU pill	70	30	30,240
	Fluconazole 200 mg pill	30		12,960
Total for mycosis				**100,800**

Dosages of Drugs Used

Disease	Drug	Dose
Prophylaxis for pregnant women	Co-trimoxazole 480 mg pill	2 pills/day × 6 months
Systemic infection	Co-trimoxazole 480 mg pill	2 pills/day at one time × 6 months
Pneumocystis carinii pneumonia	Co-trimoxazole 480 mg pill	6 pills/day × 21 days + return to classic prophylaxis (co-trimoxazole)
Esophageal candidiasis	Fluconazole 200 mg pill	2 pills/day × 8 days
Cryptococcosis	Fluconazole 200 mg pill	2 pills/day at one time × 14 days + 1 pill/day × 8 weeks
Toxoplasmosis (3%)	Sulfadiazine 500 mg pill	10 pills/day × 14 days + 5 pills/day × 8 weeks
	Pyrimethamine 25 mg pill	First day 2 pills + 2 pills/day × 21 days + 1 pill/day × 8 weeks
	Folic acid 15 mg pill	1 pill/day × 14 days + 1 pill/day × 8 weeks
	Clindamycin 150 mg pill	8 pills/day × 6 weeks
Oral candidiasis	Nystatin 500,000 IU pill	5 tablets/day × 5 days
Mycosis	Nystatin 500,000 IU pill (70%)	1 pill, 3 times per day × 10 days
	Fluconazole 200 mg pill (30%)	1 pill/day × 14 days

Assumptions for PLHIV Children on ARVs to Treat OIs

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Existing child patients who are PLHIV on ARVs	4911	6000	7330	8955	10,940
New child patients who are PLHIV on ARVs	900	1296	1572	1488	1428
New-born child prophylaxis	18,319	26,149	36,890	49,892	61,781

Disease	Drug	Percentage	PLHIV
Children (existing)	Co-trimoxazole 120 mg	85	30
	Co-trimoxazole 480 mg pill	15	
Children on PMTCT prophylaxis (all 17,203 children) born to an HIV-positive mother	Co-trimoxazole 120 mg	100	100
Children with mycosis (existing first-year patient)	Fluconazole syrup vial/50 ml	50	30
	Fluconazole 200 mg capsule	50	
Children with mycosis (new patient)	Fluconazole syrup vial/50 ml	50	100
	Fluconazole 200 mg pill	50	

Total for Order A

ARVs

Product	Formulation	Dose	Packaging	Order A
ABC	tablet	60	60 tablets	1137
ABC	tablet	300	60 tablets	1734
ABC+3TC	tablet	60/30	60 tablets	8023
AZT+3TC+NVP	tablet	60/30/50	60 tablets	13,385
ddI	capsules	125	30 capsules	64
3TC	suspension	0	240 ml	559
3TC	tablet	150	60 tablets	836
EFV	tablet	600	60 tablets	7761
NVP	tablet	50	60 tablets	936
AZT+3TC	tablet	300/150	60 tablets	44,448
AZT+3TC+NVP	capsules	300/150/200	60 tablets	136,591
ddI	capsules	250	30 capsules	2319
ddI	capsules	400	30 capsules	1929
EFV	tablet	600	30 tablets	34,109
NVP	tablet	200	60 tablets	101,651
LPV/r	tablet	200/50	120 tablets	21,814
TDF+3TC	tablet	300/300	30 tablets	92,900
TDF+3TC+EFV	tablet	300/300/600	30 tablets	302,519
ATV/r	tablet	300/100	30 tablets	8752

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Medicines for Opportunistic Infections

Patient category	Product	Packaging	Combined needs for July 2013–June 2014	Quantities obtained with the allocated budget
Adults	Co-trimoxazole 480 mg pill	1000	29,856	19,265
Adult	Fluconazole 200 mg	40	7524	4855
Adult	Sulfadiazine 500 mg pill	1000	185	119
Adult	Pyrimethamine 25 mg pill	1000	58	38
Adult	Folic acid 15 mg pill	10	1851	1195
Adult	Clindamycin 150 mg pill	100	5554	3584
Adult	Nystatin 500,000 IU pill	1000	2970	1916
Pediatric	Co-trimoxazole 120 mg pill	1000	259	167
Pediatric	Co-trimoxazole 480 mg pill	1000	10	6
Pediatric	Fluconazole syrup vial/50 ml	1	6480	4181
Pediatric	Fluconazole 200 mg pill	40	1265	816

CD4 Tests

Platform	Total annual need	Number obtained with the allocated budget
FACSCount	119,232	76,046
FACSCalibur	20,440	15,209
Cyflow	30,660	27,376
Total	**170,331**	**118,631**

ORDER B

Order B Assumptions

Situation avec les livraisons prevues (NOMBRE DE MOIS)

Rupture de stock	Stock en dessous de 6 mois	Stock au dessus de 6 mois

Produit	Dosage	Conditionnement	déc-13	janv-14	févr-14	mars-14	avr-14	mai-14	juin-14
AZT/3TC/NVP	300/150/200 mg	60	0,21	1,99	0,99	7,65	6,65	6,67	5,67
AZT/3TC	300/150 mg	60	3,73	2,73	4,64	9,36	8,35	7,34	6,34
EFV	600 mg	30	0,87	7,44	6,44	9,38	8,38	7,38	6,38
TDF/3TC	300/300 mg	30	4,59	5,20	7,94	11,07	10,05	10,85	9,83
NVP	200 mg	60	9,40	10,12	13,86	14,86	13,86	14,96	13,96
TDF/3TC/EFV	300/300/600 mg	30	0,93	15,75	21,03	29,73	27,92	27,61	25,90
LPV/r	200/50 mg	120	6,84	11,54	10,54	9,54	8,54	7,54	6,54
ATV/r	300/100 mg	30	-	8,97	7,51	6,14	4,86	3,65	2,49

ABC = abacavir, ATV/r = atazanavir/ritonavir, AZT = zidovudine, ddI = didanosine, EFV = efavirenz, LPV/r = lopinavir/ritonavir, NVP = nevirapine, TDF = tenofovir, 3TC = lamivudine

Forecasts of ARV Availability

Average monthly consumption of ARVs was calculated using patient data from November 2013 sent to the NACC, which set the number of adults on ARVs at 130,589; 96.5 percent of this number are adults on first-line treatment and 3.5 percent are adults on second-line treatment.

A recruitment rate of 1,402 new adults per month was applied for 2014. This rate was set using the NACC performance framework, defined with the Global Fund.

Patient distribution based on regimens is defined as follows—

- AZT/3TC/NVP: 39 percent
- AZT/3TC/EFV: 11 percent
- TDF/3TC/NVP: 17 percent
- TDF/3TC/EFV: 33 percent

Order B was developed within a context of commitment from the Government of Cameroon with the PIB13, the President of the Republic, and partners such as the World Bank, AFD, and PEPFAR. The quantities obtained through this funding made it possible to forecast the availability of the ARVs indicated in the table above. Thus AZT/3TC/NVP 300/150/200 mg would face a stock-out in December 2014, and AZT/3TC 300/150 mg and EFV 600 mg would face a stock-out in January 2015. TDF/3TC 300/300 mg would undergo its stock-out in April 2015, while NVP 200 mg would run out in August 2015. TDF/3TC/EFV would be available beyond December 2015.

The first objective was for Order B to cover the entire year of 2015 with the quantities indicated in the following table, but this proved to be very ambitious. A secondary goal was set to ensure coverage until September 2015. At that time, budget trade-offs were required for the quantities obtained to produce Order B as presented below.

Produit	Dosage	Conditionnement	Quantites pour couvrir Jusqu'en Dec 15	Couverture jusqu'en septembre 2015	Commande B Apres arbitrage budgetaire
AZT/3TC/NVP	300/150/200 n	60	638 915	491 473	497 526
AZT/3TC	300/150 mg	60	185 902	139 082	153 988
EFV	600 mg	30	166 345	138 621	146 237
TDF/3TC	300/300 mg	30	228 707	152 225	156 445
NVP	200 mg	60	107 116	42 846	52 086
TDF/3TC/EFV	300/300/600 n	30	-		
LPV/r	200/50 mg	120	42 098	32 277	27 946
ATV/r	300/100 mg	30	27 531	19 906	4 000

ABC = abacavir, ATV/r = atazanavir/ritonavir, AZT = zidovudine, ddI = didanosine, EFV = efavirenz, LPV/r = lopinavir/ritonavir, NVP = nevirapine, TDF = tenofovir, 3TC = lamivudine
Translation of column headings: Product; Dose; Packaging; Quantities for coverage through Dec. 2015; Coverage until September 2015; Order B after budget trade-offs

Total for Order B

Product	Formulation	Dose	Packaging	Order B
AZT/3TC/NVP	capsules	300/150/200 mg	60	497,526
AZT/3TC	tablet	300/150 mg	60	153,988
EFV	tablet	600 mg	30	146,237
TDF/3TC	tablet	300/300 mg	30	156,445
NVP	tablet	200 mg	60	52,086
LPV/r	tablet	200/50 mg	120	27,946
ATV/r	tablet	300/100 mg	30	4000

ABC = abacavir, ATV/r = atazanavir/ritonavir, AZT = zidovudine, ddI = didanosine, EFV = efavirenz, LPV/r = lopinavir/ritonavir, NVP = nevirapine, TDF = tenofovir, 3TC = lamivudine

ORDER C

Order C Assumptions for the Remainder of Phase 1 for R10

Budget Distribution of Commodities

The remainder of the first phase of R10 HIV for Cameroon totaled €4,300,211 after deducting €431,858 for the management and distribution costs of the ARV donation from PEPFAR.

Categorie	Pourcentage	Montant (USD)	Montant (Euro)
ARV Adulte 1L	27%	$ 1 572 402	€ 1 155 778
ARV Adulte 2L	25%	$ 1 462 577	€ 1 075 053
ARV Pediatrique (tous)	8%	$ 468 025	€ 344 017
ARV pour la PTME	14%	$ 819 043	€ 602 030
Tests de depistage	0%	$ -	€ -
Reactifs CD4	10%	$ 585 031	€ 430 021
Reactifs biochimie et hematologie	6%	$ 358 200	€ 263 291
EID	0%	$ -	€ -
MIO	10%	$ 585 031	€ 430 021
TOTAL	**100%**	**$ 5 850 309**	**€ 4 300 211**

Percentages are determined using the country's available stocks, those expected (Orders A and B form the NFM, Presidential Funds, PIB-13, AFD, and World Bank), and forecast needs at a specified date taking into account funding limitations. The program plans to put all new patients on TDF/3TC/EFV; therefore it was deemed appropriate to make this product available in December 2015. These are validated quantities of first-line ARVs that account for 27 percent of the budget for Order C. The same reasoning has guided the approach for determining the percentage allocated to each of the products that make up this order.

Assumptions for Quantifying Needs for ARVs and Other Commodities

The assumptions are the same for those drawn up to quantify Order A, taking into account the budget.

Quantification of Needs Financed by the Remaining Funds from Phase 1 of R10

ARVs

Product	Packaging	Total quantity to order
Tenofovir/Lamivudine/Efavirenz 300/300/600 mg, pill	30	174,813
Tenofovir/Lamivudine 300/300 mg, pill	30	23,100
Zidovudine/Lamivudine 300/150 mg, pill	60	26,397
Lopinavir/Ritonavir 200/50 mg, pill	120	39,018
Lopinavir/Ritonavir 300/100 mg, pill	30	8679
Abacavir/Lamivudine 60/30 mg, dispersible pill	60	3860
Abacavir/Lamivudine 300/300 mg, breakable tablet	60	2010
Zidovudine/Lamivudine 60/30 mg, dispersible tablet	60	9397
Zidovudine/Lamivudine/Nevirapine 60/30/50 mg, dispersible tablet	60	20,156
Zidovudine/Lamivudine/Nevirapine 300/150/200 mg, pill	60	10,498
Efavirenz 200 mg, breakable tablet	90	3642
Nevirapine 50 mg, dispersible tablet	60	366
Nevirapine 200 mg, pill	60	457
Lopinavir/Ritonavir 80+20/mg/ml	300 ml	296
Lopinavir/Ritonavir 100/25 mg, pill	60	370

Hematological and biochemical tests

	Product	Packaging	Quantity to order
Complete Blood Count (CBC) (Hema Screen)	Diluent (Hema Screen)	20 L	202
	Lyse (Hema Screen)	500 mL	101
	Detergent (Hema Screen)	20 L	51
CBC (Cell-Dyn 1800)	Diluent (Cell Dyn)	20 L	202
	Enzymatic (Cell Dyn)	36 mL	101
	Control (Cell Dyn)	6 mL	51
	WBC (Cell Cyn)	4 L	51
	Detergent (Cell Dyn)	20 L	51
Glycemia/Trans (Spectro)	SGOT	200 mL	405
	SGPT	200 mL	405
	Glucose	250 mL	405

Medicines for Opportunistic Infections

Product	Packaging	Total quantity to order
Co-trimoxazole 480 mg pill	1000	37,538
Fluconazole 200 mg	40	1,380
Sulfadiazine 500 mg pill	1000	1,982
Folic acid 15 mg pill	10	144
Clindamycin 150 mg pill	100	7,618
Nystatin 500,000 IU pill	1000	4,773
Co-trimoxazole 120 mg pill	1000	4,817
Fluconazole syrup vial/50 ml	1	2,739

Inputs for Pima CD4

Product	Packaging	Total quantity to order
Pima CD4 100 × cartridges	100	592
Finger Stick Sample Collection	100	592
Pima Printer Paper II (10 rolls)	10	164
Pima Bead Standard	1	164

SUGGESTED DELIVERY PLAN FOR ADULT ARVs

Delivery sSchedule

Product	Dose	Packaging	Dec-13	Jan-14	Feb-14	Apr-14	May-14	Sep-14	Jan-15
AZT/3TC/NVP	300/150/200 mg	60	136,591			497,526			10,498
AZT/3TC	300/150 mg	60		44,448			153,988		26,397
EFV	600 mg	30	41,870				146,237		3642
TDF/3TC	300/300 mg	30		92,900				156,445	23,100
NVP	200 mg	60		101,651					52,543
TDF/3TC/EFV	300/300/600 mg	30		151,260	151,259				174,813
LPV/r	200/50 mg	120	21,814			27,946			39,018
ATV/r	300/100 mg	30	8752			4000			8679

KEY	
	Order A NFM
	Order B NFM
	Order C RR10
	Orders B + C

REVISION OF PSM PLAN

The Central Technical Group (CTG) of the NACC has submitted its Procurement and Supply Management Plan and had it validated by the Global Fund. This document is key to negotiating and obtaining grants. The Global Fund has adopted a series of policies and principles on PSM, detailed in its policy guide on procurement and supply management.

To gain approval of an advance of €15,294,107 from the Global Fund grant through the NFM, the CTG/NACC, the principal recipient, must update its PSM Plan. For this, the following must occur—

- Include this amount in the budget on the first page of the PSM Plan;
- Specify that purchases will be conducted through VVP and that the National Center for the Procurement of Essential Medicines and Medical Supplies will continue to implement activities in supply management and distribution; and
- Include a list of medicines and other medical commodities forecast with their quantities and their prices corresponding to those of the PFSCM officer.

Thus, the updated PSM Plan was validated. The following table summarizes the costs of procurement and supply management and is a key component of the PSM Plan, based on the model provided by the Global Fund.

Résumé des coûts de gestion des achats et de gestion pharmaceutique.					
Titre de l'offre / de la subvention :		VIH/Sida, Round 10			
Bénéficiaire principal		Ministère de la Santé Publique			
Pays :		Cameroun			
Composant :		VIH			
Série :		10			
Phase 1 ou Phase 2 :		Phase 1			
Numéro de					
Période ou durée :		De l'année 1 à l'année 2 .			
Catégorie de produit		Période 1 (Euro)	Période 2(Euro)	Periode 2 (Q6) Budget Aditionnel NFM	Total pour Phase 1 (Euro)
1	Médicaments	7 237 281,43	6 873 882,06	10 799 864,00	24 911 027,49
2	Produits médicaux et matières premières (hors produits pharmaceutiques)	953 209,98	1 319 976,77	830 635,00	**3 103 821,75**
4	Coûts de gestion des achats et des stocks (services associés à la GAS, ex. QA, MIS,	819049,141	819385,883	3663607	**5 302 042,02**
5	Produits et services non médicaux (ex. : véhicules, ordinateurs, construction, consultants financiers, etc.)	259163,329	0		**259 163,33**
Montant total (Euro)		**9 268 703,88**	**9 013 244,71**	**15 294 106,00**	**33 576 054,60**
Montant total de la subvention		**13 332 342,00**	**12 542 590,00**	**15 294 106,00**	**41 169 038,00**
Approvisionnement total en tant que % du montant de la		**69,52%**	**71,86%**	**100,00%**	**81,56%**
Personne étant globalement responsable de cette subvention. Indiquer le nom, la fonction, le service et les coordonnées (tél., e-		M. MAMA FOUDA André, Ministre de la Santé Publique, Bénéficiaire Principal Tel : 00 237 22 22 01 72, Fax : 00 237 22 22 02 33, E mail : andrmama@yahoo.fr			
Personne étant globalement responsable de toutes les activités PHPM. Indiquer le nom, la		Dr OUSSOUMANOU TAOUSSE, Directeur Général de la CENAME, Tel : 00 237 22 23 29 20, Email : cename@hotmail.com			
Date de soumission(s) :		Le 28-10-2011			