GAVI Alliance

Annual Progress Report 2014

Submitted by

The Government of

Ghana

Reporting on year: **2014**
Requesting for support year: **2016**
Date of submission: **15/05/2015**

Deadline for submission: 15/05/2015

Please submit the APR 2014 using the online platform https://AppsPortal.gavialliance.org/PDExtranet

Enquiries to: apr@gavi.org or representatives of a GAVI Alliance partner. The documents can be shared with GAVI Alliance partners, collaborators and general public. The APR and attachments must be submitted in English, French, Spanish, or Russian.

Note: *You are encouraged to use previous APRs and approved Proposals for GAVI support as reference documents. The electronic copy of the previous APRs and approved proposals for GAVI support are available at* http://www.gavialliance.org/country/

The GAVI Secretariat is unable to return submitted documents and attachments to countries. Unless otherwise specified, documents will be shared with the GAVI Alliance partners and the general public.

GAVI ALLIANCE
GRANT TERMS AND CONDITIONS

FUNDING USED SOLELY FOR APPROVED PROGRAMMES

The applicant country ("Country") confirms that all funding provided by the GAVI Alliance will be used and applied for the sole purpose of fulfilling the programme(s) described in the Country's application. Any significant change from the approved programme(s) must be reviewed and approved in advance by the GAVI Alliance. All funding decisions for the application are made at the discretion of the GAVI Alliance Board and are subject to the Independent Review Committee (IRC) and its processes and the availability of funds.

AMENDMENT TO THE APPLICATION

The Country will notify the GAVI Alliance in its Annual Progress Report (APR) if it wishes to propose any change to the programme(s) description in its application. The GAVI Alliance will document any change approved by the GAVI Alliance, and the Country's application will be amended.

RETURN OF FUNDS

The Country agrees to reimburse to the GAVI Alliance all funding amounts that are not used for the programme(s) described in its application. The country's reimbursement must be in US dollars and be provided, unless otherwise decided by the GAVI Alliance, within sixty (60) days after the Country receives the GAVI Alliance's request for a reimbursement and be paid to the account or accounts as directed by the GAVI Alliance.

SUSPENSION/ TERMINATION

The GAVI Alliance may suspend all or part of its funding to the Country if it has reason to suspect that funds have been used for purpose other than for the programmes described in the Country's application, or any GAVI Alliance-approved amendment to the application. The GAVI Alliance retains the right to terminate its support to the Country for the programmes described in its application if a misuse of GAVI Alliance funds is confirmed.

ANTICORRUPTION

The Country confirms that funds provided by the GAVI Alliance shall not be offered by the Country to any third person, nor will the Country seek in connection with its application any gift, payment or benefit directly or indirectly that could be construed as an illegal or corrupt practice.

AUDITS AND RECORDS

The Country will conduct annual financial audits, and share these with the GAVI Alliance, as requested. The GAVI Alliance reserves the right, on its own or through an agent, to perform audits or other financial management assessment to ensure the accountability of funds disbursed to the Country.

The Country will maintain accurate accounting records documenting how GAVI Alliance funds are used. The Country will maintain its accounting records in accordance with its government-approved accounting standards for at least three years after the date of last disbursement of GAVI Alliance funds. If there is any claims of misuse of funds, Country will maintain such records until the audit findings are final. The Country agrees not to assert any documentary privilege against the GAVI Alliance in connection with any audit.

CONFIRMATION OF LEGAL VALIDITY

The Country and the signatories for the Country confirm that its application, and APR, are accurate and correct and form legally binding obligations on the Country, under the Country's law, to perform the programmes described in its application, as amended, if applicable, in the APR.

CONFIRMATION OF COMPLIANCE WITH THE GAVI ALLIANCE TRANSPARANCY AND ACCOUNTABILITY POLICY

The Country confirms that it is familiar with the GAVI Alliance Transparency and Accountability Policy (TAP) and complies with the requirements therein.

USE OF COMMERCIAL BANK ACCOUNTS

The Country is responsible for undertaking the necessary due diligence on all commercial banks used to manage GAVI cash-based support. The Country confirms that it will take all responsibility for replenishing GAVI cash support lost due to bank insolvency, fraud or any other unforeseen event.

ARBITRATION

Any dispute between the Country and the GAVI Alliance arising out of or relating to its application that is not settled amicably within a reasonable period of time, will be submitted to arbitration at the request of either the GAVI Alliance or the Country. The arbitration will be conducted in accordance with the then-current UNCITRAL Arbitration Rules. The parties agree to be bound by the arbitration award, as the final adjudication of any such dispute. The place of arbitration will be Geneva, Switzerland. The languages of the arbitration will be English or French.

For any dispute for which the amount at issue is US$ 100,000 or less, there will be one arbitrator appointed by the GAVI Alliance. For any dispute for which the amount at issue is greater than US $100,000 there will be three arbitrators appointed as follows: The GAVI Alliance and the Country will each appoint one arbitrator, and the two arbitrators so appointed will jointly appoint a third arbitrator who shall be the chairperson.

The GAVI Alliance will not be liable to the country for any claim or loss relating to the programmes described in the application, including without limitation, any financial loss, reliance claims, any harm to property, or personal injury or death. Country is solely responsible for all aspects of managing and implementing the programmes described in its application.

By filling this APR the country will inform GAVI about:

Accomplishments using GAVI resources in the past year

Important problems that were encountered and how the country has tried to overcome them

Meeting accountability needs concerning the use of GAVI disbursed funding and in-country arrangements with development partners

Requesting more funds that had been approved in previous application for ISS/NVS/HSS, but have not yet been released

How GAVI can make the APR more user-friendly while meeting GAVI's principles to be accountable and transparent.

1. Application Specification

Reporting on year: **2014**

Requesting for support year: **2016**

1.1. NVS & INS support

Type of Support	Current Vaccine	Preferred presentation	Active until
Routine New Vaccines Support	Measles second dose, 10 dose(s) per vial, LYOPHILISED	Measles second dose, 10 dose(s) per vial, LYOPHILISED	2016
Routine New Vaccines Support	Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID	Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID	2017
Routine New Vaccines Support	DTP-HepB-Hib, 10 dose(s) per vial, LIQUID	DTP-HepB-Hib, 10 dose(s) per vial, LIQUID	2015
Routine New Vaccines Support	Rotavirus, 2-dose schedule	Rotavirus, 2-dose schedule	2017
Routine New Vaccines Support	Yellow Fever, 10 dose(s) per vial, LYOPHILISED	Yellow Fever, 10 dose(s) per vial, LYOPHILISED	2015

DTP-HepB-Hib (Pentavalent) vaccine: Based on current country preferences the vaccine is available through UNICEF in fully liquid 1 and 10 dose vial presentations and in a 2 dose-2 vials liquid/lyophilised formulation, to be used in a three-dose schedule. Other presentations are also WHO pre-qualified, and a full list can be viewed on the WHO website, but availability would need to be confirmed specifically.

1.2. Programme extension

Type of Support	Vaccine	Start year	End year
Routine New Vaccines Support	Measles second dose, 10 dose(s) per vial, LYOPHILISED	2017	2017
Routine New Vaccines Support	Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID	2018	2019
Routine New Vaccines Support	DTP-HepB-Hib, 10 dose(s) per vial, LIQUID	2016	2019
Routine New Vaccines Support	Rotavirus, 2-dose schedule	2018	2019
Routine New Vaccines Support	Yellow Fever, 10 dose(s) per vial, LYOPHILISED	2016	2019

1.3. ISS, HSS, CSO support

Type of Support	Reporting fund utilisation in 2014	Request for Approval of	Eligible For 2014 ISS reward
CSO Type B	Yes	CSO Type B extension per GAVI Board Decision in July 2014: N/A	No
HSS	Yes	next tranche of HSS Grant No	No
HSFP	Yes	Next tranch of HSFP Grant No	No

VIG: Vaccine Introduction Grant; COS: Campaign Operational Support

1.4. Previous Monitoring IRC Report

APR Monitoring IRC Report for year 2013 is available here.

2. Signatures

2.1. Government Signatures Page for all GAVI Support (ISS, INS, NVS, HSS, CSO)

By signing this page, the Government of Ghana hereby attests the validity of the information provided in the report, including all attachments, annexes, financial statements and/or audit reports. The Government further confirms that vaccines, supplies, and funding were used in accordance with the GAVI Alliance Standard Grant Terms and Conditions as stated in this Annual Progress Report (APR).

For the Government of Ghana

Please note that this APR will not be reviewed or approved by the High Level Review Panel (HLRP) without the signatures of both the Minister of Health & Minister Finance or their delegated authority.

Minister of Health (or delegated authority)		Minister of Finance (or delegated authority)	
Name	Dr Sylvester Anemana	**Name**	Hon. Seth Emmanuel Terkper
Date		**Date**	
Signature		**Signature**	

This report has been compiled by (these persons may be contacted in case the GAVI Secretatiat has queries on this document):

Full name	Position	Telephone	Email
Dr George BONSU	National EPI Manager/Ghana Health Service	+233244326637	gybonsu@yahoo.com
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Mr Stanley DIAMENU	EPI Focal Point, WHO-Ghana	+233244312896	diamenus@who.int
Dr. Daniel YAYEMAIN	Child Health Specialist, UNICEF-Ghana	+233244606315	dyayemain@unicef.org

2.2. ICC signatures page

If the country is reporting on Immunisation Services (ISS), Injection Safety (INS) and/or New and Under-Used Vaccines (NVS) supports

In some countries, HSCC and ICC committees are merged. Please fill-in each section where information is appropriate and upload in the attached documents section the signatures twice, one for HSCC signatures and one for ICC signatures

The GAVI Alliance Transparency and Accountability Policy (TAP) is an integral part of GAVI Alliance monitoring of country performance. By signing this form the ICC members confirm that the funds received from the GAVI Alliance have been used for purposes stated within the approved application and managed in a transparent manner, in accordance with government rules and regulations for financial management.

2.2.1. ICC report endorsement

We, the undersigned members of the immunisation Inter-Agency Coordinating Committee (ICC), endorse this report. Signature of endorsement of this document does not imply any financial (or legal) commitment on the part of the partner agency or individual.

Name/Title	Agency/Organization	Signature	Date

Dr Ebenezer APPIAH-DENKYIRA/Director General	Ghana Health Service		
Dr George BONSU/National EPI Programme Manager	Ghana Health Service		
Dr Afisah ZAKARIAH/Deputy Director Policy Planning Monitoring and Evaluation	Ministry of Health		
Dr Erasmus AGONGO/Director Policy Planning Monitoring and Evaluation	Ghana Health Service		
Dr Gloria Quansah ASARE/Deputy Director General	Ghana Health Service		
Mr. Sam WORENTETU/Chairman	Ghana National Polio Plus Committee of Rotary International		
Mr Bright AMISSAH-NYARKO/Vice Chairman	Ghana Coalition of NGOs in Health		
Dr K. O. ANTWI-AGYEI	Immediate Past EPI Manager		
Dr Badu SARKODIE/Director for Public Health	Ghana Health Service		
Dr Magda ROBALO/WHO Representative	World Health Organization		
Ms. Susan Namondo NGONGI/UNICEF Representative	UNICEF		
Mrs Ramatu Ude UMANTA/Financial Controller	Ghana Health Service		
Mrs Vandana STAPLETON/Family Health Team Leader	USAID		

Thomas AAPORE/Health Coordinator	Ghana Red Cross Society		
Dr. Victoria M. ADABAYERI/Paediatrician	Paediatric Society of Ghana		
Mr Dan OSEI/Head of Planning and Budget Unit, PPMED	Ministry of Health		
Mrs Delese Mimi DARKO/Deputy Chief Executive	Food and Drugs Authority		

ICC may wish to send informal comments to: apr@gavi.org

All comments will be treated confidentially

Comments from Partners:

The ICC commended the team for putting together a comprehensive report for the country. They noted that the report on CSO support did not highlight their contributions. The ICC therefore advised the team to let the report reflect the contribution of CSOs.

Comments from the Regional Working Group:

The Regional Working Group commended Ghana for completing the 2014 APR. They advised the team to review all sections of the report to make sure it is as accurate as possible.

2.3. HSCC signatures page

We, the undersigned members of the National Health Sector Coordinating Committee (HSCC), Health Sector Working Group , endorse this report on the Health Systems Strengthening Programme. Signature of endorsement of this document does not imply any financial (or legal) commitment on the part of the partner agency or individual.

The GAVI Alliance Transparency and Accountability Policy is an integral part of GAVI Alliance monitoring of country performance. By signing this form the HSCC members confirm that the funds received from the GAVI Alliance have been used for purposes stated within the approved application and managed in a transparent manner, in accordance with government rules and regulations for financial management. Furthermore, the HSCC confirms that the content of this report has been based upon accurate and verifiable financial reporting.

Name/Title	Agency/Organization	Signature	Date
Dr Magda ROBALO/WHO Representative/Sector Lead	World Health Organization		

HSCC may wish to send informal comments to: apr@gavi.org

All comments will be treated confidentially

Comments from Partners:

The 2014 APR is very good. The HSWG hope for the acceptance of the report by the IRC.

Comments from the Regional Working Group:

2.4. Signatures Page for GAVI Alliance CSO Support (Type A & B)

This report has been prepared in consultation with CSO representatives participating in national level coordination mechanisms (HSCC or equivalent and ICC) and those involved in the mapping exercise (for Type A funding), and those receiving support from the GAVI Alliance to help implement the GAVI HSS proposal or cMYP (for Type B funding).

2.4.1. CSO report editors

This report on the GAVI Alliance CSO Support has been completed by

Name/Title	Agency/Organization	Signature	Date

2.4.2. CSO report endorsement

We, the undersigned members of the National Health Sector Coordinating Committee (or equivallent committees)- , endorse this report on the GAVI Alliance CSO Support.

Name/Title	Agency/Organization	Signature	Date
Mr Gabriel Gbiel BENARKUU/Chairman	Ghana Coalition of NGOs in Health		

Signature of endorsement does not imply any financial (or legal) commitment on the part of the partner agency or individual.

3. Table of Contents

This APR reports on Ghana's activities between January – December 2014 and specifies the requests for the period of January – December 2016

Sections

4. Baseline & annual targets

Countries are encouraged to aim for realistic and appropriate wastage rates informed by an analysis of their own wastage data. In the absence of country-specific data, countries may use indicative maximum wastage values as shown on the **Wastage Rate Table** available in the guidelines. Please note the benchmark wastage rate for 10ds pentavalent which is available.

Please also note that if the country applies the WHO multi-dose vial policy for IPV, the maximum indicative wastage rates are 5%, 15% and 20% for the 1-dose, 5-dose and 10-dose presentations respectively.

Number	Achievements as per JRF		Targets (preferred presentation)							
	2014		2015		2016		2017		2018	
	Original approved target according to Decision Letter	Reported	Original approved target according to Decision Letter	Current estimation	Previous estimates in 2014	Current estimation	Previous estimates in 2014	Current estimation	Previous estimates in 2014	Current estimation
Total births	1,090,949	1,091,922	1,118,850	1,115,968	1,146,272	1,143,867	1,173,813	1,172,464		1,201,775
Total infants' deaths	54,547	54,596	55,943	55,798	57,314	57,193	58,691	58,623		60,089
Total surviving infants	1036402	1,037,326	1,062,907	1,060,170	1,088,958	1,086,674	1,115,122	1,113,841		1,141,686
Total pregnant women	1,090,949	1,091,922	1,118,850	1,115,968	1,146,272	1,143,867	1,173,813	1,172,464		1,201,775
Number of infants vaccinated (to be vaccinated) with BCG	1,090,949	1,122,420	1,118,850	1,115,968	1,146,272	1,143,867	1,173,813	1,172,464		1,201,775
BCG coverage*[1]*	100 %	103 %	100 %	100 %	100 %	100 %	100 %	100 %	0 %	100 %
Number of infants vaccinated (to be vaccinated) with OPV3	974,217	983,977	999,133	996,559	1,048,215	1,021,473	1,084,222	1,047,010		1,073,185
OPV3 coverage*[2]*	94 %	95 %	94 %	94 %	96 %	94 %	97 %	94 %	0 %	94 %
Number of infants vaccinated (to be vaccinated) with DTP1*[3]*	0	0	0	0	0	0	0	0		0
Number of infants vaccinated (to be vaccinated) with DTP3*[3][4]*	0	0	0	0	0	0	0	0		0
DTP3 coverage*[2]*	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Wastage*[5]* rate in base-year and planned thereafter (%) for DTP	0	0	0	0	0	0	0	0		0
Wastage*[5]* factor in base-year and planned thereafter for DTP	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Number of infants vaccinated (to be vaccinated) with 1st dose of DTP-HepB-Hib	994,945	1,012,838	1,020,391	996,559		1,026,907		1,052,579		1,084,602
Number of infants vaccinated (to be vaccinated) with 3rd dose of DTP-HepB-Hib	974,217	981,952	999,133	996,559		1,021,473		1,047,010		1,073,185
DTP-HepB-Hib coverage*[2]*	94 %	95 %	94 %	94 %	0 %	94 %	0 %	94 %	0 %	94 %
Wastage*[5]* rate in base-year and planned thereafter (%) *[6]*	10	10	20	10		10		10		10
Wastage*[5]* factor in base-year and planned thereafter (%)	1.11	1.11	1.25	1.11	1	1.11	1	1.11	1	1.11
Maximum wastage rate value for DTP-HepB-Hib, 10 dose(s) per vial, LIQUID	0 %	0 %	0 %	25 %	0 %	25 %	0 %	25 %	0 %	25 %
Number of infants vaccinated (to be vaccinated) with Yellow Fever	974,217	952,384	999,133	996,559		1,021,473		1,047,010		1,073,185

Yellow Fever coverage*[2]*	94 %	92 %	94 %	94 %	0 %	94 %	0 %	94 %	0 %	94 %
Wastage*[5]* rate in base-year and planned thereafter (%)	40	10	20	20		25		25		25
Wastage*[5]* factor in base-year and planned thereafter (%)	1.67	1.11	1.25	1.25	1	1.33	1	1.33	1	1.33
Maximum wastage rate value for Yellow Fever, 10 dose(s) per vial, LYOPHILISED	0 %	40 %	0 %	40 %	0 %	40 %	0 %	40 %	0 %	40 %
Number of infants vaccinated (to be vaccinated) with 1st dose of Pneumococcal (PCV13)	994,945	1,014,709	1,020,391	996,559	1,006,287	1,026,907	1,029,897	1,052,579		1,084,602
Number of infants vaccinated (to be vaccinated) with 3rd dose of Pneumococcal (PCV13)	974,217	989,147	999,133	996,559	1,048,215	1,021,473	1,084,222	1,047,010		1,073,185
Pneumococcal (PCV13) coverage*[2]*	94 %	95 %	94 %	94 %	96 %	94 %	97 %	94 %	0 %	94 %
Wastage*[5]* rate in base-year and planned thereafter (%)	5	1	5	1	1	1	1	1		1
Wastage*[5]* factor in base-year and planned thereafter (%)	1.05	1.01	1.05	1.01	1.01	1.01	1.01	1.01	1	1.01
Maximum wastage rate value for Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID	0 %	5 %	0 %	5 %	0 %	5 %	0 %	5 %	0 %	5 %
Number of infants vaccinated (to be vaccinated) with 1st dose of Rotavirus	994,945	1,009,329	1,020,391	996,559	1,006,287	1,026,907	1,029,897	1,052,579		1,084,602
Number of infants vaccinated (to be vaccinated) with 2nd dose of Rotavirus	974,217	971,357	999,133	996,559	1,048,215	1,021,473	1,084,222	1,047,010		1,073,185
Rotavirus coverage*[2]*	94 %	94 %	94 %	94 %	96 %	94 %	97 %	94 %	0 %	94 %
Wastage*[5]* rate in base-year and planned thereafter (%)	5	5	5	1	1	1	1	1		1
Wastage*[5]* factor in base-year and planned thereafter (%)	1.05	1.05	1.05	1.01	1.01	1.01	1.01	1.01	1	1.01
Maximum wastage rate value for Rotavirus, 2-dose schedule	0 %	5 %	0 %	5 %	0 %	5 %	0 %	5 %	0 %	5 %
Number of infants vaccinated (to be vaccinated) with 1st dose of Measles	0	960,406	999,133	996,559	1,048,215	1,021,473	1,084,222	1,047,010		1,073,185
Number of infants vaccinated (to be vaccinated) with 2nd dose of Measles	880,941	695,076	903,472	781,177	947,854	857,900	970,094	937,971		1,021,509
Measles coverage*[2]*	85 %	67 %	85 %	74 %	87 %	79 %	87 %	84 %	0 %	89 %
Wastage*[5]* rate in base-year and planned thereafter (%)	25	25	25	25	20	25	20	25		25
Wastage*[5]* factor in base-year and planned thereafter (%)	1.33	1.33	1.33	1.33	1.25	1.33	1.25	1.33	1	1.33
Maximum wastage rate value for Measles second dose, 10 dose(s) per vial, LYOPHILISED	0.00 %	40.00 %	0.00 %	40.00 %	0.00 %	40.00 %	0.00 %	40.00 %	0.00 %	40.00 %
Pregnant women vaccinated with TT+	927,307	679,344	951,023	781,177	997,741	857,900	1,021,151	937,971		1,021,509
TT+ coverage*[7]*	85 %	62 %	85 %	70 %	87 %	75 %	87 %	80 %	0 %	85 %
Vit A supplement to mothers within 6 weeks from delivery	880,941	980,819	903,472	996,559	947,854	1,021,473	970,094	1,047,010		1,073,185

Vit A supplement to infants after 6 months	880,941	717,010	903,472	781,177	947,854	857,900	970,094	937,971	N/A	1,021,509
Annual DTP Drop out rate [(DTP1 – DTP3) / DTP1] x 100	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

Number	Targets (preferred presentation)	
	2019	
	Previous estimates in 2014	Current estimation
Total births		1,231,820
Total infants' deaths		61,591
Total surviving infants		1,170,229
Total pregnant women		1,231,820
Number of infants vaccinated (to be vaccinated) with BCG		1,231,820
BCG coverage*[1]*	0 %	100 %
Number of infants vaccinated (to be vaccinated) with OPV3		1,111,717
OPV3 coverage*[2]*	0 %	95 %
Number of infants vaccinated (to be vaccinated) with DTP1*[3]*		0
Number of infants vaccinated (to be vaccinated) with DTP3*[3][4]*		0
DTP3 coverage*[2]*	0 %	0 %
Wastage*[5]* rate in base-year and planned thereafter (%) for DTP		0
Wastage*[5]* factor in base-year and planned thereafter for DTP	1.00	1.00
Number of infants vaccinated (to be vaccinated) with 1st dose of DTP-HepB-Hib		1,111,717
Number of infants vaccinated (to be vaccinated) with 3rd dose of DTP-HepB-Hib		1,111,717
DTP-HepB-Hib coverage*[2]*	0 %	95 %
Wastage*[5]* rate in base-year and planned thereafter (%) *[6]*		10
Wastage*[5]* factor in base-year and planned thereafter (%)	1	1.11
Maximum wastage rate value for DTP-HepB-Hib, 10 dose(s) per vial, LIQUID	0 %	25 %
Number of infants vaccinated (to be vaccinated) with Yellow Fever		1,111,717
Yellow Fever coverage*[2]*	0 %	95 %
Wastage*[5]* rate in base-year and planned thereafter (%)		25
Wastage*[5]* factor in base-year and planned thereafter (%)	1	1.33

Maximum wastage rate value for Yellow Fever, 10 dose(s) per vial, LYOPHILISED	0 %	40 %
Number of infants vaccinated (to be vaccinated) with 1st dose of Pneumococcal (PCV13)		1,111,717
Number of infants vaccinated (to be vaccinated) with 3rd dose of Pneumococcal (PCV13)		1,111,717
Pneumococcal (PCV13) coverage*[2]*	0 %	95 %
Wastage*[5]* rate in base-year and planned thereafter (%)		1
Wastage*[5]* factor in base-year and planned thereafter (%)	1	1.01
Maximum wastage rate value for Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID	0 %	5 %
Number of infants vaccinated (to be vaccinated) with 1st dose of Rotavirus		1,111,717
Number of infants vaccinated (to be vaccinated) with 2nd dose of Rotavirus		1,111,717
Rotavirus coverage*[2]*	0 %	95 %
Wastage*[5]* rate in base-year and planned thereafter (%)		1
Wastage*[5]* factor in base-year and planned thereafter (%)	1	1.01
Maximum wastage rate value for Rotavirus, 2-dose schedule	0 %	5 %
Number of infants vaccinated (to be vaccinated) with 1st dose of Measles		1,111,717
Number of infants vaccinated (to be vaccinated) with 2nd dose of Measles		1,084,001
Measles coverage*[2]*	0 %	93 %
Wastage*[5]* rate in base-year and planned thereafter (%)		25
Wastage*[5]* factor in base-year and planned thereafter (%)	1	1.33
Maximum wastage rate value for Measles second dose, 10 dose(s) per vial, LYOPHILISED	0.00 %	40.00 %
Pregnant women vaccinated with TT+		1,084,001
TT+ coverage*[7]*	0 %	88 %
Vit A supplement to mothers within 6 weeks from delivery		1,111,717
Vit A supplement to infants after 6 months	N/A	1,084,001
Annual DTP Drop out rate [(DTP1 – DTP3) / DTP1] x 100	0 %	0 %

[1] Number of infants vaccinated out of total births

[2] Number of infants vaccinated out of total surviving infants

[3] Indicate total number of children vaccinated with either DTP alone or combined

[4] Please make sure that the DTP3 cells are correctly populated

[5] The formula to calculate a vaccine wastage rate (in percentage): [(A – B) / A] x 100. Whereby: A = the number of doses distributed for use according to the supply records with correction for stock balance at the end of the supply period; B = the number of vaccinations with the same vaccine in the same period.

[6] GAVI would also appreciate feedback from countries on feasibility and interest of selecting and being shipped multiple Pentavalent vaccine presentations (1 dose and 10 dose vials) so as to optimise wastage, coverage and cost.

[7] Number of pregnant women vaccinated with TT+ out of total pregnant women

5. General Programme Management Component

5.1. Updated baseline and annual targets

Note: Fill in the table in section 4 Baseline and Annual Targets before you continue

The numbers for 2014 must be consistent with those that the country reported in the **WHO/UNICEF Joint Reporting Form (JRF) for 2014.** The numbers for 2015 - 2016 in Table 4 Baseline and Annual Targets should be consistent with those that the country provided to GAVI in previous APR or in new application for GAVI support or in cMYP.

In fields below, please provide justification and reasons for those numbers that in this APR are different from the referenced ones:

- Justification for any changes in **births**

  The numbers for 2014 reported in the WHO/UNICEF Joint Reporting Form is consistent with the 2014 APR. The annual targets in the Ghana cMYP 2015-2019 is also consistent with what is in the 2014 APR. However, the annual targets are different from those that the country provided to GAVI in previous APR and new application for GAVI support.
  There is a revision in the population data from the Ghana Statistical Service (official data source). It therefore became necessary that the annual targets were reviewed in line with the new population database. The revision of the population database also affected the number of births. However, the proportion for annual births remained 4%. These are part of the ongoing actions being taken by the Ghana Government to improve/address the denominator issue.

- Justification for any changes in **surviving infants**

  The revision of the population database by the Ghana Statistical Service also affected the annual targets for number of surviving infants. However, the proportion of surviving infants in the country remained 3.8%. As already mentioned, these are part of the ongoing actions being taken by the Ghana Government to improve/address the denominator issue.

- Justification for any changes in targets by vaccine. **Please note that targets in excess of 10% of previous years' achievements will need to be justified.** For IPV, supporting documentation must also be provided as an attachment(s) to the APR to justify ANY changes in target population.

  There is slight changes in the targets by vaccine. These changes were informed by the performance of the country in 2014 (there was the need to set realistic targets based in our previous performance). There was also the need to align vaccine targets with the new cMYP and other strategic documents such as Measles-Rubella Elimination Strategic Plan 2015-2020. The new vaccine targets are all within 10% of previous targets.
  With regards to IPV, the guidelines provided by GAVI recommended a different target (2.8%) other than what is used in the country (4.0%). The country recommends that a target of 4% is used for IPV introduction.

- Justification for any changes in **wastage by vaccine**

  There has been changes in the wastage rate for DPT-HepB-Hib (Penta) and Yellow fever vaccines. This was as a result of changes in the vial size of the vaccines. The vial size of Penta has changed from single dose vial to a 10 dose vial, whiles Yellow fever vaccine for 2015 will be 10 dose vial.

5.2. Monitoring the Implementation of GAVI Gender Policy

5.2.1. At any point in the past five years, were sex-disaggregated data on DTP3 coverage available in your country from administrative data sources and/or surveys? **yes, available**

If yes, please report the latest data available and the year that it is from.

Data Source	Reference Year for Estimate	DTP3 Coverage Estimate	
		Boys	Girls
Multiple Indicator Cluster Survey (MICS)	2010	92.7	93.0
Demographic and Health Survey (DHS)	2007	88.8	88.8

5.2.2. How have any discrepancies in reaching boys versus girls been addressed programmatically?

From the above survey data, there has not been any significant difference in reaching boys as compared with girls.

5.2.3. If no sex-disaggregated data are available at the moment, do you plan in the future to collect sex-disaggregated coverage estimates? **No**

5.2.4. How have any gender-related barriers to accessing and delivering immunisation services (eg, mothers not being empowered to access services, the sex of service providers, etc) been addressed programmatically ? (For more information on gender-related barriers, please see GAVI's factsheet on gender and immunisation, which can be found on http://www.gavialliance.org/about/mission/gender/)

There is no gender-related barrier so far as immunization is concerned. There is equity in access to immunization services across the country.

5.3. Overall Expenditures and Financing for Immunisation

The purpose of **Table 5.3a** is to guide GAVI understanding of the broad trends in immunisation programme expenditures and financial flows. Please fill the table using US$.

Exchange rate used	1 US$ = 3.6829	Enter the rate only; Please do not enter local currency name

Table 5.3a: Overall Expenditure and Financing for Immunisation from all sources (Government and donors) in US$

Expenditure by category	Expenditure Year 2014	Source of funding						
		Country	GAVI	UNICEF	WHO	Rotary International	Church of Jesus Christ	None
Traditional Vaccines*	2,553,075	2,553,075	0	0	0	0	0	0
New and underused Vaccines**	19,538,775	2,067,529	17,471,246	0	0	0	0	0
Injection supplies (both AD syringes and syringes other than ADs)	1,238,453	633,699	604,754	0	0	0	0	0
Cold Chain equipment	837,210	0	752,210	85,000	0	0	0	0
Personnel	80,733	80,733	0	0	0	0	0	0
Other routine recurrent costs	62,500	0	62,500	0	0	0	0	0
Other Capital Costs	0	0	0	0	0	0	0	0
Campaigns costs	3,344,347	0	0	460,539	2,848,149	25,323	10,336	0
Support for trainings, evaluations,development of documents e.t.c		0	0	115,298	58,917	0	0	0
Total Expenditures for Immunisation	27,655,093							
Total Government Health		5,335,036	18,890,710	660,837	2,907,066	25,323	10,336	0

Traditional vaccines: BCG, DTP, OPV, Measles 1st dose (or the combined MR, MMR), TT. Some countries will also include HepB and Hib vaccines in this row, if these vaccines were introduced without GAVI support

5.4. Interagency Coordinating Committee (ICC)

How many times did the ICC meet in 2014? **3**

Please attach the minutes **(Document nº 4)** from the ICC meeting in 2015 endorsing this report.

List the key concerns or recommendations, if any, made by the ICC on sections 5.1 Updated baseline and annual targets to 5.3 Overall Expenditures and Financing for Immunisation

The ICC is yet to meet

Are any Civil Society Organisations members of the ICC? **Yes**

If Yes, which ones?

List CSO member organisations:
Paediatric Society of Ghana
Ghana Registered Midwives Association
Ghana National Polio Plus Committee of Rotary International
Ghana Red Cross Society
Ghana Coalition of NGOs in Health
Church of Jesus Christ of Latter Day Saints (LDS)
Christian Health Association of Ghana

5.5. Priority actions in 2015 to 2016

What are the country's main objectives and priority actions for its EPI programme for 2015 to 2016

Goal

Rapidly increase immunity to selected Vaccine Preventable diseases(VPDs) in order to accelerate reduction of morbidity and mortality from vaccine preventable diseases.

Objectives

1. To increase immunisation coverage to 95% or above in all childhood immunizations
2. To achieve at least 90% of districts with a Penta1-MCV1 drop-out rate of less than 10%
3. To achieve 85% coverage at national level and at least 80% of districts with 80% Td 2+ for pregnant women
4. To prevent interruption of immunisation activities as a result of cold chain breakdown
5. To attain 100% safe injection practices at immunisation sites
6. To prevent stock out of vaccines and other supplies
7. To introduce new vaccines

Priority Actions

1. Organize workshops on microplanning with districts/ Develop RED/REC Plans at various levels
2. Conduct EPI Cluster Survey to validate 2014 administrative data
3. Conduct inventory for all EPI equipment at all levels
4. Train regional cold chain technicians in preventive cold chain maintenance and provide periodic refresher training
5. Support cold chain maintenance teams to carry out routine and timely maintenance and repair of equipment
6. Construction of incinerators in districts and major hospitals without incinerator
7. Procure adequate quantities of vaccines and devices
8. Organize annual African Vaccination Week and Child Health Promotion Week celebrations
9. Lobby parliamentarians and local political leader etc. to support immunization activities
10. Train health workers in analysis and use of data for action (GIS, MS Excel, EpiInfo, DVD-MT and DHIMS)
11. Conduct data quality self-assessment (DQSA)
12. Introduce inactivated polio vaccine (IPV) into routine immunisation
13. Conduct Sub-national Yellow Fever Campaign
14. Conduct Sub-national Meningitis Campaign
15. Implement phase 2 of HPV programme
16. Conduct KAPB studies in new vaccines and acceptance of multiple injections
17. Establish NITAG

18. Hold monthly data validation and reconciliation meeting at the national level
19. Merge the DHIMS and DVDMT
20. Conduct EPI MLM training
22. Finalise and disseminate MNTE sustainability plan and Measles-Rubella Elimination Strategic Plan
23. Intensify monitoring and supervision at all levels
24. Finalize and disseminate EPI communication plan

5.6. Progress of transition plan for injection safety

For all countries, please report on progress of transition plan for injection safety

Please report what types of syringes are used and the funding sources of Injection Safety material in 2014

Vaccine	Types of syringe used in 2014 routine EPI	Funding sources of 2014
BCG	Auto-Disable Syringe 0.05ml/Recon. Syringe 2ml	Government of Ghana
Measles	Auto-Disable Syringe 0.5ml/Recon. Syringe 5ml	Government of Ghana and GAVI
TT	Auto-Disable Syringe 0.5ml	Government of Ghana
DTP-containing vaccine	Auto-Disable Syringe 0.5ml	Government of Ghana and GAVI
IPV	NA	NA
Yellow Fever	Auto-Disable Syringe 0.5ml/Recon. Syringe 5ml	Government of Ghana and GAVI
PCV-13	Auto-Disable Syringe 0.5ml	Government of Ghana and GAVI

Does the country have an injection safety policy/plan? **Yes**

If Yes: Have you encountered any obstacles during the implementation of this injection safety policy/plan?

If No: When will the country develop the injection safety policy/plan? (Please report in box below)

Currently not all districts and major hospitals have functional incinerators. Some of these districts and hospitals are also sited far from areas where there are functional incinerators. As a result, some facilities resort to burning injection waste in pits. The challenge with these pits is that, the sharps do not completely burn. This poses major threat to communities as a whole and health workers in particular.

Please explain in 2014 how sharps waste is being disposed of, problems encountered, etc.

Safety boxes are used for the collection of sharps at the vaccination points. These are transported to incineration sites for incineration. In areas where there are no incinerators, these are burnt in a pit. The main challenges have been unavailability of incinerators in some districts and also the poor state of the de-Montfort incinerators earlier constructed. The Government of Ghana with the support of UNICEF and WHO is currently constructing new incinerators for districts.

6. Immunisation Services Support (ISS)

6.1. Report on the use of ISS funds in 2014

Ghana is not reporting on Immunisation Services Support (ISS) fund utilisation in 2014

6.2. Detailed expenditure of ISS funds during the 2014 calendar year

Ghana is not reporting on Immunisation Services Support (ISS) fund utilisation in 2014

6.3. Request for ISS reward

Request for ISS reward achievement in Ghana is not applicable for 2014

7. New and Under-used Vaccines Support (NVS)

7.1. Receipt of new & under-used vaccines for 2014 vaccine programme

7.1.1. Did you receive the approved amount of vaccine doses for 2014 Immunisation Programme that GAVI communicated to you in its Decision Letter (DL)? Fill-in table below

Table 7.1: Vaccines received for 2014 vaccinations against approvals for 2014

Please also include any deliveries from the previous year received against this Decision Letter

	[A]	[B]	[C]	
Vaccine type	**Total doses for 2014 in Decision Letter**	**Total doses received by 31 December 2014**	**Total doses postponed from previous years and received in 2014**	**Did the country experience any stockouts at any level in 2014?**
Measles second dose	1,171,700	1,171,700	0	No
Pneumococcal (PCV13)	3,357,300	2,586,600	334,800	No
DTP-HepB-Hib	890,500	717,200	0	No
Rotavirus	1,832,200	1,438,300	0	No
Yellow Fever	1,724,800	1,127,290	0	No

If values in [A] and [B] are different, specify:

- What are the main problems encountered? (Lower vaccine utilisation than anticipated due to delayed new vaccine introduction or lower coverage? Delay in shipments? Stock-outs? Excessive stocks? Problems with cold chain? Doses discarded because VVM changed colour or because of the expiry date? ...)

  The values in columns [A] and [B] are different because delivery of some doses of vaccines were postponed basically due to non payment of Governments component of GAVI co-financing for 2014.

- What actions have you taken to improve the vaccine management, e.g. such as adjusting the plan for vaccine shipments? (in the country and with UNICEF Supply Division)

  GAVI would also appreciate feedback from countries on feasibility and interest of selecting and being shipped multiple Pentavalent vaccine presentations (1 dose and 10 dose vials) so as to optimise wastage, coverage and cost.

  The country postponed delivery of some doses of vaccines in 2014 (PCV-13) in order to avoid over-stocking of vaccines. With regards to the option of using multiple Pentavalent vaccine presentations, Ghana would like to maintain a single Pentavalent vaccine presentation (10-dose vial).

If **Yes** for any vaccine in **Table 7.1**, please describe the duration, reason and impact of stock-out, including if the stock-out was at the central, regional, district or at lower facility level.

NA

7.2. Introduction of a New Vaccine in 2014

7.2.1. If you have been approved by GAVI to introduce a new vaccine in 2014, please refer to the vaccine introduction plan in the proposal approved and report on achievements:

DTP-HepB-Hib, 10 dose(s) per vial, LIQUID		
Nationwide introduction	No	
Phased introduction	No	
The time and scale of introduction was as planned in the proposal? If No, Why ?	No	NA

When is the Post Introduction Evaluation (PIE) planned? **January 2017**

Measles second dose, 10 dose(s) per vial, LYOPHILISED		
Nationwide introduction	No	
Phased introduction	No	
The time and scale of introduction was as planned in the proposal? If No, Why ?	No	NA

When is the Post Introduction Evaluation (PIE) planned? **January 2017**

Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID		
Nationwide introduction	No	
Phased introduction	No	
The time and scale of introduction was as planned in the proposal? If No, Why ?	No	NA

When is the Post Introduction Evaluation (PIE) planned? **January 2017**

Rotavirus, 1 dose(s) per vial, ORAL		
Nationwide introduction	No	
Phased introduction	No	
The time and scale of introduction was as planned in the proposal? If No, Why ?	No	NA

When is the Post Introduction Evaluation (PIE) planned? **January 2017**

Yellow Fever, 10 dose(s) per vial, LYOPHILISED		
Nationwide introduction	No	
Phased introduction	No	
The time and scale of	No	NA

introduction was as planned in the proposal? If No, Why ?		

When is the Post Introduction Evaluation (PIE) planned? **January 2017**

7.2.2. If your country conducted a PIE in the past two years, please attach relevant reports and provide a summary on the status of implementation of the recommendations following the PIE. (Document N° 9))

Ghana conducted post-introduction evaluation for pneumococcal, rotavirus and measles second dose in 2013. The recommendation and status of implementation of the recommendations are indicated below;

RECOMMENDATIONS

1. Training

All documents related to new vaccines (MCV2, PCV, and rotavirus)should be made available at all levels. There is also the need for continuous refresher training for new and old staff. Areas of focus should include recording, reporting and age restrictions in vaccine administration.

2. Cold Chain

Repair broken refrigerators in a timely fashion.

3. Monitoring/Supervision

Strengthening the supervision component of the EPI programme is needed in order to maintain the effective implementation of immunization activities. Supervisors should provide written feedback during visits;Standardize supervisory checklists to include EPI.

4. Waste Management

All pits and incinerators should have fences.

5. Vaccine management

Vaccine wastage should be tracked and reported in monthly reports.Ensure implementation of the national policy for diluent temperature. Guidelines on vaccine management currently in the training manual should be put in a document of its own and disseminated.

6. AEFI

Provide written guidelines to Districts and HFs; HCW should remember to sensitize caregivers and mothers about possible adverse events. Encourage community and HF to report AEFI.

STATUS OF IMPLEMENTATION OF RECOMMENDATIONS

1. Training

All levels of health service delivery have completed the training on new vaccines. Training materials and manuals have also been distributed to all levels. Additional training will be provided in the 2nd Quarter of 2015 as part of the preparatory activities towards the introduction of inactivated polio vaccine (IPV). Civil society organizations will also be trained to build their capacity in order to ensure quality.

2. Cold chain

The country updated the cold chain inventory and also conducted Effective Vaccine Management Assessment in 2014. Cold chain gaps that were identified are being addressed. New TCW 2000 and TCW 3000 are being procured for distribution. Spare parts have been procured to facilitate repairs of non-functional but serviceable cold chain equipment.

3. Monitoring/Supervision

In 2014, the national EPI Office conducted supportive supervision at least once in every region. In order to

further strengthen monitoring and supervision, peer review among regions is planned for the 2nd Quarter of 2014. Key indicators of the immunization programme have been incorporated in the Ghana Health Service integrated checklist for supervision. These indicators are also incorporated in the new Key Health Indicators Score Card developed by the Ghana Health Service.

4. Waste Management
The construction of 65 new incinerators is almost completed. These plan for these incinerators is such that they do not need to be fenced. However, steps are being taken to ensure that pits dug for the purpose of burning injection wastes are fenced.

5. Vaccine Management
Vaccine wastage is tracked and reported in the monthly reporting system (DVDMT as well as DHIMS). Diluents are kept in cold chain before vaccines are reconstituted in accordance with the national policy. A training programme based on the observations and findings from the 2014 EVM will be used to develop and comprehensive training programme on vaccine management across all levels.

6. AEFI
Health workers, especially, vaccinators are constantly being advised to inform parents and caregivers about possible adverse events they should expert after vaccine administration.

7.2.3. Adverse Event Following Immunization (AEFI)

Is there a national dedicated vaccine pharmacovigilance capacity? **Yes**

Is there a national AEFI expert review committee? **Yes**

Does the country have an institutional development plan for vaccine safety? **Yes**

Is the country sharing its vaccine safety data with other countries? **Yes**

Does your country have a risk communication strategy with preparedness plans to address vaccine crises? **Yes**

7.2.4. Surveillance

Does your country conduct sentinel surveillance for:

a. rotavirus diarrhea? **Yes**

b. pediatric bacterial meningitis or pneumococcal or meningococcal disease? **Yes**

Does your country conduct special studies around:

a. rotavirus diarrhea? **No**

b. pediatric bacterial meningitis or pneumococcal or meningococcal disease? **No**

If so, does the National Immunization Technical Advisory Group (NITAG) or the Inter-Agency Coordinating Committee (ICC) regularly review the sentinel surveillance and special studies data to provide recommendations on the data generated and how to further improve data quality? **No**

Do you plan to use these sentinel surveillance and/or special studies data to monitor and evaluate the impact of vaccine introduction and use? **Yes**

Please describe the results of surveillance/special studies and inputs of the NITAG/ICC:

NA

7.3. New Vaccine Introduction Grant lump sums 2014

7.3.1. Financial Management Reporting

	Amount US$	Amount local currency

Funds received during 2014 (A)	0	0
Remaining funds (carry over) from 2013 (B)	0	0
Total funds available in 2014 (C=A+B)	0	0
Total Expenditures in 2014 (D)	0	0
Balance carried over to 2015 (E=C-D)	0	0

Detailed expenditure of New Vaccines Introduction Grant funds during the 2014 calendar year

Please attach a detailed financial statement for the use of New Vaccines Introduction Grant funds in the 2014 calendar year (Document No 10,11) . Terms of reference for this financial statement are available in **Annexe 1** Financial statements should be signed by the Finance Manager of the EPI Program and and the EPI Manager, or by the Permanent Secretary of Ministry of Health

7.3.2. Programmatic Reporting

Please report on major activities that have been undertaken in relation to the introduction of a new vaccine, using the GAVI New Vaccine Introduction Grant

NA

Please describe any problem encountered and solutions in the implementation of the planned activities

NA

Please describe the activities that will be undertaken with any remaining balance of funds for 2015 onwards

NA

7.4. Report on country co-financing in 2014

Table 7.4 : Five questions on country co-financing

	Q.1: What were the actual co-financed amounts and doses in 2014?	
Co-Financed Payments	**Total Amount in US$**	**Total Amount in Doses**
Awarded Vaccine #1: DTP-HepB-Hib, 10 dose(s) per vial, LIQUID	215,937	110,900
Awarded Vaccine #2: Measles second dose, 10 dose(s) per vial, LYOPHILISED	0	0
Awarded Vaccine #3: Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID	809,680	238,700
Awarded Vaccine #4: Rotavirus, 1 dose(s) per vial, ORAL	452,127	189,400
Awarded Vaccine #5: Yellow Fever, 10 dose(s) per vial, LYOPHILISED	369,730	377,600
	Q.2: Which were the amounts of funding for country co-financing in reporting year 2014 from the following sources?	
Government	2067529	
Donor	0	
Other	0	
	Q.3: Did you procure related injections supplies for the co-financing vaccines? What were the amounts in US$ and supplies?	
Co-Financed Payments	**Total Amount in US$**	**Total Amount in Doses**
Awarded Vaccine #1: DTP-HepB-Hib, 10 dose(s) per vial, LIQUID	15,563	77,000

Awarded Vaccine #2: Measles second dose, 10 dose(s) per vial, LYOPHILISED	0	0
Awarded Vaccine #3: Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID	63,320	250,900
Awarded Vaccine #4: Rotavirus, 1 dose(s) per vial, ORAL	0	0
Awarded Vaccine #5: Yellow Fever, 10 dose(s) per vial, LYOPHILISED	52,270	374,200
	Q.4: When do you intend to transfer funds for co-financing in 2016 and what is the expected source of this funding	
Schedule of Co-Financing Payments	Proposed Payment Date for 2016	Source of funding
Awarded Vaccine #1: DTP-HepB-Hib, 10 dose(s) per vial, LIQUID	September	Government of Ghana
Awarded Vaccine #2: Measles second dose, 10 dose(s) per vial, LYOPHILISED	September	Government of Ghana
Awarded Vaccine #3: Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID	September	Government of Ghana
Awarded Vaccine #4: Rotavirus, 1 dose(s) per vial, ORAL	September	Government of Ghana
Awarded Vaccine #5: Yellow Fever, 10 dose(s) per vial, LYOPHILISED	September	Government of Ghana
	Q.5: Please state any Technical Assistance needs for developing financial sustainability strategies, mobilising funding for immunization, including for co-financing	
	The Immunization Programme is in dire need of technical assistance for high level advocacy for support of immunization especially payment of vaccines. Technical assistance is also needed in the development of sustainability plan and strategies as well as mobilization of funds.	

*__Note:__ co-financing is not mandatory for IPV

Is support from GAVI, in form of new and under-used vaccines and injection supplies, reported in the national health sector budget? **Yes**

7.5. Vaccine Management (EVSM/VMA/EVM)

Please note that Effective Vaccine Store Management (EVSM) and Vaccine Management Assessment(VMA) tools have been replaced by an integrated Effective Vaccine Management (EVM) tool. The information on EVM tool can be found at http://www.who.int/immunization/programmes_systems/supply_chain/evm/en/index3.html

It is mandatory for the countries to conduct an EVM prior to an application for introduction of a new vaccine. This assessment concludes with an Improvement Plan including activities and timelines whose progress report is reported with annual report. The EVM assessment is valid for a period of three years.

When was the latest Effective Vaccine Management (EVM) or an alternative assessment (EVSM/VMA) carried out? **October 2014**

Please attach:

(a) EVM assessment **(Document No 12)**

(b) Improvement plan after EVM **(Document No 13)**

(c) Progress report on the activities implemented during the year and status of implementation of recommendations from the Improvement Plan **(Document No 14)**

Progress report on EVM/VMA/EVSM Improvement Plan' is a mandatory requirement

Are there any changes in the Improvement plan, with reasons? **No**

If yes, provide details

NA

When is the next Effective Vaccine Management (EVM) assessment planned? **October 2017**

7.6. Monitoring GAVI Support for Preventive Campaigns in 2014

Ghana does not report on NVS Preventive campaign

7.7. Change of vaccine presentation

Ghana does not require to change any of the vaccine presentation(s) for future years.

7.8. Renewal of multi-year vaccines support for those countries whose current support is ending in 2015

If 2015 is the last year of approved multiyear support for a certain vaccine and the country wishes to extend GAVI support, the country should request for an extension of the co-financing agreement with GAVI for vaccine support starting from 2016 and for the duration of a new Comprehensive Multi-Year Plan (cMYP).

The country hereby requests an extension of GAVI support for the years 2016 to 2019 for the following vaccines:

* **DTP-HepB-Hib, 10 dose(s) per vial, LIQUID**
* **Measles second dose, 10 dose(s) per vial, LYOPHILISED**
* **Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID**
* **Rotavirus, 2-dose schedule**
* **Yellow Fever, 10 dose(s) per vial, LYOPHILISED**

At the same time it commits itself to co-finance the procurement of the following vaccines in accordance with the minimum Gavi co-financing levels as summarised in section 7.11 Calculation of requirements.

* **DTP-HepB-Hib, 10 dose(s) per vial, LIQUID**
* **Measles second dose, 10 dose(s) per vial, LYOPHILISED**
* **Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID**
* **Rotavirus, 2-dose schedule**
* **Yellow Fever, 10 dose(s) per vial, LYOPHILISED**

The multi-year support extension is in line with the new cMYP for the years 2016 to 2019, which is attached to this APR (Document N°**16**). The new costing tool is also attached (Document N°**17**) for the following vaccines:

* **DTP-HepB-Hib, 10 dose(s) per vial, LIQUID**
* **Measles second dose, 10 dose(s) per vial, LYOPHILISED**
* **Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID**
* **Rotavirus, 2-dose schedule**
* **Yellow Fever, 10 dose(s) per vial, LYOPHILISED**

The country ICC has endorsed this request for extended support of the following vaccines at the ICC meeting whose minutes are attached to this APR. (Document N°**18**)

* **DTP-HepB-Hib, 10 dose(s) per vial, LIQUID**
* **Measles second dose, 10 dose(s) per vial, LYOPHILISED**
* **Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID**
* **Rotavirus, 2-dose schedule**
* **Yellow Fever, 10 dose(s) per vial, LYOPHILISED**

7.9. Request for continued support for vaccines for 2016 vaccination programme

In order to request NVS support for 2016 vaccination do the following

Confirm here below that your request for 2016 vaccines support is as per 7.11 Calculation of requirements
Yes

If you don't confirm, please explain

NA

7.10. Weighted average prices of supply and related freight cost

Table 7.10.1: Commodities Cost

Estimated prices of supply are not disclosed

Table 7.10.2: Freight Cost

Vaccine Antigen	Vaccine Type	2007	2008	2009	2010	2011	2012	2013
DTP-HepB-Hib, 10 dose(s) per vial, LIQUID	DTP-HepB-Hib, 10 dose(s) per vial, LIQUID							
Measles second dose, 10 dose(s) per vial, LYOPHILISED	Measles second dose, 10 dose(s) per vial, LYOPHILISED							
Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID	Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID							
Rotavirus, 2-dose schedule	Rotavirus, 2-dose schedule							
Yellow Fever, 10 dose(s) per vial, LYOPHILISED	Yellow Fever, 10 dose(s) per vial, LYOPHILISED							

Vaccine Antigen	Vaccine Type	2014	2015	2016	2017	2018	2019
DTP-HepB-Hib, 10 dose(s) per vial, LIQUID	DTP-HepB-Hib, 10 dose(s) per vial, LIQUID	4.00 %	3.50 %	4.60 %	5.20 %	5.20 %	5.20 %
Measles second dose, 10 dose(s) per vial, LYOPHILISED	Measles second dose, 10 dose(s) per vial, LYOPHILISED	13.80 %					
Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID	Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID	5.90 %	6.00 %	5.90 %	6.00 %	6.10 %	3.10 %
Rotavirus, 2-dose schedule	Rotavirus, 2-dose schedule	3.90 %					
Yellow Fever, 10 dose(s) per vial, LYOPHILISED	Yellow Fever, 10 dose(s) per vial, LYOPHILISED	6.80 %	6.30 %	6.30 %	6.10 %	6.00 %	6.00 %

7.11. Calculation of requirements

Table 7.11.1: Specifications for DTP-HepB-Hib, 10 dose(s) per vial, LIQUID

ID		Source		2014	2015	2016	2017	2018
	Number of surviving infants	Parameter	#	1,036,402	1,062,907	1,086,674	1,113,841	1,141,686
	Number of children to be vaccinated with the first dose	Parameter	#	994,945	1,020,391	1,026,907	1,052,579	1,084,602
	Number of children to be vaccinated with the third dose	Parameter	#	974,217	999,133	1,021,473	1,047,010	1,073,185
	Immunisation coverage with the third dose	Parameter	%	94.00 %	94.00 %	94.00 %	94.00 %	94.00 %

	Number of doses per child	Parameter	#	3	3	3	3	3
	Estimated vaccine wastage factor	Parameter	#	1.11	1.25	1.11	1.11	1.11
	Stock in Central Store Dec 31, 2014		#	9,000				
	Stock across second level Dec 31, 2014 (if available)*		#					
	Stock across third level Dec 31, 2014 (if available)*	Parameter	#					
	Number of doses per vial	Parameter	#		10	10	10	10
	AD syringes required	Parameter	#		Yes	Yes	Yes	Yes
	Reconstitution syringes required	Parameter	#		No	No	No	No
	Safety boxes required	Parameter	#		Yes	Yes	Yes	Yes
cc	**Country co-financing per dose**	Parameter	$		0.30	0.49	0.68	0.86
ca	**AD syringe price per unit**	Parameter	$		0.0448	0.0448	0.0448	0.0448
cr	**Reconstitution syringe price per unit**	Parameter	$		0	0	0	0
cs	**Safety box price per unit**	Parameter	$		0.0054	0.0054	0.0054	0.0054
fv	**Freight cost as % of vaccines value**	Parameter	%		3.50 %	4.60 %	5.20 %	5.20 %

ID		Source		2019	TOTAL
	Number of surviving infants	Parameter	#	1,170,229	6,611,739
	Number of children to be vaccinated with the first dose	Parameter	#	1,111,717	6,291,141
	Number of children to be vaccinated with the third dose	Parameter	#	1,111,717	6,226,735
	Immunisation coverage with the third dose	Parameter	%	95.00 %	
	Number of doses per child	Parameter	#	3	
	Estimated vaccine wastage factor	Parameter	#	1.11	
	Number of doses per vial	Parameter	#	10	
	AD syringes required	Parameter	#	Yes	
	Reconstitution syringes required	Parameter	#	No	
	Safety boxes required	Parameter	#	Yes	
cc	**Country co-financing per dose**	Parameter	$	1.05	
ca	**AD syringe price per unit**	Parameter	$	0.0448	
cr	**Reconstitution syringe price per unit**	Parameter	$	0	
cs	**Safety box price per unit**	Parameter	$	0.0054	
fv	**Freight cost as % of vaccines value**	Parameter	%	5.20 %	

* Please describe the method used for stock count in the text box below. We assume the closing stock (Dec 31, 2014) is the same as the opening stock (Jan 1, {1}). If there is a difference, please provide details in the text box below.

NA

For pentavalent vaccines, GAVI applies a benchmark of 4.5 months of buffer + operational stocks. Countries should state their buffer + operational stock requirements when different from the benchmark up to a maximum of 6 months. For support on how to calculate the buffer and operational stock levels, please contact WHO or UNICEF. By default, a buffer + operational stock of 4.5 months is pre-selected.

3

Co-financing tables for DTP-HepB-Hib, 10 dose(s) per vial, LIQUID

Co-financing group	Graduating

	2014	2015	2016	2017	2018
Minimum co-financing	0.26	0.30	0.49	0.68	0.86
Recommended co-financing as per			0.49	0.68	0.86
Your co-financing	0.26	0.30	0.49	0.68	0.86

	2019
Minimum co-financing	1.05
Recommended co-financing as per	1.05
Your co-financing	1.05

Table 7.11.2: Estimated GAVI support and country co-financing (**GAVI support**)

		2014	2015	2016	2017	2018
Number of vaccine doses	#	779,600	3,536,000	2,211,800	2,169,000	1,630,500
Number of AD syringes	#	541,400	3,204,600	2,180,400	2,196,700	1,651,300
Number of re-constitution syringes	#	0	0	0	0	0
Number of safety boxes	#	6,025	35,275	24,350	23,875	17,950
Total value to be co-financed by GAVI	$	1,629,000	5,964,000	3,371,500	2,928,000	2,201,000

Table 7.11.2: Estimated GAVI support and country co-financing (**GAVI support**)

		2019
Number of vaccine doses	#	1,028,200
Number of AD syringes	#	1,041,300
Number of re-constitution syringes	#	0
Number of safety boxes	#	11,325
Total value to be co-financed by GAVI	$	1,388,000

Table 7.11.3: Estimated GAVI support and country co-financing (**Country support**)

		2014	2015	2016	2017	2018
Number of vaccine doses	#	110,900	765,500	1,047,800	2,201,600	2,862,100
Number of AD syringes	#	77,000	693,400	1,033,000	2,229,800	2,898,600
Number of re-constitution syringes	#	0	0	0	0	0
Number of safety boxes	#	875	7,650	11,550	24,225	31,500
Total value to be co-financed by the Country ***[1]***	$	231,500	1,290,500	1,597,500	2,972,000	3,864,000

Table 7.11.3: Estimated GAVI support and country co-financing (**Country support**)

		2019
Number of vaccine doses	#	3,599,800
Number of AD syringes	#	3,645,500
Number of re-constitution syringes	#	0
Number of safety boxes	#	39,600

Total value to be co-financed by the Country *[1]*	$	4,859,500

Table 7.11.4: Calculation of requirements for DTP-HepB-Hib, 10 dose(s) per vial, LIQUID (part 1)

		Formula	2014	2015		
				Total	Government	GAVI
A	**Country co-finance**	*V*				
B	**Number of children to be vaccinated with the second dose**	*Table 4*	994,945	1,020,391		
B1	**Number of children to be vaccinated with the third dose**	*Table 4*	974,217	1,020,391		
C	**Number of doses per child**	*Vaccine parameter (schedule)*	3	3		
D	**Number of doses needed**	*B + B1 + Target for the 2nd dose ((B -0.41 x (B - B1))*	2,955,609	3,031,200		
E	**Estimated vaccine wastage factor**	*Table 4*	1.11	1.25		
F	**Number of doses needed including wastage**	*D x E*		3,789,000		
G	**Vaccines buffer stock**	***Buffer on doses needed*** *+* ***buffer on doses wasted*** ***Buffer on doses needed*** *= (D - D of previous year original approved) x 0.25* ***Buffer on doses wasted*** *=* • *if(wastage factor of previous year current estimation < wastage factor of previous year original approved): ((F - D) - ((F - D) of previous year original approved - (F - D) of previous year current estimation)) x 0.25* • *else: (F - D - ((F - D) of previous year original approved)) x 0.25 >= 0*				
H	**Stock to be deducted**	*H1 - (F (2015) current estimation x 0.25)*				
H1	**Calculated opening stock**	*H2 (2015) + H3 (2015) - F (2015)*				
H2	**Reported stock on January 1st**	*Table 7.11.1*	2,586,000	9,000		
H3	**Shipment plan**	*Approved volume*		4,301,500		
I	**Total vaccine doses needed**	*Round up((F + G - H) / vaccine package size) x vaccine package size*		4,301,500		
J	**Number of doses per vial**	*Vaccine Parameter*				
K	**Number of AD syringes (+ 10% wastage) needed**	*(D + G – H) x 1.10*				
L	**Reconstitution syringes (+ 10% wastage) needed**	*(I / J) x 1.10*				
M	**Total of safety boxes (+ 10% of extra need) needed**	*(I / 100) x 1.10*				
N	**Cost of vaccines needed**	*I x vaccine price per dose (g)*				
O	**Cost of AD syringes needed**	*K x AD syringe price per unit (ca)*				
P	**Cost of reconstitution syringes needed**	*L x reconstitution price per unit (cr)*				
Q	**Cost of safety boxes needed**	*M x safety box price per unit (cs)*				
R	**Freight cost for vaccines needed**	*N x freight cost as of % of vaccines value (fv)*				
S	**Freight cost for devices needed**	*(O+P+Q) x freight cost as % of devices value (fd)*				
T	**Total fund needed**	*(N+O+P+Q+R+S)*				
U	**Total country co-financing**	*I x country co-financing per dose (cc)*				
V	**Country co-financing % of GAVI supported proportion**	*U / T*				

Given that the shipment plan of 2014 is not yet available, the volume approved for 2014 is used as our best proxy of 2014 shipment. The information would be updated when the shipment plan will become available.

Table 7.11.4: Calculation of requirements for DTP-HepB-Hib, 10 dose(s) per vial, LIQUID (part 2)

		Formula	2016		
			Total	Government	GAVI
A	Country co-finance	*V*	32.15 %		
B	Number of children to be vaccinated with the second dose	*Table 4*	1,026,907	330,106	696,801
B1	Number of children to be vaccinated with the third dose	*Table 4*	1,021,473	328,359	693,114
C	Number of doses per child	*Vaccine parameter (schedule)*	3		
D	Number of doses needed	*B + B1 + Target for the 2nd dose ((B -0.41 x (B - B1))*	3,073,060	987,853	2,085,207
E	Estimated vaccine wastage factor	*Table 4*	1.11		
F	Number of doses needed including wastage	*D X E*	3,411,096	1,096,517	2,314,579
G	Vaccines buffer stock	***Buffer on doses needed*** + ***buffer on doses wasted*** ***Buffer on doses needed*** = *(D - D of previous year original approved) x 0.25* ***Buffer on doses wasted*** = • *if(wastage factor of previous year current estimation < wastage factor of previous year original approved): ((F - D) - ((F - D) of previous year original approved - (F - D) of previous year current estimation)) x 0.25* • *else: (F - D - ((F - D) of previous year original approved)) x 0.25 >= 0*	10,466	3,365	7,101
H	Stock to be deducted	*H1 - (F (2015) current estimation x 0.25)*	162,324	52,180	110,144
H1	Calculated opening stock	*H2 (2015) + H3 (2015) - F (2015)*	991,959	318,871	673,088
H2	Reported stock on January 1st	*Table 7.11.1*			
H3	Shipment plan	*Approved volume*			
I	Total vaccine doses needed	*Round up((F + G - H) / vaccine package size) x vaccine package size*	3,259,500	1,047,785	2,211,715
J	Number of doses per vial	*Vaccine Parameter*	10		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G – H) x 1.10*	3,213,323	1,032,942	2,180,381
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*	0	0	0
M	Total of safety boxes (+ 10% of extra need) needed	*(I / 100) x 1.10*	35,855	11,526	24,329
N	Cost of vaccines needed	*I x vaccine price per dose (g)*	4,612,193	1,482,616	3,129,577
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	143,957	46,276	97,681
P	Cost of reconstitution syringes needed	*L x reconstitution price per unit (cr)*	0	0	0
Q	Cost of safety boxes needed	*M x safety box price per unit (cs)*	196	64	132
R	Freight cost for vaccines needed	*N x freight cost as of % of vaccines value (fv)*	212,161	68,201	143,960
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	4,968,507	1,597,155	3,371,352
U	Total country co-financing	*I x country co-financing per dose (cc)*	1,597,155		
V	Country co-financing % of GAVI supported proportion	*U / T*	32.15 %		

Given that the shipment plan of 2014 is not yet available, the volume approved for 2014 is used as our best proxy of 2014 shipment. The information would be updated when the shipment plan will become available.

Table 7.11.4: Calculation of requirements for DTP-HepB-Hib, 10 dose(s) per vial, LIQUID (part 3)

		Formula	2017		
			Total	Government	GAVI

A	**Country co-finance**	*V*	50.37 %		
B	**Number of children to be vaccinated with the second dose**	*Table 4*	1,052,579	530,223	522,356
B1	**Number of children to be vaccinated with the third dose**	*Table 4*	1,047,010	527,417	519,593
C	**Number of doses per child**	*Vaccine parameter (schedule)*	3		
D	**Number of doses needed**	*B + B1 + Target for the 2nd dose ((B -0.41 x (B - B1))*	3,149,885	1,586,712	1,563,173
E	**Estimated vaccine wastage factor**	*Table 4*	1.11		
F	**Number of doses needed including wastage**	*D X E*	3,496,373	1,761,250	1,735,123
G	**Vaccines buffer stock**	***Buffer on doses needed*** *+* ***buffer on doses wasted*** ***Buffer on doses needed*** *= (D - D of previous year original approved) x 0.25* ***Buffer on doses wasted*** *=* • *if(wastage factor of previous year current estimation < wastage factor of previous year original approved): ((F - D) - ((F - D) of previous year original approved - (F - D) of previous year current estimation)) x 0.25* • *else: (F - D - ((F - D) of previous year original approved)) x 0.25 >= 0*	874,094	440,313	433,781
H	**Stock to be deducted**	*H1 - (F (2015) current estimation x 0.25)*			
H1	**Calculated opening stock**	*H2 (2015) + H3 (2015) - F (2015)*			
H2	**Reported stock on January 1st**	*Table 7.11.1*			
H3	**Shipment plan**	*Approved volume*			
I	**Total vaccine doses needed**	*Round up((F + G - H) / vaccine package size) x vaccine package size*	4,370,500	2,201,580	2,168,920
J	**Number of doses per vial**	*Vaccine Parameter*	10		
K	**Number of AD syringes (+ 10% wastage) needed**	*(D + G – H) x 1.10*	4,426,377	2,229,727	2,196,650
L	**Reconstitution syringes (+ 10% wastage) needed**	*(I / J) x 1.10*	0	0	0
M	**Total of safety boxes (+ 10% of extra need) needed**	*(I / 100) x 1.10*	48,076	24,218	23,858
N	**Cost of vaccines needed**	*I x vaccine price per dose (g)*	5,419,420	2,729,959	2,689,461
O	**Cost of AD syringes needed**	*K x AD syringe price per unit (ca)*	198,302	99,892	98,410
P	**Cost of reconstitution syringes needed**	*L x reconstitution price per unit (cr)*	0	0	0
Q	**Cost of safety boxes needed**	*M x safety box price per unit (cs)*	262	132	130
R	**Freight cost for vaccines needed**	*N x freight cost as of % of vaccines value (fv)*	281,810	141,958	139,852
S	**Freight cost for devices needed**	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	**Total fund needed**	*(N+O+P+Q+R+S)*	5,899,794	2,971,940	2,927,854
U	**Total country co-financing**	*I x country co-financing per dose (cc)*	2,971,940		
V	**Country co-financing % of GAVI supported proportion**	*U / T*	50.37 %		

Given that the shipment plan of 2014 is not yet available, the volume approved for 2014 is used as our best proxy of 2014 shipment. The information would be updated when the shipment plan will become available.

Table 7.11.4: Calculation of requirements for DTP-HepB-Hib, 10 dose(s) per vial, LIQUID (part 4)

		Formula	2018		
			Total	**Government**	**GAVI**
A	**Country co-finance**	*V*	63.71 %		
B	**Number of children to be vaccinated with the second dose**	*Table 4*	1,084,602	690,977	393,625
B1	**Number of children to be vaccinated with the third dose**	*Table 4*	1,073,185	683,704	389,481
C	**Number of doses per child**	*Vaccine parameter (schedule)*	3		

D	**Number of doses needed**	*B + B1 + Target for the 2nd dose ((B -0.41 x (B - B1))*	3,237,709	2,062,676	1,175,033
E	**Estimated vaccine wastage factor**	*Table 4*	1.11		
F	**Number of doses needed including wastage**	*D X E*	3,593,856	2,289,570	1,304,286
G	**Vaccines buffer stock**	***Buffer on doses needed*** *+* ***buffer on doses wasted*** ***Buffer on doses needed*** *= (D - D of previous year original approved) x 0.25* ***Buffer on doses wasted*** *=* • *if(wastage factor of previous year current estimation < wastage factor of previous year original approved): ((F - D) - ((F - D) of previous year original approved - (F - D) of previous year current estimation)) x 0.25* • *else: (F - D - ((F - D) of previous year original approved)) x 0.25 >= 0*	898,465	572,394	326,071
H	**Stock to be deducted**	*H1 - (F (2015) current estimation x 0.25)*			
H1	**Calculated opening stock**	*H2 (2015) + H3 (2015) - F (2015)*			
H2	**Reported stock on January 1st**	*Table 7.11.1*			
H3	**Shipment plan**	*Approved volume*			
I	**Total vaccine doses needed**	*Round up((F + G - H) / vaccine package size) x vaccine package size*	4,492,500	2,862,077	1,630,423
J	**Number of doses per vial**	*Vaccine Parameter*	10		
K	**Number of AD syringes (+ 10% wastage) needed**	*(D + G – H) x 1.10*	4,549,792	2,898,577	1,651,215
L	**Reconstitution syringes (+ 10% wastage) needed**	*(I / J) x 1.10*	0	0	0
M	**Total of safety boxes (+ 10% of extra need) needed**	*(I / 100) x 1.10*	49,418	31,484	17,934
N	**Cost of vaccines needed**	*I x vaccine price per dose (g)*	5,570,700	3,548,976	2,021,724
O	**Cost of AD syringes needed**	*K x AD syringe price per unit (ca)*	203,831	129,857	73,974
P	**Cost of reconstitution syringes needed**	*L x reconstitution price per unit (cr)*	0	0	0
Q	**Cost of safety boxes needed**	*M x safety box price per unit (cs)*	269	172	97
R	**Freight cost for vaccines needed**	*N x freight cost as of % of vaccines value (fv)*	289,677	184,548	105,129
S	**Freight cost for devices needed**	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	**Total fund needed**	*(N+O+P+Q+R+S)*	6,064,477	3,863,550	2,200,927
U	**Total country co-financing**	*I x country co-financing per dose (cc)*	3,863,550		
V	**Country co-financing % of GAVI supported proportion**	*U / T*	63.71 %		

Given that the shipment plan of 2014 is not yet available, the volume approved for 2014 is used as our best proxy of 2014 shipment. The information would be updated when the shipment plan will become available.

Table 7.11.4: Calculation of requirements for DTP-HepB-Hib, 10 dose(s) per vial, LIQUID (part 5)

		Formula	**2019**		
			Total	**Government**	**GAVI**
A	**Country co-finance**	*V*	77.78 %		
B	**Number of children to be vaccinated with the second dose**	*Table 4*	1,111,717	864,728	246,989
B1	**Number of children to be vaccinated with the third dose**	*Table 4*	1,111,717	864,728	246,989
C	**Number of doses per child**	*Vaccine parameter (schedule)*	3		
D	**Number of doses needed**	*B + B1 + Target for the 2nd dose ((B -0.41 x (B - B1))*	3,335,151	2,594,182	740,969
E	**Estimated vaccine wastage factor**	*Table 4*	1.11		
F	**Number of doses needed including wastage**	*D X E*	3,702,018	2,879,543	822,475
G	**Vaccines buffer stock**	***Buffer on doses needed*** *+* ***buffer on doses wasted*** ***Buffer on doses needed*** *= (D - D of previous year*	925,505	719,886	205,619

		original approved) x 0.25 ***Buffer on doses wasted*** *=* • *if(wastage factor of previous year current estimation < wastage factor of previous year original approved): ((F - D) - ((F - D) of previous year original approved - (F - D) of previous year current estimation)) x 0.25* • *else: (F - D - ((F - D) of previous year original approved)) x 0.25 >= 0*			
H	**Stock to be deducted**	*H1 - (F (2015) current estimation x 0.25)*			
H1	**Calculated opening stock**	*H2 (2015) + H3 (2015) - F (2015)*			
H2	**Reported stock on January 1st**	*Table 7.11.1*			
H3	**Shipment plan**	*Approved volume*			
I	**Total vaccine doses needed**	*Round up((F + G - H) / vaccine package size) x vaccine package size*	4,628,000	3,599,800	1,028,200
J	**Number of doses per vial**	*Vaccine Parameter*	10		
K	**Number of AD syringes (+ 10% wastage) needed**	*(D + G – H) x 1.10*	4,686,722	3,645,476	1,041,246
L	**Reconstitution syringes (+ 10% wastage) needed**	*(I / J) x 1.10*	0	0	0
M	**Total of safety boxes (+ 10% of extra need) needed**	*(I / 100) x 1.10*	50,909	39,599	11,310
N	**Cost of vaccines needed**	*I x vaccine price per dose (g)*	5,738,720	4,463,752	1,274,968
O	**Cost of AD syringes needed**	*K x AD syringe price per unit (ca)*	209,966	163,318	46,648
P	**Cost of reconstitution syringes needed**	*L x reconstitution price per unit (cr)*	0	0	0
Q	**Cost of safety boxes needed**	*M x safety box price per unit (cs)*	277	216	61
R	**Freight cost for vaccines needed**	*N x freight cost as of % of vaccines value (fv)*	298,414	232,116	66,298
S	**Freight cost for devices needed**	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	**Total fund needed**	*(N+O+P+Q+R+S)*	6,247,377	4,859,400	1,387,977
U	**Total country co-financing**	*I x country co-financing per dose (cc)*	4,859,400		
V	**Country co-financing % of GAVI supported proportion**	*U / T*	77.78 %		

Given that the shipment plan of 2014 is not yet available, the volume approved for 2014 is used as our best proxy of 2014 shipment. The information would be updated when the shipment plan will become available.

Table 7.11.1: Specifications for Measles second dose, 10 dose(s) per vial, LYOPHILISED

ID		Source		2014	2015	2016	2017	TOTAL
	Number of surviving infants	Parameter	#	1,036,402	1,062,907	1,086,674	1,113,841	4,299,824
	Number of children to be vaccinated with the first dose	Parameter	#	0	999,133	1,021,473	1,047,010	3,067,616
	Number of children to be vaccinated with the second dose	Parameter	#	880,941	903,472	857,900	937,971	3,580,284
	Immunisation coverage with the second dose	Parameter	%	85.00 %	85.00 %	78.95 %	84.21 %	
	Number of doses per child	Parameter	#	1	1	1	1	
	Estimated vaccine wastage factor	Parameter	#	1.33	1.33	1.33	1.33	
	Stock in Central Store Dec 31, 2014		#	962,100				
	Stock across second level Dec 31, 2014 (if available)*		#	0				
	Stock across third level Dec 31, 2014 (if available)*	Parameter	#	0				
	Number of doses per vial	Parameter	#		10	10	10	
	AD syringes required	Parameter	#		Yes	Yes	Yes	
	Reconstitution syringes required	Parameter	#		Yes	Yes	Yes	
	Safety boxes required	Parameter	#		Yes	Yes	Yes	
cc	**Country co-financing per dose**	Parameter	$		0.00	0.00	0.00	
ca	**AD syringe price per unit**	Parameter	$		0.0448	0.0448	0.0448	
cr	**Reconstitution syringe price per unit**	Parameter	$		0	0	0	
cs	**Safety box price per unit**	Parameter	$		0.0054	0.0054	0.0054	
fv	**Freight cost as % of vaccines value**	Parameter	%					
fd	**Freight cost as % of devices value**	Parameter	%					

* Please describe the method used for stock count in the text box below. We assume the closing stock (Dec 31, 2014) is the same as the opening stock (Jan 1, {1}). If there is a difference, please provide details in the text box below.

NA

Co-financing tables for Measles second dose, 10 dose(s) per vial, LYOPHILISED

Co-financing group	Graduating

	2014	2015	2016	2017
Minimum co-financing				
Recommended co-financing as per				
Your co-financing				

Table 7.11.2: Estimated GAVI support and country co-financing (**GAVI support**)

		2014	2015	2016	2017
Number of vaccine doses	#	1,171,700	279,100	736,400	1,394,400
Number of AD syringes	#	969,100	993,900	439,200	1,153,700

Number of re-constitution syringes	#	128,900	30,700	81,100	153,400
Number of safety boxes	#	12,200	11,275	8,125	15,350
Total value to be co-financed by GAVI	$	436,500	139,500	221,000	442,000

Table 7.11.3: Estimated GAVI support and country co-financing (**Country support**)

		2014	2015	2016	2017
Number of vaccine doses	#	0	0	0	0
Number of AD syringes	#	0	0	0	0
Number of re-constitution syringes	#	0	0	0	0
Number of safety boxes	#	0	0	0	0
Total value to be co-financed by the Country ***[1]***	$	0	0	0	0

Table 7.11.4: Calculation of requirements for Measles second dose, 10 dose(s) per vial, LYOPHILISED (part 1)

		Formula	2014	2015		
				Total	Government	GAVI
A	**Country co-finance**	*V*				
B	**Number of children to be vaccinated with the second dose**	*Table 4*	880,941	903,472		
C	**Number of doses per child**	*Vaccine parameter (schedule)*	1	1		
D	**Number of doses needed**	*B x C*	0	999,133		
E	**Estimated vaccine wastage factor**	*Table 4*	1.33	1.33		
F	**Number of doses needed including wastage**	*D x E*		1,328,847		
G	**Vaccines buffer stock**	***Buffer on doses needed*** *+* ***buffer on doses wasted*** ***Buffer on doses needed*** *= (D - D of previous year original approved) x 0.25* ***Buffer on doses wasted*** *= (F - D) x [XXX] - ((F - D) of previous year current estimate) x 0.25*				
H	**Stock to be deducted**	*H2 of previous year - 0.25 x F of previous year*				
H2	**Reported stock on January 1st**	*Table 7.11.1*	0	962,100		
I	**Total vaccine doses needed**	*Round up((F + G - H) / vaccine package size) x vaccine package size*		279,100		
J	**Number of doses per vial**	*Vaccine Parameter*				
K	**Number of AD syringes (+ 10% wastage) needed**	*(D + G – H) x 1.10*				
L	**Reconstitution syringes (+ 10% wastage) needed**	*(I / J) x 1.10*				
M	**Total of safety boxes (+ 10% of extra need) needed**	*(I / 100) x 1.10*				
N	**Cost of vaccines needed**	*I x vaccine price per dose (g)*				
O	**Cost of AD syringes needed**	*K x AD syringe price per unit (ca)*				
P	**Cost of reconstitution syringes needed**	*L x reconstitution price per unit (cr)*				
Q	**Cost of safety boxes needed**	*M x safety box price per unit (cs)*				
R	**Freight cost for vaccines needed**	*N x freight cost as of % of vaccines value (fv)*				
S	**Freight cost for devices needed**	*(O+P+Q) x freight cost as % of devices value (fd)*				
T	**Total fund needed**	*(N+O+P+Q+R+S)*				
U	**Total country co-financing**	*I x country co-financing per dose (cc)*				
V	**Country co-financing % of GAVI supported proportion**	*U / T*				

Table 7.11.4: Calculation of requirements for Measles second dose, 10 dose(s) per vial, LYOPHILISED (part 2)

		Formula	2016		
			Total	Government	GAVI
A	Country co-finance	*V*	0.00 %		
B	Number of children to be vaccinated with the second dose	*Table 4*	857,900	0	857,900
C	Number of doses per child	*Vaccine parameter (schedule)*	1		
D	Number of doses needed	*B x C*	1,021,473	0	1,021,473
E	Estimated vaccine wastage factor	*Table 4*	1.33		
F	Number of doses needed including wastage	*D x E*	1,358,560	0	1,358,560
G	Vaccines buffer stock	***Buffer on doses needed*** + ***buffer on doses wasted*** ***Buffer on doses needed*** = *(D - D of previous year original approved) x 0.25* ***Buffer on doses wasted*** = *(F - D) x [XXX] - ((F - D) of previous year current estimate) x 0.25*	7,641	0	7,641
H	Stock to be deducted	*H2 of previous year - 0.25 x F of previous year*	629,889	0	629,889
H2	Reported stock on January 1st	*Table 7.11.1*			
I	Total vaccine doses needed	*Round up((F + G - H) / vaccine package size) x vaccine package size*	736,400	0	736,400
J	Number of doses per vial	*Vaccine Parameter*	10		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G – H) x 1.10*	439,148	0	439,148
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*	81,004	0	81,004
M	Total of safety boxes (+ 10% of extra need) needed	*(I / 100) x 1.10*	8,101	0	8,101
N	Cost of vaccines needed	*I x vaccine price per dose (g)*	198,092	0	198,092
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	19,674	0	19,674
P	Cost of reconstitution syringes needed	*L x reconstitution price per unit (cr)*	2,836	0	2,836
Q	Cost of safety boxes needed	*M x safety box price per unit (cs)*	45	0	45
R	Freight cost for vaccines needed	*N x freight cost as of % of vaccines value (fv)*	0	0	0
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	220,647	0	220,647
U	Total country co-financing	*I x country co-financing per dose (cc)*	0		
V	Country co-financing % of GAVI supported proportion	*U / T*	0.00 %		

Table 7.11.4: Calculation of requirements for Measles second dose, 10 dose(s) per vial, LYOPHILISED (part 3)

		Formula	2017		
			Total	Government	GAVI
A	Country co-finance	*V*	0.00 %		
B	Number of children to be vaccinated with the second dose	*Table 4*	937,971	0	937,971
C	Number of doses per child	*Vaccine parameter (schedule)*	1		
D	Number of doses needed	*B x C*	1,047,010	0	1,047,010
E	Estimated vaccine wastage factor	*Table 4*	1.33		
F	Number of doses needed including wastage	*D x E*	1,392,524	0	1,392,524
G	Vaccines buffer stock	***Buffer on doses needed*** + ***buffer on doses wasted*** ***Buffer on doses needed*** = *(D - D of previous year original approved) x 0.25* ***Buffer on doses wasted*** = *(F - D) x [XXX] - ((F - D) of previous year current estimate) x 0.25*	1,806	0	1,806
H	Stock to be deducted	*H2 of previous year - 0.25 x F of previous year*			
H2	Reported stock on January 1st	*Table 7.11.1*			
I	Total vaccine doses needed	*Round up((F + G - H) / vaccine package size) x vaccine package size*	1,394,400	0	1,394,400
J	Number of doses per vial	*Vaccine Parameter*	10		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G – H) x 1.10*	1,153,698	0	1,153,698
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*	153,384	0	153,384
M	Total of safety boxes (+ 10% of extra need) needed	*(I / 100) x 1.10*	15,339	0	15,339
N	Cost of vaccines needed	*I x vaccine price per dose (g)*	384,855	0	384,855
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	51,686	0	51,686
P	Cost of reconstitution syringes needed	*L x reconstitution price per unit (cr)*	5,369	0	5,369
Q	Cost of safety boxes needed	*M x safety box price per unit (cs)*	84	0	84
R	Freight cost for vaccines needed	*N x freight cost as of % of vaccines value (fv)*	0	0	0
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	441,994	0	441,994
U	Total country co-financing	*I x country co-financing per dose (cc)*	0		
V	Country co-financing % of GAVI supported proportion	*U / T*	0.00 %		

Table 7.11.1: Specifications for Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID

ID		Source		2014	2015	2016	2017	2018
	Number of surviving infants	Parameter	#	1,036,402	1,062,907	1,086,674	1,113,841	1,141,686
	Number of children to be vaccinated with the first dose	Parameter	#	994,945	1,020,391	1,026,907	1,052,579	1,084,602
	Number of children to be vaccinated with the third dose	Parameter	#	974,217	999,133	1,021,473	1,047,010	1,073,185
	Immunisation coverage with the third dose	Parameter	%	94.00 %	94.00 %	94.00 %	94.00 %	94.00 %
	Number of doses per child	Parameter	#	3	3	3	3	3
	Estimated vaccine wastage factor	Parameter	#	1.05	1.05	1.01	1.01	1.01
	Stock in Central Store Dec 31, 2014		#	733,600				
	Stock across second level Dec 31, 2014 (if available)*		#	0				
	Stock across third level Dec 31, 2014 (if available)*	Parameter	#	0				
	Number of doses per vial	Parameter	#		1	1	1	1
	AD syringes required	Parameter	#		Yes	Yes	Yes	Yes
	Reconstitution syringes required	Parameter	#		No	No	No	No
	Safety boxes required	Parameter	#		Yes	Yes	Yes	Yes
cc	**Country co-financing per dose**	Parameter	$		0.30	0.90	1.49	2.06
ca	**AD syringe price per unit**	Parameter	$		0.0448	0.0448	0.0448	0.0448
cr	**Reconstitution syringe price per unit**	Parameter	$		0	0	0	0
cs	**Safety box price per unit**	Parameter	$		0.0054	0.0054	0.0054	0.0054
fv	**Freight cost as % of vaccines value**	Parameter	%		6.00 %	5.90 %	6.00 %	6.10 %

ID		Source		2019	TOTAL
	Number of surviving infants	Parameter	#	1,170,229	6,611,739
	Number of children to be vaccinated with the first dose	Parameter	#	1,111,717	6,291,141
	Number of children to be vaccinated with the third dose	Parameter	#	1,111,717	6,226,735
	Immunisation coverage with the third dose	Parameter	%	95.00 %	
	Number of doses per child	Parameter	#	3	
	Estimated vaccine wastage factor	Parameter	#	1.01	
	Number of doses per vial	Parameter	#	1	
	AD syringes required	Parameter	#	Yes	
	Reconstitution syringes required	Parameter	#	No	
	Safety boxes required	Parameter	#	Yes	
cc	**Country co-financing per dose**	Parameter	$	2.65	
ca	**AD syringe price per unit**	Parameter	$	0.0448	
cr	**Reconstitution syringe price per unit**	Parameter	$	0	
cs	**Safety box price per unit**	Parameter	$	0.0054	
fv	**Freight cost as % of vaccines value**	Parameter	%	3.10 %	

* Please describe the method used for stock count in the text box below. We assume the closing stock (Dec 31, 2014) is the same as the opening stock (Jan 1, {1}). If there is a difference, please provide details in the text box below.

NA

Co-financing tables for Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID

Co-financing group	Graduating

	2014	2015	2016	2017	2018
Minimum co-financing	0.26	0.30	0.89	1.47	2.06
Recommended co-financing as per			0.90	1.49	2.06
Your co-financing	0.26	0.30	0.90	1.49	2.06

	2019
Minimum co-financing	2.65
Recommended co-financing as per	2.65
Your co-financing	2.65

Table 7.11.2: Estimated GAVI support and country co-financing (**GAVI support**)

		2014	2015	2016	2017	2018
Number of vaccine doses	#	3,118,600	2,336,400	2,343,900	1,880,200	1,379,600
Number of AD syringes	#	3,277,900	2,415,100	2,552,000	2,047,100	1,502,400
Number of re-constitution syringes	#	0	0	0	0	0
Number of safety boxes	#	36,400	26,600	25,800	20,700	15,175
Total value to be co-financed by GAVI	$	11,405,000	8,486,500	8,499,500	6,717,000	4,854,000

Table 7.11.2: Estimated GAVI support and country co-financing (**GAVI support**)

		2019
Number of vaccine doses	#	916,900
Number of AD syringes	#	1,000,500
Number of re-constitution syringes	#	0
Number of safety boxes	#	10,100
Total value to be co-financed by GAVI	$	3,108,000

Table 7.11.3: Estimated GAVI support and country co-financing (**Country support**)

		2014	2015	2016	2017	2018
Number of vaccine doses	#	238,700	210,600	773,800	1,345,500	1,948,700
Number of AD syringes	#	250,900	217,500	842,500	1,464,900	2,122,300
Number of re-constitution syringes	#	0	0	0	0	0
Number of safety boxes	#	2,800	2,400	8,525	14,800	21,450
Total value to be co-financed by the Country *[1]*	$	873,000	764,500	2,806,000	4,806,500	6,856,500

Table 7.11.3: Estimated GAVI support and country co-financing (**Country support**)

		2019
Number of vaccine doses	#	3,286,200
Number of AD syringes	#	3,585,700
Number of re-constitution syringes	#	0

Number of safety boxes	#	36,150
Total value to be co-financed by the Country ***[1]***	$	11,138,000

Table 7.11.4: Calculation of requirements for Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID (part 1)

		Formula	2014	2015		
				Total	Government	GAVI
A	Country co-finance	*V*				
B	Number of children to be vaccinated with the second dose	*Table 4*	994,945	1,020,391		
C	Number of doses per child	*Vaccine parameter (schedule)*	3	3		
D	Number of doses needed	*B x C*	2,984,835	3,061,174		
E	Estimated vaccine wastage factor	*Table 4*	1.05	1.05		
F	Number of doses needed including wastage	*D x E*		3,214,232		
G	Vaccines buffer stock	***Buffer on doses needed*** *+* ***buffer on doses wasted*** ***Buffer on doses needed*** *= (D - D of previous year original approved) x 0.25* ***Buffer on doses wasted*** *= (F - D) x [XXX] - ((F - D) of previous year current estimate) x 0.25*				
H	Stock to be deducted	*H2 of previous year - 0.25 x F of previous year*				
H2	Reported stock on January 1st	*Table 7.11.1*	0	733,600		
I	Total vaccine doses needed	*Round up((F + G - H) / vaccine package size) x vaccine package size*		2,547,000		
J	Number of doses per vial	*Vaccine Parameter*				
K	Number of AD syringes (+ 10% wastage) needed	*(D + G – H) x 1.10*				
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*				
M	Total of safety boxes (+ 10% of extra need) needed	*(I / 100) x 1.10*				
N	Cost of vaccines needed	*I x vaccine price per dose (g)*				
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*				
P	Cost of reconstitution syringes needed	*L x reconstitution price per unit (cr)*				
Q	Cost of safety boxes needed	*M x safety box price per unit (cs)*				
R	Freight cost for vaccines needed	*N x freight cost as of % of vaccines value (fv)*				
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*				
T	Total fund needed	*(N+O+P+Q+R+S)*				
U	Total country co-financing	*I x country co-financing per dose (cc)*				
V	Country co-financing % of GAVI supported proportion	*U / T*				

Table 7.11.4: Calculation of requirements for Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID (part 2)

		Formula	2016		
			Total	Government	GAVI
A	Country co-finance	*V*	24.82 %		
B	Number of children to be vaccinated with the second dose	*Table 4*	1,026,907	254,877	772,030
C	Number of doses per child	*Vaccine parameter (schedule)*	3		
D	Number of doses needed	*B x C*	3,080,721	764,629	2,316,092
E	Estimated vaccine wastage factor	*Table 4*	1.01		
F	Number of doses needed including wastage	*D x E*	3,111,529	772,275	2,339,254
G	Vaccines buffer stock	***Buffer on doses needed*** *+* ***buffer on doses wasted*** ***Buffer on doses needed*** *= (D - D of previous year original approved) x 0.25* ***Buffer on doses wasted*** *= (F - D) x [XXX] - ((F - D) of previous year current estimate) x 0.25*	5,115	1,270	3,845
H	Stock to be deducted	*H2 of previous year - 0.25 x F of previous year*	0	0	0
H2	Reported stock on January 1st	*Table 7.11.1*			
I	Total vaccine doses needed	*Round up((F + G - H) / vaccine package size) x vaccine package size*	3,117,600	773,782	2,343,818
J	Number of doses per vial	*Vaccine Parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G – H) x 1.10*	3,394,420	842,488	2,551,932
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*	0	0	0
M	Total of safety boxes (+ 10% of extra need) needed	*(I / 100) x 1.10*	34,294	8,512	25,782
N	Cost of vaccines needed	*I x vaccine price per dose (g)*	10,531,253	2,613,834	7,917,419
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	152,071	37,744	114,327
P	Cost of reconstitution syringes needed	*L x reconstitution price per unit (cr)*	0	0	0
Q	Cost of safety boxes needed	*M x safety box price per unit (cs)*	187	47	140
R	Freight cost for vaccines needed	*N x freight cost as of % of vaccines value (fv)*	621,344	154,217	467,127
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	11,304,855	2,805,840	8,499,015
U	Total country co-financing	*I x country co-financing per dose (cc)*	2,805,840		
V	Country co-financing % of GAVI supported proportion	*U / T*	24.82 %		

Table 7.11.4: Calculation of requirements for Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID (part 3)

		Formula	2017		
			Total	Government	GAVI
A	Country co-finance	*V*	41.71 %		
B	Number of children to be vaccinated with the second dose	*Table 4*	1,052,579	439,032	613,547
C	Number of doses per child	*Vaccine parameter (schedule)*	3		
D	Number of doses needed	*B x C*	3,157,737	1,317,095	1,840,642
E	Estimated vaccine wastage factor	*Table 4*	1.01		
F	Number of doses needed including wastage	*D x E*	3,189,315	1,330,267	1,859,048
G	Vaccines buffer stock	***Buffer on doses needed*** + ***buffer on doses wasted*** ***Buffer on doses needed*** = *(D - D of previous year original approved) x 0.25* ***Buffer on doses wasted*** = *(F - D) x [XXX] - ((F - D) of previous year current estimate) x 0.25*	34,912	14,562	20,350
H	Stock to be deducted	*H2 of previous year - 0.25 x F of previous year*			
H2	Reported stock on January 1st	*Table 7.11.1*			
I	Total vaccine doses needed	*Round up((F + G - H) / vaccine package size) x vaccine package size*	3,225,600	1,345,401	1,880,199
J	Number of doses per vial	*Vaccine Parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G – H) x 1.10*	3,511,914	1,464,823	2,047,091
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*	0	0	0
M	Total of safety boxes (+ 10% of extra need) needed	*(I / 100) x 1.10*	35,482	14,800	20,682
N	Cost of vaccines needed	*I x vaccine price per dose (g)*	10,721,895	4,472,113	6,249,782
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	157,334	65,625	91,709
P	Cost of reconstitution syringes needed	*L x reconstitution price per unit (cr)*	0	0	0
Q	Cost of safety boxes needed	*M x safety box price per unit (cs)*	194	81	113
R	Freight cost for vaccines needed	*N x freight cost as of % of vaccines value (fv)*	643,314	268,327	374,987
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	11,522,737	4,806,144	6,716,593
U	Total country co-financing	*I x country co-financing per dose (cc)*	4,806,144		
V	Country co-financing % of GAVI supported proportion	*U / T*	41.71 %		

Table 7.11.4: Calculation of requirements for Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID (part 5)

		Formula	2019		
			Total	Government	GAVI
A	Country co-finance	*V*	78.19 %		
B	Number of children to be vaccinated with the second dose	*Table 4*	1,111,717	869,200	242,517
C	Number of doses per child	*Vaccine parameter (schedule)*	3		
D	Number of doses needed	*B x C*	3,335,151	2,607,599	727,552
E	Estimated vaccine wastage factor	*Table 4*	1.01		
F	Number of doses needed including wastage	*D x E*	3,368,503	2,633,675	734,828
G	Vaccines buffer stock	***Buffer on doses needed*** *+* ***buffer on doses wasted*** ***Buffer on doses needed*** *= (D - D of previous year original approved) x 0.25* ***Buffer on doses wasted*** *= (F - D) x [XXX] - ((F - D) of previous year current estimate) x 0.25*	833,992	652,060	181,932
H	Stock to be deducted	*H2 of previous year - 0.25 x F of previous year*			
H2	Reported stock on January 1st	*Table 7.11.1*			
I	Total vaccine doses needed	*Round up((F + G - H) / vaccine package size) x vaccine package size*	4,203,000	3,286,129	916,871
J	Number of doses per vial	*Vaccine Parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G – H) x 1.10*	4,586,058	3,585,624	1,000,434
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*	0	0	0
M	Total of safety boxes (+ 10% of extra need) needed	*(I / 100) x 1.10*	46,234	36,149	10,085
N	Cost of vaccines needed	*I x vaccine price per dose (g)*	13,617,720	10,647,058	2,970,662
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	205,456	160,637	44,819
P	Cost of reconstitution syringes needed	*L x reconstitution price per unit (cr)*	0	0	0
Q	Cost of safety boxes needed	*M x safety box price per unit (cs)*	252	198	54
R	Freight cost for vaccines needed	*N x freight cost as of % of vaccines value (fv)*	422,150	330,060	92,090
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	14,245,578	11,137,950	3,107,628
U	Total country co-financing	*I x country co-financing per dose (cc)*	11,137,950		
V	Country co-financing % of GAVI supported proportion	*U / T*	78.19 %		

Table 7.11.1: Specifications for Rotavirus, 2-dose schedule

ID		Source		2014	2015	2016	2017	2018
	Number of surviving infants	Parameter	#	1,036,402	1,062,907	1,086,674	1,113,841	1,141,686
	Number of children to be vaccinated with the first dose	Parameter	#	994,945	1,020,391	1,026,907	1,052,579	1,084,602
	Number of children to be vaccinated with the second dose	Parameter	#	974,217	999,133	1,021,473	1,047,010	1,073,185
	Immunisation coverage with the second dose	Parameter	%	94.00 %	94.00 %	94.00 %	94.00 %	94.00 %
	Number of doses per child	Parameter	#	2	2	2	2	2
	Estimated vaccine wastage factor	Parameter	#	1.05	1.05	1.01	1.01	1.01
	Stock in Central Store Dec 31, 2014		#	276,300				
	Stock across second level Dec 31, 2014 (if available)*		#	0				
	Stock across third level Dec 31, 2014 (if available)*	Parameter	#	0				
	Number of doses per vial	Parameter	#		1	1	1	1
	AD syringes required	Parameter	#		No	No	No	No
	Reconstitution syringes required	Parameter	#		No	No	No	No
	Safety boxes required	Parameter	#		No	No	No	No
cc	**Country co-financing per dose**	Parameter	$		0.30	0.76	1.23	1.47
ca	**AD syringe price per unit**	Parameter	$		0.0448	0.0448	0.0448	0.0448
cr	**Reconstitution syringe price per unit**	Parameter	$		0	0	0	0
cs	**Safety box price per unit**	Parameter	$		0.0054	0.0054	0.0054	0.0054
fv	**Freight cost as % of vaccines value**	Parameter	%					

ID		Source		2019	TOTAL
	Number of surviving infants	Parameter	#	1,170,229	6,611,739
	Number of children to be vaccinated with the first dose	Parameter	#	1,111,717	6,291,141
	Number of children to be vaccinated with the second dose	Parameter	#	1,111,717	6,226,735
	Immunisation coverage with the second dose	Parameter	%	95.00 %	
	Number of doses per child	Parameter	#	2	
	Estimated vaccine wastage factor	Parameter	#	1.01	
	Number of doses per vial	Parameter	#	1	
	AD syringes required	Parameter	#	No	
	Reconstitution syringes required	Parameter	#	No	
	Safety boxes required	Parameter	#	No	
cc	**Country co-financing per dose**	Parameter	$	1.86	
ca	**AD syringe price per unit**	Parameter	$	0.0448	
cr	**Reconstitution syringe price per unit**	Parameter	$	0	
cs	**Safety box price per unit**	Parameter	$	0.0054	
fv	**Freight cost as % of vaccines value**	Parameter	%		

* Please describe the method used for stock count in the text box below. We assume the closing stock (Dec 31, 2014) is the same as the opening stock (Jan 1, {1}). If there is a difference, please provide details in the text box below.

NA

Co-financing tables for Rotavirus, 2-dose schedule

Co-financing group	Graduating

	2014	2015	2016	2017	2018
Minimum co-financing	0.26	0.30	0.69	1.08	1.47
Recommended co-financing as per			0.76	1.23	1.47
Your co-financing	0.26	0.30	0.76	1.23	1.47

	2019
Minimum co-financing	1.86
Recommended co-financing as per	1.86
Your co-financing	1.86

Table 7.11.2: Estimated GAVI support and country co-financing (**GAVI support**)

		2014	2015	2016	2017	2018
Number of vaccine doses	#	1,642,800	1,369,500	1,378,700	977,600	773,000
Number of AD syringes	#	0	0	0	0	0
Number of re-constitution syringes	#	0	0	0	0	0
Number of safety boxes	#	0	0	0	0	0
Total value to be co-financed by GAVI	$	4,137,000	3,648,500	3,110,500	2,205,500	1,744,000

Table 7.11.2: Estimated GAVI support and country co-financing (**GAVI support**)

		2019
Number of vaccine doses	#	491,900
Number of AD syringes	#	0
Number of re-constitution syringes	#	0
Number of safety boxes	#	0
Total value to be co-financed by GAVI	$	1,110,000

Table 7.11.3: Estimated GAVI support and country co-financing (**Country support**)

		2014	2015	2016	2017	2018
Number of vaccine doses	#	189,400	175,500	700,400	1,172,000	1,445,600
Number of AD syringes	#	0	0	0	0	0
Number of re-constitution syringes	#	0	0	0	0	0
Number of safety boxes	#	0	0	0	0	0
Total value to be co-financed by the Country *[1]*	$	476,500	463,500	1,580,500	2,644,000	3,261,500

Table 7.11.3: Estimated GAVI support and country co-financing (**Country support**)

		2019
Number of vaccine doses	#	2,310,200
Number of AD syringes	#	0
Number of re-constitution syringes	#	0

Number of safety boxes	#	0
Total value to be co-financed by the Country ***[1]***	$	5,212,000

Table 7.11.4: Calculation of requirements for Rotavirus, 2-dose schedule (part 1)

		Formula	2014	2015		
				Total	Government	GAVI
A	**Country co-finance**	*V*				
B	**Number of children to be vaccinated with the second dose**	*Table 4*	994,945	1,020,391		
C	**Number of doses per child**	*Vaccine parameter (schedule)*	2	2		
D	**Number of doses needed**	*B x C*	1,989,890	2,040,782		
E	**Estimated vaccine wastage factor**	*Table 4*	1.05	1.05		
F	**Number of doses needed including wastage**	*D x E*		2,142,822		
G	**Vaccines buffer stock**	***Buffer on doses needed*** *+* ***buffer on doses wasted*** ***Buffer on doses needed*** *= (D - D of previous year original approved) x 0.25* ***Buffer on doses wasted*** *= (F - D) x [XXX] - ((F - D) of previous year current estimate) x 0.25*				
H	**Stock to be deducted**	*H2 of previous year - 0.25 x F of previous year*				
H2	**Reported stock on January 1st**	*Table 7.11.1*	779,650	276,300		
I	**Total vaccine doses needed**	*Round up((F + G - H) / vaccine package size) x vaccine package size*		1,545,000		
J	**Number of doses per vial**	*Vaccine Parameter*				
K	**Number of AD syringes (+ 10% wastage) needed**	*(D + G – H) x 1.10*				
L	**Reconstitution syringes (+ 10% wastage) needed**	*(I / J) x 1.10*				
M	**Total of safety boxes (+ 10% of extra need) needed**	*(K + L) / 100 x 1.10*				
N	**Cost of vaccines needed**	*I x vaccine price per dose (g)*				
O	**Cost of AD syringes needed**	*K x AD syringe price per unit (ca)*				
P	**Cost of reconstitution syringes needed**	*L x reconstitution price per unit (cr)*				
Q	**Cost of safety boxes needed**	*M x safety box price per unit (cs)*				
R	**Freight cost for vaccines needed**	*N x freight cost as of % of vaccines value (fv)*				
S	**Freight cost for devices needed**	*(O+P+Q) x freight cost as % of devices value (fd)*				
T	**Total fund needed**	*(N+O+P+Q+R+S)*				
U	**Total country co-financing**	*I x country co-financing per dose (cc)*				
V	**Country co-financing % of GAVI supported proportion**	*U / T*				

Table 7.11.4: Calculation of requirements for Rotavirus, 2-dose schedule (part 2)

		Formula	2016		
			Total	Government	GAVI
A	**Country co-finance**	*V*	33.69 %		
B	**Number of children to be vaccinated with the second dose**	*Table 4*	1,026,907	345,944	680,963
C	**Number of doses per child**	*Vaccine parameter (schedule)*	2		
D	**Number of doses needed**	*B x C*	2,053,814	691,888	1,361,926
E	**Estimated vaccine wastage factor**	*Table 4*	1.01		
F	**Number of doses needed including wastage**	*D x E*	2,074,353	698,807	1,375,546
G	**Vaccines buffer stock**	***Buffer on doses needed*** + ***buffer on doses wasted*** ***Buffer on doses needed*** = *(D - D of previous year original approved) x 0.25* ***Buffer on doses wasted*** = *(F - D) x [XXX] - ((F - D) of previous year current estimate) x 0.25*	3,410	1,149	2,261
H	**Stock to be deducted**	*H2 of previous year - 0.25 x F of previous year*	0	0	0
H2	**Reported stock on January 1st**	*Table 7.11.1*			
I	**Total vaccine doses needed**	*Round up((F + G - H) / vaccine package size) x vaccine package size*	2,079,000	700,373	1,378,627
J	**Number of doses per vial**	*Vaccine Parameter*	1		
K	**Number of AD syringes (+ 10% wastage) needed**	*(D + G – H) x 1.10*	0	0	0
L	**Reconstitution syringes (+ 10% wastage) needed**	*(I / J) x 1.10*	0	0	0
M	**Total of safety boxes (+ 10% of extra need) needed**	*(K + L) / 100 x 1.10*	0	0	0
N	**Cost of vaccines needed**	*I x vaccine price per dose (g)*	4,690,224	1,580,040	3,110,184
O	**Cost of AD syringes needed**	*K x AD syringe price per unit (ca)*	0	0	0
P	**Cost of reconstitution syringes needed**	*L x reconstitution price per unit (cr)*	0	0	0
Q	**Cost of safety boxes needed**	*M x safety box price per unit (cs)*	0	0	0
R	**Freight cost for vaccines needed**	*N x freight cost as of % of vaccines value (fv)*	0	0	0
S	**Freight cost for devices needed**	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	**Total fund needed**	*(N+O+P+Q+R+S)*	4,690,224	1,580,040	3,110,184
U	**Total country co-financing**	*I x country co-financing per dose (cc)*	1,580,040		
V	**Country co-financing % of GAVI supported proportion**	*U / T*	33.69 %		

Table 7.11.4: Calculation of requirements for Rotavirus, 2-dose schedule (part 3)

		Formula	2017		
			Total	Government	GAVI
A	**Country co-finance**	*V*	54.52 %		
B	**Number of children to be vaccinated with the second dose**	*Table 4*	1,052,579	573,880	478,699
C	**Number of doses per child**	*Vaccine parameter (schedule)*	2		
D	**Number of doses needed**	*B x C*	2,105,158	1,147,760	957,398
E	**Estimated vaccine wastage factor**	*Table 4*	1.01		
F	**Number of doses needed including wastage**	*D x E*	2,126,210	1,159,237	966,973
G	**Vaccines buffer stock**	***Buffer on doses needed*** + ***buffer on doses wasted*** ***Buffer on doses needed*** = *(D - D of previous year original approved) x 0.25* ***Buffer on doses wasted*** = *(F - D) x [XXX] - ((F - D) of previous year current estimate) x 0.25*	23,275	12,690	10,585
H	**Stock to be deducted**	*H2 of previous year - 0.25 x F of previous year*			
H2	**Reported stock on January 1st**	*Table 7.11.1*			
I	**Total vaccine doses needed**	*Round up((F + G - H) / vaccine package size) x vaccine package size*	2,149,500	1,171,935	977,565
J	**Number of doses per vial**	*Vaccine Parameter*	1		
K	**Number of AD syringes (+ 10% wastage) needed**	*(D + G – H) x 1.10*	0	0	0
L	**Reconstitution syringes (+ 10% wastage) needed**	*(I / J) x 1.10*	0	0	0
M	**Total of safety boxes (+ 10% of extra need) needed**	*(K + L) / 100 x 1.10*	0	0	0
N	**Cost of vaccines needed**	*I x vaccine price per dose (g)*	4,849,272	2,643,885	2,205,387
O	**Cost of AD syringes needed**	*K x AD syringe price per unit (ca)*	0	0	0
P	**Cost of reconstitution syringes needed**	*L x reconstitution price per unit (cr)*	0	0	0
Q	**Cost of safety boxes needed**	*M x safety box price per unit (cs)*	0	0	0
R	**Freight cost for vaccines needed**	*N x freight cost as of % of vaccines value (fv)*	0	0	0
S	**Freight cost for devices needed**	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	**Total fund needed**	*(N+O+P+Q+R+S)*	4,849,272	2,643,885	2,205,387
U	**Total country co-financing**	*I x country co-financing per dose (cc)*	2,643,885		
V	**Country co-financing % of GAVI supported proportion**	*U / T*	54.52 %		

Table 7.11.4: Calculation of requirements for Rotavirus, 2-dose schedule (part 5)

		Formula	2019		
			Total	Government	GAVI
A	**Country co-finance**	*V*	82.45 %		
B	**Number of children to be vaccinated with the second dose**	*Table 4*	1,111,717	916,576	195,141
C	**Number of doses per child**	*Vaccine parameter (schedule)*	2		
D	**Number of doses needed**	*B x C*	2,223,434	1,833,151	390,283
E	**Estimated vaccine wastage factor**	*Table 4*	1.01		
F	**Number of doses needed including wastage**	*D x E*	2,245,669	1,851,483	394,186
G	**Vaccines buffer stock**	***Buffer on doses needed*** + ***buffer on doses wasted*** ***Buffer on doses needed*** = *(D - D of previous year original approved) x 0.25* ***Buffer on doses wasted*** = *(F - D) x [XXX] - ((F - D) of previous year current estimate) x 0.25*	555,995	458,401	97,594
H	**Stock to be deducted**	*H2 of previous year - 0.25 x F of previous year*			
H2	**Reported stock on January 1st**	*Table 7.11.1*			
I	**Total vaccine doses needed**	*Round up((F + G - H) / vaccine package size) x vaccine package size*	2,802,000	2,310,160	491,840
J	**Number of doses per vial**	*Vaccine Parameter*	1		
K	**Number of AD syringes (+ 10% wastage) needed**	*(D + G – H) x 1.10*	0	0	0
L	**Reconstitution syringes (+ 10% wastage) needed**	*(I / J) x 1.10*	0	0	0
M	**Total of safety boxes (+ 10% of extra need) needed**	*(K + L) / 100 x 1.10*	0	0	0
N	**Cost of vaccines needed**	*I x vaccine price per dose (g)*	6,321,312	5,211,720	1,109,592
O	**Cost of AD syringes needed**	*K x AD syringe price per unit (ca)*	0	0	0
P	**Cost of reconstitution syringes needed**	*L x reconstitution price per unit (cr)*	0	0	0
Q	**Cost of safety boxes needed**	*M x safety box price per unit (cs)*	0	0	0
R	**Freight cost for vaccines needed**	*N x freight cost as of % of vaccines value (fv)*	0	0	0
S	**Freight cost for devices needed**	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	**Total fund needed**	*(N+O+P+Q+R+S)*	6,321,312	5,211,720	1,109,592
U	**Total country co-financing**	*I x country co-financing per dose (cc)*	5,211,720		
V	**Country co-financing % of GAVI supported proportion**	*U / T*	82.45 %		

Table 7.11.1: Specifications for Yellow Fever, 10 dose(s) per vial, LYOPHILISED

ID		Source		2014	2015	2016	2017	2018
	Number of surviving infants	Parameter	#	1,036,402	1,062,907	1,086,674	1,113,841	1,141,686
	Number of children to be vaccinated with the first dose	Parameter	#	974,217	999,133	1,021,473	1,047,010	1,073,185
	Number of doses per child	Parameter	#	1	1	1	1	1
	Estimated vaccine wastage factor	Parameter	#	1.67	1.25	1.33	1.33	1.33
	Stock in Central Store Dec 31, 2014		#	165,400				
	Stock across second level Dec 31, 2014 (if available)*		#					
	Stock across third level Dec 31, 2014 (if available)*	Parameter	#					
	Number of doses per vial	Parameter	#		10	10	10	10
	AD syringes required	Parameter	#		Yes	Yes	Yes	Yes
	Reconstitution syringes required	Parameter	#		Yes	Yes	Yes	Yes
	Safety boxes required	Parameter	#		Yes	Yes	Yes	Yes
cc	**Country co-financing per dose**	Parameter	$		0.45	0.62	0.79	0.95
ca	**AD syringe price per unit**	Parameter	$		0.0448	0.0448	0.0448	0.0448
cr	**Reconstitution syringe price per unit**	Parameter	$		0	0	0	0
cs	**Safety box price per unit**	Parameter	$		0.0054	0.0054	0.0054	0.0054
fv	**Freight cost as % of vaccines value**	Parameter	%		6.30 %	6.30 %	6.10 %	6.00 %
fd	**Freight cost as % of devices value**	Parameter	%					

ID		Source		2019	TOTAL
	Number of surviving infants	Parameter	#	1,170,229	6,611,739
	Number of children to be vaccinated with the first dose	Parameter	#	1,111,717	6,226,735
	Number of doses per child	Parameter	#	1	
	Estimated vaccine wastage factor	Parameter	#	1.33	
	Number of doses per vial	Parameter	#	10	
	AD syringes required	Parameter	#	Yes	
	Reconstitution syringes required	Parameter	#	Yes	
	Safety boxes required	Parameter	#	Yes	
cc	**Country co-financing per dose**	Parameter	$	1.12	
ca	**AD syringe price per unit**	Parameter	$	0.0448	
cr	**Reconstitution syringe price per unit**	Parameter	$	0	
cs	**Safety box price per unit**	Parameter	$	0.0054	
fv	**Freight cost as % of vaccines value**	Parameter	%	6.00 %	
fd	**Freight cost as % of devices value**	Parameter	%		

* Please describe the method used for stock count in the text box below. We assume the closing stock (Dec 31, 2014) is the same as the opening stock (Jan 1, {1}). If there is a difference, please provide details in the text box below.

NA

Co-financing tables for Yellow Fever, 10 dose(s) per vial, LYOPHILISED

Co-financing group	Graduating

	2014	2015	2016	2017	2018
Minimum co-financing	0.26	0.30	0.62	0.79	0.95
Recommended co-financing as per			0.62	0.79	0.95
Your co-financing	0.39	0.45	0.62	0.79	0.95

	2019
Minimum co-financing	1.12
Recommended co-financing as per	1.12
Your co-financing	1.12

Table 7.11.2: Estimated GAVI support and country co-financing (**GAVI support**)

		2014	2015	2016	2017	2018
Number of vaccine doses	#	1,172,900	699,400	714,600	662,200	500,200
Number of AD syringes	#	802,000	604,800	594,900	576,500	435,400
Number of re-constitution syringes	#	129,100	77,000	78,600	72,900	55,100
Number of safety boxes	#	10,350	7,500	7,875	7,300	5,525
Total value to be co-financed by GAVI	$	1,430,000	785,000	914,500	871,500	674,000

Table 7.11.2: Estimated GAVI support and country co-financing (**GAVI support**)

		2019
Number of vaccine doses	#	275,300
Number of AD syringes	#	239,700
Number of re-constitution syringes	#	30,300
Number of safety boxes	#	3,050
Total value to be co-financed by GAVI	$	365,500

Table 7.11.3: Estimated GAVI support and country co-financing (**Country support**)

		2014	2015	2016	2017	2018
Number of vaccine doses	#	551,900	468,600	671,700	994,300	1,197,700
Number of AD syringes	#	377,400	405,200	559,200	865,600	1,042,700
Number of re-constitution syringes	#	60,800	51,600	73,900	109,400	131,800
Number of safety boxes	#	4,875	5,025	7,400	10,950	13,175
Total value to be co-financed by the Country *[1]*	$	673,000	526,000	859,500	1,309,000	1,613,000

Table 7.11.3: Estimated GAVI support and country co-financing (**Country support**)

		2019
Number of vaccine doses	#	1,484,500
Number of AD syringes	#	1,292,500
Number of re-constitution syringes	#	163,300
Number of safety boxes	#	16,350
Total value to be co-financed by the Country *[1]*	$	1,971,000

Table 7.11.4: Calculation of requirements for Yellow Fever, 10 dose(s) per vial, LYOPHILISED (part 1)

		Formula	2014	2015		
				Total	Government	GAVI
A	**Country co-finance**	*V*				
B	**Number of children to be vaccinated with the second dose**	*Table 4*	974,217	999,133		
C	**Number of doses per child**	*Vaccine parameter (schedule)*	1	1		
D	**Number of doses needed**	*B x C*	974,217	999,133		
E	**Estimated vaccine wastage factor**	*Table 4*	1.67	1.25		
F	**Number of doses needed including wastage**	*D x E*		1,248,917		
G	**Vaccines buffer stock**	***Buffer on doses needed*** *+* ***buffer on doses wasted*** ***Buffer on doses needed*** *= (D - D of previous year original approved) x 0.25* ***Buffer on doses wasted*** *= (F - D) x [XXX] - ((F - D) of previous year current estimate) x 0.25*				
H	**Stock to be deducted**	*H2 of previous year - 0.25 x F of previous year*				
H2	**Reported stock on January 1st**	*Table 7.11.1*	0	165,400		
I	**Total vaccine doses needed**	*Round up((F + G - H) / vaccine package size) x vaccine package size*		1,168,000		
J	**Number of doses per vial**	*Vaccine Parameter*				
K	**Number of AD syringes (+ 10% wastage) needed**	*(D + G – H) x 1.10*				
L	**Reconstitution syringes (+ 10% wastage) needed**	*(I / J) x 1.10*				
M	**Total of safety boxes (+ 10% of extra need) needed**	*(I / 100) x 1.10*				
N	**Cost of vaccines needed**	*I x vaccine price per dose (g)*				
O	**Cost of AD syringes needed**	*K x AD syringe price per unit (ca)*				
P	**Cost of reconstitution syringes needed**	*L x reconstitution price per unit (cr)*				
Q	**Cost of safety boxes needed**	*M x safety box price per unit (cs)*				
R	**Freight cost for vaccines needed**	*N x freight cost as of % of vaccines value (fv)*				
S	**Freight cost for devices needed**	*(O+P+Q) x freight cost as % of devices value (fd)*				
T	**Total fund needed**	*(N+O+P+Q+R+S)*				
U	**Total country co-financing**	*I x country co-financing per dose (cc)*				
V	**Country co-financing % of GAVI supported proportion**	*U / T*				

Table 7.11.4: Calculation of requirements for Yellow Fever, 10 dose(s) per vial, LYOPHILISED (part 2)

		Formula	2016		
			Total	Government	GAVI
A	**Country co-finance**	*V*	48.45 %		
B	**Number of children to be vaccinated with the second dose**	*Table 4*	1,021,473	494,931	526,542
C	**Number of doses per child**	*Vaccine parameter (schedule)*	1		
D	**Number of doses needed**	*B x C*	1,021,473	494,931	526,542
E	**Estimated vaccine wastage factor**	*Table 4*	1.33		
F	**Number of doses needed including wastage**	*D x E*	1,358,560	658,259	700,301
G	**Vaccines buffer stock**	***Buffer on doses needed*** *+* ***buffer on doses wasted*** ***Buffer on doses needed*** *= (D - D of previous year original approved) x 0.25* ***Buffer on doses wasted*** *= (F - D) x [XXX] - ((F - D) of previous year current estimate) x 0.25*	27,572	13,360	14,212
H	**Stock to be deducted**	*H2 of previous year - 0.25 x F of previous year*	0	0	0
H2	**Reported stock on January 1st**	*Table 7.11.1*			
I	**Total vaccine doses needed**	*Round up((F + G - H) / vaccine package size) x vaccine package size*	1,386,200	671,651	714,549
J	**Number of doses per vial**	*Vaccine Parameter*	10		
K	**Number of AD syringes (+ 10% wastage) needed**	*(D + G – H) x 1.10*	1,153,950	559,120	594,830
L	**Reconstitution syringes (+ 10% wastage) needed**	*(I / J) x 1.10*	152,482	73,882	78,600
M	**Total of safety boxes (+ 10% of extra need) needed**	*(I / 100) x 1.10*	15,249	7,389	7,860
N	**Cost of vaccines needed**	*I x vaccine price per dose (g)*	1,614,923	782,474	832,449
O	**Cost of AD syringes needed**	*K x AD syringe price per unit (ca)*	51,697	25,049	26,648
P	**Cost of reconstitution syringes needed**	*L x reconstitution price per unit (cr)*	5,337	2,586	2,751
Q	**Cost of safety boxes needed**	*M x safety box price per unit (cs)*	83	41	42
R	**Freight cost for vaccines needed**	*N x freight cost as of % of vaccines value (fv)*	101,741	49,297	52,444
S	**Freight cost for devices needed**	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	**Total fund needed**	*(N+O+P+Q+R+S)*	1,773,781	859,444	914,337
U	**Total country co-financing**	*I x country co-financing per dose (cc)*	859,444		
V	**Country co-financing % of GAVI supported proportion**	*U / T*	48.45 %		

Table 7.11.4: Calculation of requirements for Yellow Fever, 10 dose(s) per vial, LYOPHILISED (part 3)

		Formula	2017		
			Total	Government	GAVI
A	Country co-finance	*V*	60.03 %		
B	Number of children to be vaccinated with the second dose	*Table 4*	1,047,010	628,472	418,538
C	Number of doses per child	*Vaccine parameter (schedule)*	1		
D	Number of doses needed	*B x C*	1,047,010	628,472	418,538
E	Estimated vaccine wastage factor	*Table 4*	1.33		
F	Number of doses needed including wastage	*D x E*	1,392,524	835,867	556,657
G	Vaccines buffer stock	***Buffer on doses needed*** *+* ***buffer on doses wasted*** ***Buffer on doses needed*** *= (D - D of previous year original approved) x 0.25* ***Buffer on doses wasted*** *= (F - D) x [XXX] - ((F - D) of previous year current estimate) x 0.25*	263,860	158,383	105,477
H	Stock to be deducted	*H2 of previous year - 0.25 x F of previous year*			
H2	Reported stock on January 1st	*Table 7.11.1*			
I	Total vaccine doses needed	*Round up((F + G - H) / vaccine package size) x vaccine package size*	1,656,400	994,260	662,140
J	Number of doses per vial	*Vaccine Parameter*	10		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G – H) x 1.10*	1,441,958	865,540	576,418
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*	182,205	109,370	72,835
M	Total of safety boxes (+ 10% of extra need) needed	*(I / 100) x 1.10*	18,221	10,938	7,283
N	Cost of vaccines needed	*I x vaccine price per dose (g)*	1,987,680	1,193,112	794,568
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	64,600	38,777	25,823
P	Cost of reconstitution syringes needed	*L x reconstitution price per unit (cr)*	6,378	3,829	2,549
Q	Cost of safety boxes needed	*M x safety box price per unit (cs)*	100	61	39
R	Freight cost for vaccines needed	*N x freight cost as of % of vaccines value (fv)*	121,249	72,781	48,468
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	2,180,007	1,308,556	871,451
U	Total country co-financing	*I x country co-financing per dose (cc)*	1,308,556		
V	Country co-financing % of GAVI supported proportion	*U / T*	60.03 %		

Table 7.11.4: Calculation of requirements for Yellow Fever, 10 dose(s) per vial, LYOPHILISED (part 5)

		Formula	2019		
			Total	Government	GAVI
A	Country co-finance	*V*	84.36 %		
B	Number of children to be vaccinated with the second dose	*Table 4*	1,111,717	937,850	173,867
C	Number of doses per child	*Vaccine parameter (schedule)*	1		
D	Number of doses needed	*B x C*	1,111,717	937,850	173,867
E	Estimated vaccine wastage factor	*Table 4*	1.33		
F	Number of doses needed including wastage	*D x E*	1,478,584	1,247,341	231,243
G	Vaccines buffer stock	***Buffer on doses needed*** + ***buffer on doses wasted*** ***Buffer on doses needed*** = *(D - D of previous year original approved) x 0.25* ***Buffer on doses wasted*** = *(F - D) x [XXX] - ((F - D) of previous year current estimate) x 0.25*	281,109	237,145	43,964
H	Stock to be deducted	*H2 of previous year - 0.25 x F of previous year*			
H2	Reported stock on January 1st	*Table 7.11.1*			
I	Total vaccine doses needed	*Round up((F + G - H) / vaccine package size) x vaccine package size*	1,759,700	1,484,491	275,209
J	Number of doses per vial	*Vaccine Parameter*	10		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G – H) x 1.10*	1,532,109	1,292,494	239,615
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*	193,568	163,295	30,273
M	Total of safety boxes (+ 10% of extra need) needed	*(I / 100) x 1.10*	19,357	16,330	3,027
N	Cost of vaccines needed	*I x vaccine price per dose (g)*	2,132,757	1,799,204	333,553
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	68,639	57,905	10,734
P	Cost of reconstitution syringes needed	*L x reconstitution price per unit (cr)*	6,775	5,716	1,059
Q	Cost of safety boxes needed	*M x safety box price per unit (cs)*	106	90	16
R	Freight cost for vaccines needed	*N x freight cost as of % of vaccines value (fv)*	127,966	107,953	20,013
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	2,336,243	1,970,865	365,378
U	Total country co-financing	*I x country co-financing per dose (cc)*	1,970,865		
V	Country co-financing % of GAVI supported proportion	*U / T*	84.36 %		

8. Health Systems Strengthening Support (HSS)

Please use this APR section (8. Health Systems Strengthening Support) to report on grant implementation of the previous HSS grant which was approved before 2012. In addition, please complete and attach the HSS Reporting Form to report on the implementation of the new HSS grant which was approved in 2012 or 2013.

Instructions for reporting on HSS funds received

1. Please complete this section only if your country **was approved for and received HSS funds before or during January to December 2014**. All countries are expected to report on:

   a. Progress achieved in 2014

   b. HSS implementation during January – April 2015 (interim reporting)

   c. Plans for 2016

   d. Proposed changes to approved activities and budget (see No. 4 below)

For countries that received HSS funds within the last 3 months of 2014, or experienced other delays that limited implementation in 2014, this section can be used as an inception report to comment on start up activities.

2. In order to better align HSS support reporting to country processes, for countries of which the 2014 fiscal year starts in January 2014 and ends in December 2014, HSS reports should be received by the GAVI Alliance before **15th May 2015**. For other countries, HSS reports should be received by the GAVI Alliance approximately six months after the end of country fiscal year, e.g., if the country fiscal year ends in March 2015, the HSS reports are expected by GAVI Alliance by September 2015.

3. Please use your approved proposal as reference to fill in this Annual Progress Report. Please fill in this reporting template thoroughly and accurately and use additional space as necessary.

4. If you are proposing changes to approved objectives, activities and budget (reprogramming) please request the reprogramming guidelines by contacting your Country Responsible Officer at GAVI or by emailing gavihss@gavi.org.

5. If you are requesting a new tranche of funding, please make this clear in Section 8.1.2.

6. Please ensure that, **prior to its submission to the GAVI Alliance Secretariat, this report has been endorsed by the relevant country coordination mechanisms** (HSCC or equivalent) as provided for on the signature page in terms of its accuracy and validity of facts, figures and sources used.

7. Please attach all required supporting documents. These include:

   a. Minutes of all the HSCC meetings held in 2014

   b. Minutes of the HSCC meeting in 2015 that endorses the submission of this report

   c. Latest Health Sector Review Report

   d. Financial statement for the use of HSS funds in the 2014 calendar year

   e. External audit report for HSS funds during the most recent fiscal year (if available)

8. The GAVI Alliance Independent Review Committee (IRC) reviews all Annual Progress Reports. In addition to the information listed above, the IRC requires the following information to be included in this section in order to approve further tranches of HSS funding:

   a. Reporting on agreed indicators, as outlined in the approved M&E framework, proposal and approval letter;

   b. Demonstration of (with tangible evidence) strong links between activities, output, outcome and impact indicators;

   c. Outline of technical support that may be required to either support the implementation or monitoring of the GAVI HSS investment in the coming year

8. Inaccurate, incomplete or unsubstantiated reporting may lead the IRC to either send the APR back to your country for clarifications (which may cause delays in the release of further HSS funds), to recommend against the release of

further HSS funds or only approve part of the next tranche of HSS funds.

8.1. Report on the use of HSS funds in 2014 and request of a new tranche

Please provide data sources for all data used in this report.

8.1.1. Report on the use of HSS funds in **2014**

Please complete Table 8.1.3.a and 8.1.3.b (as per APR) for each year of your country's approved multi-year HSS programme and both in US$ and local currency

Please note: If you are requesting a new tranche of funding, please make sure you fill in the last row of Table 8.1.3.a and 8.1.3.b.

8.1.2. Please indicate if you are requesting a new tranche of funding **Yes**

If yes, please indicate the amount of funding requested: **3440096** US$

These funds should be sufficient to carry out HSS grant implementation through December 2016.

Table 8.1.3a (US)$

	2009	2010	2011	2012	2013	2014
Original annual budgets (*as per the originally approved HSS proposal*)	7230500	767000	637000			
Revised annual budgets (*if revised by previous Annual Progress Reviews*)		3615250	2509625	2509625		
Total funds received from GAVI during the calendar year (*A*)		3615250	2509625		2509625	
Remaining funds (carry over) from previous year (*B*)	762236	407449	2463160	3860055	1547227	2634756
Total Funds available during the calendar year (*C=A+B*)	762236	4022699	4972785	3860055	4056832	2634756
Total expenditure during the calendar year (*D*)	354787	1559539	1112730	2312828	1422076	2307108.16
Refund per Gavi Audit (Refer to Note 3)						71679
Balance carried forward to next calendar year (*E=C-D*)	407449	2463160	3860055	1547227	2634756	399336.44
Amount of funding requested for future calendar year(s) [please ensure you complete this row if you are requesting a new tranche]	0	0	0	0	0	0

	2015	2016	2017	2018
Original annual budgets (*as per the originally approved HSS proposal*)				
Revised annual budgets				

(*if revised by previous Annual Progress Reviews*)				
Total funds received from GAVI during the calendar year (*A*)				
Remaining funds (carry over) from previous year (*B*)	399336.44			
Total Funds available during the calendar year (*C=A+B*)	399336.44			
Total expenditure during the calendar year (*D*)	116208.72			
Balance carried forward to next calendar year (As at June 30th 2015) (*E=C-D*)	283127.72			
Amount of funding requested for future calendar year(s) [please ensure you complete this row if you are requesting a new tranche]				

Table 8.1.3b (Local currency)

	2009	2010	2011	2012	2013	2014
Original annual budgets (*as per the originally approved HSS proposal*)	9023664	1092208	943397			
Revised annual budgets (*if revised by previous Annual Progress Reviews*)		5148116	3716754	4050534		
Total funds received from GAVI during the calendar year (*A*)		5148116	3716754		4868672	
Remaining funds (carry over) from previous year (*B*)	678862	171871	3055537	5052012	472613	5111426.64
Total Funds available during the calendar year (*C=A+B*)	678862	5319987	6772291	5052012	5341286	5111426,64
Total expenditure during the calendar year (*D*)	506990	2264450	1720279	4579399	2757399	4475789.84
Balance carried forward to next calendar year (*E=C-D*)	171871	3055537	5052012	472613	5111426.64	635636.80
Amount of funding requested for future calendar year(s) [please ensure you complete this row if you are requesting a new tranche]	0	0	0	0	0	0

	2015	2016	2017	2018
Original annual budgets (*as per the originally approved HSS proposal*)				
Revised annual budgets (*if revised by previous Annual Progress Reviews*)				
Total funds received from GAVI during the calendar year (*A*)				
Remaining funds (carry over) from previous year (*B*)	635636.80			
Total Funds available during the calendar year (*C=A+B*)	635636.80			
Total expenditure during the calendar year (*D*)	225444.92			
Balance carried forward to next calendar year (*E=C-D*)	410191.88			
Amount of funding requested for future calendar year(s) [please ensure you complete this row if you are requesting a new tranche]				

Report of Exchange Rate Fluctuation

Please indicate in the table Table 8.3.c below the exchange rate used for each calendar year at opening and closing.

Table 8.1.3.c

Exchange Rate	2009	2010	2011	2012	2013	2014
Opening on 1 January	1.248	1.424	1.481	1.614	1.89	1.94
Closing on 31 December	1.429	1.454	1.546	1.98	1.94	1.94

Detailed expenditure of HSS funds during the 2014 calendar year

Please attach a detailed financial statement for the use of HSS funds during the 2014 calendar year *(Terms of reference for this financial statement are attached in the online APR Annexes)*. Financial statements should be signed by the Chief Accountant or by the Permanent Secretary of Ministry of Health. **(Document Number: 19)**

If any expenditures for the January April 2015 period are reported in Tables 8.1.3a and 8.1.3b, a separate, detailed financial statement for the use of these HSS funds must also be attached **(Document Number: 20)**

Has an external audit been conducted? Yes

External audit reports for HSS programmes are due to the GAVI Secretariat six months following the close of your governments fiscal year. If an external audit report is available during your governments most recent fiscal year, this must also be attached (Document Number: 21)

8.2. Progress on HSS activities in the 2014 fiscal year

Please report on major activities conducted to strengthen immunisation using HSS funds in Table 8.2. It is very important to be precise about the extent of progress and use the M&E framework in your original

application and approval letter.

Please provide the following information for each planned activity:

- The percentage of activity completed where applicable
- An explanation about progress achieved and constraints, if any
- The source of information/data if relevant.

Table 8.2: HSS activities in the 2014 reporting year

Major Activities (insert as many rows as necessary)	**Planned Activity for 2014**	**Percentage of Activity completed (annual)** (where applicable)	**Source of information/data** (if relevant)
Objective 1	Strengthening District and Sub-districts		
Objective 1.1	Strengthen management capacity in leadership		
Activity 1.1	Equip national and Regional in-service training centres	100	GHS PPMED 2013 Annual report
Activity 1.2	Train District directors and Senior managers in leadership and management	100	GHS HRDD 2013 Annual report
Activity 1.3	Train selected NGOs, RHMT and DDHS in teambuilding	100	GHS HRDD 2014 Annual report
Activity 1.4	Develop simplified financial management and procurement operational manual for sub districts, CHOs and NGOs	100	GHS PPMED 2011/2013 Annual report
Activity 1.5	Train sub district managers and CHOs in procurement and financial management	100	GHS PPMED 2013 Annual report
Objective 1.2	Strengthen District Health planning, prioritization and resource allocation		
Activity 1.2.1	Technical assistance to update DHA tools to support DSS sites	100	GHS PPMED 2013 Report
Activity 1.2.2	Train Senior managers including national, regional and district directors in the use of DHIP and DHA for priority setting and decision-making.	100	GHS PPMED 2013 Report
Objective 1.3	Strengthen Support & Supervision Systems		
Activity 1.3.1	Train district, sub districts and NGOs in supportive supervision	100	GHS PPMED 2013 Annual Report
Activity 1.3.2	Provide fuel and stationery to districts, sub districts and NGOs to undertake supportive supervision	100	GHS PPMED 2013 Annual Report
Objective 2	Expand functional CHPS coverage to deliver essential services especially for MDG 4 and 5		
Activity 2.1	Procure vehicles for sub districts	100	GHS HASS 2012 Report
Activity 2.2	Procurement of Service delivery kits for CHOs	100	PPMED Annual Report 2013
Objective 3	Strengthening sub-district Health Information Systems especially at the CHPS zone level using District Wide		

	Information Management System (DWIMS)		
Activity 3.1	Procure PDA (Smart phones) for CHOs	100	GHS PPMED 2013 Annual report
Activity 3.2	Train CHOs in the use of PDA (Smart phone) equipment	100	GHS PPMED 2013 Annual report
Activity 3.3	Customise and Integrate PDA data into existing health management information system	100	GHS PPMED 2013 Annual report
Objective 4	Strengthening Information management, M&E and operational and implementation research		
Activity 4.1	Undertake operational and implementation research	100	PPMED 2015 First Quarter Report Annual Report
Activity 4.2	Support national & regional level M&E	100	GHS 2013 Annual report
Activity 4.3	Review and Evaluation of HSS support	100	PPMED 1st Quarter report

8.2.1 For each objective and activity (i.e. Objective 1, Activity 1.1, Activity 1.2, etc.), explain the progress achieved and relevant constraints (e.g. evaluations, HSCC meetings).

Major Activities (insert as many rows as necessary)	**Explain progress achieved and relevant constraints**
Objective 1	Strengthening District and Sub-districts
Objective 1.1	Strengthen management capacity in leadership
Activity 1.1 Equip national and Regional in-servic	The GAVI HSS support was used to upgrade the offices of all the 10 regional directors of health services as well as the 10 regional training centers in all regions. Funds were transferred to the Region for this purpose. At the moment these centers have functional teleconference facilities.
Activity 1.2 Train District directors and Senior m	Capacity at the regional level has been built through the leadership Development Training. This was made possible with HSS funding and other support from development partners. The Leadership Development Program (LDP) is an organizational process that develops people at all levels to learn Leading and Managing practices, face challenges and achieve measurable results. The process brings about transformation in how people work as teams, how those teams approach challenges, and the thinking that underlies their approaches. Adopted by the GHS to equip managers within the GHS with skills to lead and manage for better results and improve leadership especially at the district level. All targeted staff from the various levels of the GHS as planned in the GAVI HSS have been trained. Efforts were also made to leverage funding support from other Partners such as UNICEF, FOCUS, and USAID to scale up training to include some of the staff from the newly created districts. This includes 111 regional staff made up of Volta Region (41), Greater Accra (35), and Western Region (62), Ashanti (124), Central (66), Northern (87), Upper West (71), Upper East (62), Headquarter (55) Brong Ahafo(30). MAF is currently supporting the roll-out of the program in Brong Ahafo and Upper West Regions (mainly for RCH staff). The programme will be scale up with the support of other development partners especially for new managers who have just joined the service. This has been included in the PoW of the Ghana Health Service.
Activity 1.3 Train selected NGOs, RHMT and DDHS in	The activity was implemented together with the support and supervision activity. The sub district certification process will provide facilitative support as follow up to the sub district management training to ensure adherence to good management practice. The task to develop criteria to certify sub districts as BMCs capable of managing their resources, analyzing effective

	decision, to improve service delivery has been set up including the development of a certification checklist to trained sub district teams on management to upgrade status as managing BMCs.
Activity 1.4 Develop simplified financial manageme	The development of a sub district management manual as a management guide and training tool for strengthening sub-district management capacity was completed in 2010. As a follow up activity, the manual was printed in 2011. The manual has been used to train all the sub districts in the ten regions of Ghana. The trained participants comprised of the sub district management team and other key officers of the sub district.
Activity 1.5 Train sub district managers and CHOs	The sub district management trainings was aimed at building capacity in management including service delivery at the sub district level with the focus of scaling up interventions in which immunization and outreach services to the communities are key. The training created awareness for managers to be responsible in service delivery and their skills developed in the management capacity (Planning and budgeting, financial management, Auditing, Administration, Procurement and Service Delivery). A task team from the GHS headquarters including two external consultants was constituted to facilitate the training. At the Regional level, participants included selected managers from the Regional Health Directorate and District Health Directorate. The district level were made up of mostly District Directors, midwives, staff nurses while the sub-districts included the Sub-District Head, enrolled nurses, community health officers. Since 2011 to date, a total of 3,106 staff in the 10 regions have been trained namely Greater Accra (160) Central (330 managers), Western (365 managers), Eastern (573 managers) and Ashanti (409 managers) Volta (331Managers) Brong Ahafo (395) Northern (204 Managers) Upper East (210 Managers) Upper West (129 Managers). Sixty (60) participants from the civil society organization were nominated from the Coalition of NGOs in Health and trained in the sub district management manual covering all the six key sections in the manual. The manual continuous to be a useful guide during orientation of staff and also for the use of the staff in their day to day running of sub district level.
Objective 1.2	Strengthen District Health planning, prioritization and resource allocation
Activity 1.2.1 Technical assistance to update DHA	In 2013, the District Health Intervention Profile (DHIP) together with other existing planning tools were redefined and brought on board to enhance health planning in the sector. The Service continues to use the DHIP software developed since 2010 to guide its MTEF planning and budgeting process. Additionally, capacity was built in the use of the Bottleneck Analysis tool (BNA) to guide the strategic planning for 2015 – 2025.
Activity 1.2.2 Train Senior managers including nat	In 2013, further training using the BNA tools was carried out. The BNA was conducted across the country for the various levels (Headquarter, Regional and District levels). The BNA was employed as an evidence-based tool for a bottom up approach to the development of the GHS strategic plan for 2015-2025. All the BMCs developed tracers and identified key bottlenecks associated with them and strategies for improvement. The training comprised a series of meetings towards rolling out the bottleneck analysis training. The meeting provided participants with better understanding of the principles, steps, actions of BNA for National and Regional level planning monitoring of progress, provide participants with skills to use programme data to populate the tool, identify bottlenecks for National and Regional levels, identify geographical disparities for Regions, identify causes of bottlenecks as well as the strategies to solve them, develop capacity to plan based on BNA and also develop capacity for monitoring plans based on BNA. So far, the

	number of officers trained in the use of the BNA tool in the various regions includes Upper East Region (138 Officers), Ashanti (137 officers), UW (90 officers), Eastern (165 officers), Western Region (110 officers), Central Region (150 officers), Northern Region (135, Officers), Volta Region (137 Officers), Greater Accra Region (70 officers), Brong Ahafo (152 Officers). It is worthy to note that the training is being cascaded down to the sub district level with the support of UNICEF.
Objective 1.3	Strengthen Support & Supervision Systems
Activity 1.3.1 Train district, sub districts and N	The District and sub district levels supportive supervision visits were carried out as part of the integrated monitoring and supervision visits. The national and regional levels were supported to conduct supportive supervisory visits at the district and sub district level.
Activity 1.3.2 Provide fuel and stationery to dist	The HSS support strengthened the service delivery capacity of the sub-district with particular reference to newly created districts that needed support. Funds were disbursed to all 170 districts and sub-districts to support the provision of fuel and other logistics for supportive supervision in 2011. In 2013, funds were disbursed to the RHA, DHA and sub districts to support outreaches, growth promotion sessions and home visits. Special emphasis however, was given to the 42 newly created districts as an initial start up capital since most of these new districts were starving financially and needed support for the implementation of their activities. The funds that were allocated to the Districts were also used for the servicing of motorbikes and vehicles in the districts and sub districts to facilitate immunization activities. Funding were also disbursed in 2014 to all CHPS zones (the lowest level of service delivery) to enable them conduct outreach and home visits. The allocation was also to serve as a motivation for the CHPS zones to continue reporting their data in the DHIMS2 software.
Objective 2	Expand functional CHPS coverage to deliver essential services especially for MDG 4 and 5
Activity 2.1 Procure vehicles for sub districts	Through the HSS support, a number of vehicles have been purchased to strengthen National, Regional and District capacity to go on routine monitoring visits in the quest to improve the GHS service delivery mandate. The vehicles including 11 Toyota 4WDs and 30 Pickups were received and distributed to all levels, HQ, Regions and districts.
Activity 2.2 Procurement of Service delivery kits	Tender was publicly opened on 8th March 2013. The evaluation panel was constituted to evaluate the procurement of the 1,500 Service Delivery kits. The entity tender committee approved the report. Contract was then awarded. Currently, the 1500 service delivery kits have been procured and delivered to the central medical stores for distribution to the various sub district service in the regions. These delivery kits were distributed to the all the Regions, (Ashanti 170, Brong Ahafo 110, Central 100, Eastern 100, Greater Accra 150, Northern 100, Upper East 50, Upper West 40, Volta 80, Western 100). The Teaching hospitals in the country were also allocated some of the service delivery kits as follows: Korle bu 10, Komfo Anokye 10, Tamale 5 and Cape Coast 5. The remaining 47 kits were scheduled to be distributed in the first quarter of 2015 but this did not happen due to the fire outbreak at the central medical stores.
Objective 3	Strengthening sub-district Health Information Systems especially at the CHPS zone level using District Wide Information Management System (DWIMS)
Objective 3	Strengthening sub-district Health Information Systems especially at the CHPS zone level using District Wide Information Management System (DWIMS)

Activity 3.1 Procure PDA (Smart phones) for CHOs	The strategy to use mobile phones in capturing and reporting health service data at the community has been expanded to include laptops for the sub districts which is the supervisory level for the CHPS (who are receiving the phones), The Sene Smart phone EPI data capture initiative was initially implemented in three districts of Ghana (Asuogyaman, Kintampo North and Sene) and has now been scaled up with a centralized web based electronic register for immunization in Five regions at the district level only. This can be accessed with smartphones or personal PC and laptops. The aim is to use mobile technology to improve service delivery at the lowest level of service delivery – Community Based Health Planning and Services (CHPS) compounds to reduce the time Community Health Officers spend to generate monthly report on services, generate more accurate reports that can be used to make decisions by the CHO and the DHMT, improve the follow up of children/mothers registered for services, reduce the drop- out rate for immunization and safe motherhood services. The e-Register collects EPI data to ensure that every registered child completes his/her immunization. The Safe motherhood aspect of data collection including Antenatal Care, Supervised Delivery and Postnatal Care is now being thought through to be integrated.
Activity 3.2 Train CHOs in the use of PDA (Smart p	All 10 Regions have been trained in the use of PDA. The first batch of five regions were trained in 2013; Central (180), Volta (190), UER (100), NR (220) and UWR (110). A technical team from the Policy Planning Monitoring and Evaluation Division carried out five-regional based training for the district or municipal health administration on the e-Register and system after which the districts are expected to train all CHOs in their districts on the use of the e-Register. Ten officers from each districts were trained, officers trained at the district level included; District director of health services, Health information officers, Disease control officer, Nutrition officer, Public health, nurse, training coordinator and the regional nutrition and health information officer. The remaining Regions GAR, ER, WR, ASH, BAR were trained in 2014. As part of strengthening the sub district health systems support districts were supported to procure 13” laptops and internet modems for all their sub districts and these were made available during the training for the sub district management team. This enable the sub district staff to familiarize themselves with the basic user functions of the laptops and the modem. The focus and purpose of the training was to strengthen the capacity of the sub districts to capture electronic data at their level and also to be able to support the CHPs zone and the health centers in this regards. Five (5) to Ten (10) staff from each sub district was trained. Sixty eight (68) sub districts from the 12 districts in four (4) regions i.e. Volta, Central, Eastern and Brong Ahafo region participated in phase one of the GHS e-register system training. Two regions out of ten, Upper East and Upper West have trained all their sub districts and procured with modems and laptops to capture health service data at the sub district level and below. District level training has been done only for five out of ten regions additionally two region out of ten regions sub district have been trained. In all 212 lab tops and modem have been procure and delivered to the districts and sub district. The remaining sub district and district were trained and equipped in 2014.
Activity 3.3 Customise and Integrate PDA data into	Innovatively the PDA system has been upgraded to the use of Smart phones and mini laptops for capturing data using the GHS e-Register system. The e-Register system is to be expanded and integrated into the district health information management system (DHIMS2). Standardization of data elements and data sets of the two systems is being developed to allow the integration of the two systems The Health Service through the support of GAVI introduced two new vaccines, this needed to be incorporated into the system with

	the new EPI reporting template and also address the local base server issue which requires CHOs to travel to districts health directorate before their data could be uploaded onto the server. The new integrated web based immunization e-Register system has been developed to address this. This is hosted centrally for easy data access and entry from the sub district and facility level. Data can be entered using the smart phone with internet connection. The idea is that, the e-Register will be linked to all auxiliary services offered by the CHOs at the CHPS compound or at the health center. In 2014, the e-Register is now an extension of the DHIMS2 platform and is hosted on a separate instance using the facility registry in DHIMS2 to supports management, data collection, and analysis of transactional or disaggregated data. The new Child Health Records System e-register will be fed into DHIMS2, which will collate and generate the reports that are needed by health managers. Basic reports and line listing of registered clients can be generated by users.
Objective 4	Strengthening Information management, M&E and operational and implementation research
Activity 4.1 Undertake operational and implementat	Research has become an integral component of the documentation of the best practice of the HSS support. This is to enable the feedback to be incorporated in activities aligned in the HSS for improving the health information management and decision making process. Upper East Region has been identified as one of the key Regions that have shown best practices in the implementation of the GAVI supports. The Region has provided evidence-based documentation of their best practices in the GAVI implementation to enable other Regions and stakeholders learn from these practices. As indicated in the report, two initiatives were identified as unique, that if scaled up could potentially contribute to improvement in outputs and health outcomes. These two key programmes were 1. Digitization of community register and 2. Strengthening of sub-district financial management systems including ensuring that imprest funds get to the sub district level for service delivery.
Activity 4.2 Support national & regional level M&E	GHS has also instituted an integrated monitoring system. The system has been disseminated and operationalized at the various levels. This system brings staff of the various divisions of GHS Headquarters together to undertake monitoring and supportive supervision of the activities of the regions. Thus Activity 1.3.1 Train district, sub districts and NGOs in supportive supervision was implemented as part of the integrated monitoring and supervision activity. To ensure uniformity, an Integrated Monitoring Tool is used for this purpose. Each region is visited and assessed at least twice within the year. Headquarters develops a league table annually displaying the performance of all the regions at the end of the year. The areas assessed include, Immunization, Planning, Governance, Management and Access to Health Services, HMIS, Transport and Logistics Management, Finance and Audit, Human Resource, MNCH, Quality Assurance Emergency Care, Disease Surveillance. A number of trainings have been carried out for senior managers on the DHIMS2 to facilitate data entry, analysis and reporting on all indicators. Specialized trainings were organized weekly (every Monday afternoon) for managers on the DHIMS2. Desk officers at the headquarters (CHIM) have been assigned to each Region to look at the Regional data and provide weekly reports and feedback on the progress of all indicators of the Regions and Districts. The Desk officers also address challenges that are associated with the implementation of DHIMS2 at their respective assigned Regions.

	GAVI HSS funds are also used to support the routine monitoring and evaluation of the Service including the National, Regional and District performance reviews and senior managers meetings organized annually and biannually respectively.
Activity 4.3 Review and Evaluation of HSS support	The evaluation of GAVI HSS, ISS and CSO support to Ghana has been commissioned by the MoH/GHS to evaluate the relevance, effectiveness, efficiency and results of the GAVI supports to Ghana. The process started with the writing of the term of reference. The document was reviewed and the necessary correction was done to put the ToR in the right perspective for the activity to be implemented. The call for expression of interest had four local firms participating. Two were shortlisted and provided with RFP. The team has evaluated both the technical and financial proposals. Based on the quality cost base selection method as defined in the request for proposal; one of the service providers has been selected. A contract negotiation meeting was held to agree on critical issues before the signing of the contract. As per the procurement requirement, a report was submitted to the entity tender committee for approval. The committee has approved the contract hence a formal contract has been signed with the service provider. Currently the evaluation process is on going and the contractors have so far submitted an inception and interim report of the evaluation. The final report of the evaluation should be ready by April 2015. The result of the evaluation will provide useful lessons learnt and experience for Ghana, GAVI and other stakeholders to improve upon future funding support to Ghana and other countries. Again it will also allow the country, GAVI and the various national and international partners to learn from the experience and help to inform opportunities for improvement of future GAVI support to Ghana and other countries.

8.2.2 Explain why any activities have not been implemented, or have been modified, with references.

The Evaluation of HSS, ISS and CSO support is currently on-going and the report of the evaluation will be ready by end of April 2015. The process delayed due to administrative procedure in the service.

8.2.3 If GAVI HSS grant has been utilised to provide national health human resources incentives, how has the GAVI HSS grant been contributing to the implementation of national Human Resource policy or guidelines?

It is important to state that, HSS support has not been used to provide national health human resources incentives but has rather been used for health system strengthening activities in the Service. A major component of the funding has been used to train key managers at the district level in the bottleneck analysis which is evidence based, by this training, district have prepared their plans and also identify their various tracer intervention for identifying bottleneck, finding the causes of this bottleneck and developing strategies and solutions for these constraints. A key component of these health system activity is the training of the desk officers and key GHS staff in the DHIMS2 software as well training of district and sub district managers in the use of the SMART phones which has improved data capture monitoring and evaluation in the health information system in the service. It is now easier for national and regional managers to check data and report on district and regions who are not performing well in their operational activities. The funds were also used to build capacity in leadership and development through the Leadership and Development (LDP) trainings. Sub district managers were also trained in management in the areas of procurement, financial management, administration and service delivery.

8.3. General overview of targets achieved

Please complete **Table 8.3** for each indicator and objective outlined in the original approved proposal and decision letter. Please use the baseline values and targets for 2013 from your original HSS proposal.

Table 8.3: Progress on targets achieved

Name of Objective or	Baseline	Agreed target till end of	2014 Target						Data Source	Explanation if any targets

Indicator (Insert as many rows as necessary)			support in original HSS application								were not achieved
	Baseline value	Baseline source/date			2010	2011	2012	2013	2014		
1.2: Proportion of Regional and District Directors trained leadership and management	6.7	Training reports/2005	100	100	100%	100%	90%	100%	100%	Training report	The target set for the LDP training has been achieved. However, the service is still continuing the training in order to strengthen capacity of managers for improved service delivery.
1.2.1: Number of Health teams trained in team building	0	2007	138	100	43%	100%	100%	100%	100%	Training report	GHS has reprogrammed this activity and integrated it with training in supportive supervision.
1.2.2: Proportion of Districts using DHAP and MBB	12%	2007	100%	100%	100%	100%	100%	100%	100%	M&E Report	This activity has been implemented and completed.
2.2 Proportion of functional CHPS zones with full compliment of service delivery kits	11%		72%	72%	0%	100%	100%	100%	100%	CHPS M&E	The 1500 service delivery kits has now been procured and distribution to the various sub districts in the regions and the Teaching hospitals.
3.3 Number of CHOs using PDAs	7%	2007	500	100%	30	82	48			Training & Monitoring report	This activity has been implemented and completed.

8.4. Programme implementation in 2014

8.4.1. Please provide a narrative on major accomplishments in 2014, especially impacts on health service programmes, and how the HSS funds benefited the immunisation programme

The year 2014 marks the end of the last HSS support, which was slated for 2007 to 2013. It is worth noting that part of the remaining fund was used to support the development of the country's CMYP for immunization, which was ending in 2014. The cmyp has been developed and implementation is currently ongoing.

Additionally the contract for the commencement of the HSS evaluation was signed in 2014 and the process is currently on going, report of the evaluation will be ready by end of April 2015. Results of the evaluation will also allow the country, GAVI and the various national and international partners to learn from the experience and help to inform opportunities for improvement of future GAVI support to Ghana and other countries.

Upper East Region was supported to document best practices in the implementation of the GAVI HSS support. The report of the documentation has been submitted to GHS outlining some of the innovations and activities implemented which when scaled up could potentially contribute to improvement in outputs and outcomes particularly when embedded in the new GAVI funding platform.

In 2014, the e-Register is now an extension of the DHIMS2 platform and is hosted on a separate instance using the facility registry in DHIMS2 to supports management, data collection, and analysis of transactional or disaggregated data. The new Child Health Records System e-register will be fed into DHIMS2, which will collate and generate the reports that are needed by health managers. Basic reports and on line listing of registered clients can be generated by users.

8.4.2. Please describe problems encountered and solutions found or proposed to improve future performance of HSS funds.

Administrative procedures within the service have delay the process of undertaking the HSS, ISS and CSO evaluation. This happen because the service wanted to avoid any conflict of interest as far as the implementation of the evaluation was concern. In spite of the delay, the key management at the headquarters took keen interest in the activity and provided leadership right from the writing of the terms of reference to the assigning of the contract for the process to begin.

8.4.3. Please describe the exact arrangements at different levels for monitoring and evaluating GAVI funded HSS activities.

Financial monitoring and evaluation of GAVI funds is undertaken as an integral part of the overall health sector donor coordinated earmarked funds process. In this regard, the existing GHS financial monitoring and evaluation system architecture and software are used to capture and report on financial outlay with regards to the use of GAVI funds. Specifically financial reporting is done through the use of the ACCPAC software.

In terms of activities and performance indicators reporting at the various levels, the Ghana Health Service is currently using the DHIMS 2 as the official data repository for reporting on all health service aggregated data. All GHS staff at the National,Regional, and District and Sub districts levels can access this. The DHIM2 generates the Sector wide indicators aligned to health systems strengthening. Aside that there is an annual performance review where each level of service delivery organised mid year review and annual reviews. GAVI HSS funds are used to support the national level review and the observer teams that visit the district and regional performance reviews. These reviews provide an opportunity for all activities implemented with GAVI HSS funds to be reviewed as part of the other service delivery activities of the GHS.

8.4.4. Please outline to what extent the M&E is integrated with country systems (such as, for example, annual sector reviews). Please describe ways in which reporting on GAVI HSS funds can be more organization with existing reporting systems in your country. This could include using the relevant indicators agreed in the sector-wide approach in place of GAVI indicators.

An integrated M&E framework has been developed and disseminated to all levels (Regions and Districts) to guide these levels in their monitoring and evaluation activities.

In terms of systemic monitoring and evaluation of performance, the Common Management Arrangement outlines various arrangements for it's undertaken to which reporting on GAVI HSS funds are embodied. The following structures are specifically employed:

1. The inter-agency leadership committee set up to ensure the institutionalization of key leadership structures across MoH and Agencies. Members of this committee meet quarterly to deliberate on strategic direction relating to health policies.

2. Sector Working Groups(SWG) deals with crosscutting sectoral issues, share information and agree on sectoral operational directions. This group meets monthly and is chaired by theChief Director of the Ministry.

3. Quarterly Business Meetings held in April/May to review sector performance appraisal, October/November to discuss key performance indicators and August to review performance from the beginning of the year.

4. Since 2012, AnnualHealth Summits (Sector Reviews) are organised to discuss annual performance reviews and development of sector programmes for the coming year. Till 2012 twoAnnual Health Summits are organized within the year to discuss annual performance reviews and development of sector programmes for the coming year. These summits include participation by all stakeholders including CSOs and the self-financing private sectors.

5. Decentralized level dialogue; a sector dialogue that take place at the decentralized levels and coordinated by the Ghana Health Service and the Ministry of Health aimed at planning effectively for the delivery of district health interventions.

At the Ghana Health Service level, 3 Senior Managers Meetings are organized within the year. The first, which is organized in April, is used to appraise the performance of the previous year, the second SMM is organised inJuly to detail out policies and priorities for planning and the third SMM,which is held in November, discusses the budget for the next year and the outlook. These meetings also provide a forum for the services to discuss issues of concern relating to service delivery. In all these various levels of performance appraisal are conducted with all stakeholders in the health sector including CSOs.

8.4.5. Please specify the participation of key stakeholders in the implementation of the HSS proposal (including the EPI Programme and Civil Society Organisations). This should include organisation type, name and implementation function.

The Ghana Coalition of NGOs in Health (CSOs) and the EPI Programme were involved in the implementation of the HSS Support. The coordinating body of the CSOs was provided with funds to enable them carry out communication and social mobilization activities to create awareness on immunization in hard to reach communities. For this reason, three CSOs were funded to provide this support to selected communities in three districts from Central and Volta Regions. Through their efforts, immunization coverage levels in these districts improved. CSOs also participated in health summits and ICC meetings where issues about immunization in particular were discussed.

Every year, the CSO have been involved in various reviews of annual health summits of the Ministry of Health. In the Health Summits,some of the CSOs work as facilitators of the summit and also contribute to innovative strategies for improving the health service delivery.

In the delivery of service, these organizations have, participated and supported health care. GHS has taken key interest in building capacity ofCSO managers in health by providing training in health activities.

The CSOs on their part organise quarterly review meetings which is attended by Expanded Programme on Immunisation (EPI) team, members of the Policy Planning Monitoring andEvaluation PPMED team, WHO and the Coalition of NGOs in Health. The meeting serves as a platform to discuss activities of the CSOs and update stakeholders on what they have been doing on the field. In the meeting members discuss the joint monitoring activities of the CSOs and all the other health stakeholders.

8.4.6. Please describe the participation of Civil Society Organisations in the implementation of the HSS proposal. Please provide names of organisations, type of activities and funding provided to these organisations from the HSS funding.

In the year under review, the CSO participated in a number of activities involving the implementation of the HSS. The organisation supported the service in the drafting of the CMYP, which has currently been submitted to GAVI. Additionally the CSOs were part of the process of drafting the TOR for the GAVI HSS, ISS and CSO evaluation, which is now currently on-going. In the implementation of the HSS, ISS and CSO Evaluation, the CSO will be involved in the monitoring of the service provider to assess whether the assigned regions have been visited as stated in the evaluation TOR. Within the period of implementation of the HSS, ISS and CSO over the years, the CSOs have been much involved in the various health sector policy engagement processes such as the annual performance reviews, senior managers meetings,health summits, health sector working coordinating groups and Interagency coordinating committee meetings. As part of promoting stakeholder (especiallyCivil Society Organisations), participation and support in 2012, GHS organised training in health management for selected CSO managers across the country. Ghana has best practises as far as relationship with CSO's is concern this has attracted counties in the sub region visiting the country to learn from our experience.

In term of collaboration, the CSO (Ghana Coalition ofNGOs in Health) were supported to finalize their strategic plan. They also involve the service in their district and sub district monitoring activities.

8.4.7. Please describe the management of HSS funds and include the following:

- Whether the management of HSS funds has been effective
- Constraints to internal fund disbursement, if any
- Actions taken to address any issues and to improve management
- Any changes to management processes in the coming year

The HSS budget is included in the annual health sector plan and annual work plan of the implementing agencies. Financial management for the HSS funds has greatly improved in terms of disbursement and reporting of funds for the HSS activities. The improvement involves improvement in the accounting reporting

system through the use of electronic system for reporting(ACCPAC and the introduction of GIFMIS). The procurement procedure, which was a major challenge, has significantly improved with the installation of procurement software for the department.

In terms of structure, the GHS HeadquartersPPMED still continuous to have oversight and coordinating responsibility for the management of HSS funds and ensuring that activities outlined in the proposal are carried out to achieve the mandate of the Service as well as the outlined objectives in the HSS proposal.

There have not been any constraints in internal funds disbursement of the HSS funds for the implementation of activities. There are no unforeseen changes in the management processes in the coming year.

Although there will not be any significant change in the structural and managerial processes of the HSS funds, the introduction of GIFMIS the government accounting software for public sector in Ghana has improve the overall reporting of the funds as an integral part of financial reports to the MoH and MoFEP.

8.5. Planned HSS activities for 2015

Please use **Table 8.5** to provide information on progress on activities in 2015. If you are proposing changes to your activities and budget in 2015 please explain these changes in the table below and provide explanations for these changes.

Table 8.5: Planned activities for 2015

Major Activities (insert as many rows as necessary)	**Planned Activity for 2015**	**Original budget for 2015** (as approved in the HSS proposal or as adjusted during past annual progress reviews)	**2015 actual expenditure** (as at April 2015)	**Revised activity** (if relevant)	**Explanation for proposed changes to activities or budget** (if relevant)	**Revised budget for 2015** (if relevant)
		0	0			0

8.6. Planned HSS activities for 2016

Please use **Table 8.6** to outline planned activities for 2016. If you are proposing changes to your activities and budget please explain these changes in the table below and provide explanations for each change so that the IRC can recommend for approval the revised budget and activities.

Please note that if the change in budget is greater than 15% of the approved allocation for the specific activity in that financial year, these proposed changes must be submitted for IRC approval with the evidence for requested changes

Table 8.6: Planned HSS Activities for 2016

Major Activities (insert as many rows as necessary)	**Planned Activity for 2016**	**Original budget for 2016** (as approved in the HSS proposal or as adjusted during past annual progress reviews)	**Revised activity** (if relevant)	**Explanation for proposed changes to activities or budget** (if relevant)	**Revised budget for 2016** (if relevant)
		0			

8.7. Revised indicators in case of reprogramming

Countries planning to submit reprogramming requests may do so any time of the year. Please request the reprogramming guidelines by contacting your Country Responsible Officer at GAVI or by emailing gavihss@gavi.org

8.8. Other sources of funding for HSS

If other donors are contributing to the achievement of the country's objectives as outlined in the GAVI HSS proposal, please outline the amount and links to inputs being reported on:

Table 8.8: Sources of HSS funds in your country

Donor	Amount in US$	Duration of support	Type of activities funded

8.8.1. Is GAVI's HSS support reported on the national health sector budget? **Not selected**

8.9. Reporting on the HSS grant

8.9.1. Please list the **main** sources of information used in this HSS report and outline the following:

- How information was validated at country level prior to its submission to the GAVI Alliance.
- Any important issues raised in terms of accuracy or validity of information (especially financial information and the values of indicators) and how these were dealt with or resolved.

Table 8.9.1: Data sources

Data sources used in this report	How information was validated	Problems experienced, if any
PPMED 2013 & 2014 Divisional Report	Validated with meeting reports of various activities carried out by the Division	
Regional Reports	It was validated with information from the DHIMS2 and also with the Regional presentations at the various Regional Performance review meetings.	
Statement of Accounts from GHS Finance Division	Statement of Accounts from GHS Finance Division	

8.9.2. Please describe any difficulties experienced in putting this report together that you would like the GAVI Alliance and IRC to be aware of. This information will be used to improve the reporting process.

This report represents activities implemented using the Health System Strengthening fund for the period of 2007 to 2014. Report of the new HSS Cash Support 2014 to 2018 will be reported in June as part of the Joint Appraisal for Ghana. The major challenge faced in writing this report was whether to report for the new funding as part of this report since the new funding was received in the latter part of 2014 (August 2014).

8.9.3. How many times did the Health Sector Coordinating Committee (HSCC) meet in 2014?

Please attach:

1. The minutes from the HSCC meetings in 2015 endorsing this report **(Document Number: 6)**
2. The latest Health Sector Review report **(Document Number: 22)**

9. Strengthened Involvement of Civil Society Organisations (CSOs) : Type A and Type B

9.1. TYPE A: Support to strengthen coordination and representation of CSOs

Ghana **has NOT received GAVI TYPE A CSO support**

Ghana is not reporting on GAVI TYPE A CSO support for 2014

9.2. TYPE B: Support for CSOs to help implement the GAVI HSS proposal or cMYP

This section is to be completed by countries that have received GAVI TYPE B CSO support*1*

Please list any abbreviations and acronyms that are used in this report below:

AAD – Adaklu Anyigbe District<?xml:namespace prefix = "o" />

ARH – Alliance for Reproductive Health

BCC – Behavioral Change Communication

CBHVs – Community Based Health Volunteers

CCM – Country Coordinating Mechanism

CHNs – Community Health Nurses

CHPs- Community Based Health Planning Service

cMYP – comprehensive Multi-year Plan

CRS – Catholic Relief Services

CSOs - Civil Society Organisations

CWC – Child Welfare Clinics

DHMT – District Health Management Teams

EPI – Expanded Program on Immunisation

FP – Family Planning

FUGI – Future Generations International

GAVI – Global Alliance forVaccines and Immunisation

GCNH – Ghana Coalition ofNGOs in Health

GHANET – Ghana HIV & AIDS Network

GHS – Ghana Health Service

HFFG – Hope for Future Generations

HSS – Health System Strengthening

HSFP – Health System Strengthening Platform

ICC – Inter Agency Coordinating Committee

IE&C – Information,Education and Communication

M&E – Monitoring and Evaluation

MOH – Ministry of Health

NID – National Immunisation Day

RCH - Reproductive Child Health

STSF – Seek to Save Foundation

THLDD – Twifo Hemang Lower Denkyira

UNICEF – United Nations International Children's Emergency Fund

WHO – World Health Organisation

9.2.1. **Programme implementation**

Briefly describe progress with the implementation of the planned activities. Please specify how they have supported the implementation of the GAVI HSS proposal or cMYP (refer to your proposal). State the key successes that have been achieved in this period of GAVI Alliance support to CSOs.

The Ghana Coalition of NGOs in Health (GCNH) in 2011 received Type B Window support from GAVI through MOH/GHS to contribute to promoting immunization in Ghana through the involvement of CSOs, in line with the country's comprehensive multi-year plan (cMYP) for immunization. The specific goals under theType B Window support were to: Increase immunization coverage in children under 5 years of age and access to RCH services in 100 hard-to-reach communities in a district each in Central and Volta regions; to strengthen the capacity of indigenous/local organized groups and structures to monitor and manage the community's health. This Window support ended in June, 2013. GCNH received Bridge funding from GAVI Type B Window support for one year. This was to enable the GCNH to continue to offer support for immunization activities in the two districts whilst waiting for the new HSS cash support.

The gains made in immunization through the implementation of the Type B Window Support provided more information and room for expansion and inclusion of more hard to reach districts in the HSS support application. The successes chalked by the GCNH has resulted in the expansion of support to 20 hard to reach districts and slum communities in the new HSS cash support. The lessons learnt and best practices identified will guide the implementation of this new support.

The progress made as per the objectives in the proposal are outlined below;

1. **To identify and map 100 hard-to-reach communities in 12 months**

The GCNH in collaboration with the GHS/EPI identified 100 hard-to-reach

communities in two regions. This was done through extensive desk review of immunization data and other relevant information such as geographical access. Forty (40) of these hard-to-reach communities were identified in Twifo Hemang Lower Denkyira District in the Central Region whilst sixty (60) communities were selected from Adaklu-Anyibge in Volta Region.

Based on the locations of these 100 hard-to-reach communities, three NGOs were selected to work in these communities. They are Hope for Future Generations (HFFG), Future Generations International (FUGI) and Seek to Save Foundation (STSF). HFFG was assigned to Twifo Hemang Lower Denkyira District in the Central Region. FUGI and STSF worked in Volta Region.

2. **To strengthen working relationship with existing community groups, development partners and volunteers in 2 to 18 months<?xml:namespace prefix = "o" />**

A National Steering committee was established which has been providing technical support to implementing organizations to facilitate smooth implementation of the project.The committee has also been providing recommendations for effective engagement of duty bearers for increased resources towards improvement of immunization coverage. This committee is made up of members from WHO, MOH, GHS, EPI, CSOs and the media. The committee do not only advice on issues pertaining to the GCNH but also make recommendations to the GHS/EPI on issues related to service delivery in general and immunizations in particular. For instance, the committee recommended to the GHS to procure stronger motorbikes for fieldwork as those on the field are not suitable for the terrain and easily break down. The GCNH actively participates in Health Summit and Senior Managers Meeting of the health sector. At the programme level, the GCNH participates in the national level planning meetings for immunization campaigns. The GCNH is an active member of the Communication and Social Mobilization Sub-committee of the National Campaign Planning Committee as well as New Vaccines Application Committee. The GCNH also actively participates in the Inter-Agency Coordinating Committee (ICC) of the EPI Programme.

There is strong collaboration between the Coalition and development partners, particularly, WHO, UNICEF and USAID.

At the regional level, the Coalition has a representation in the ten (10) administrative regions. The regional executives are responsible for the day to day running of activities on behalf of the Coalition. The executives at the regional level collaborate with the Regional Health Directorate of the Ghana Health Service in the planning and implementation of activities. They actively participate and contribute to discussions during half-year and

annual performance review meetings of regions. Progress of activities being implemented by the Coalition are also presented and discussed at such meetings.

There is partnership between the Coalition and the district level in terms of implementation of health related projects. Members of the GCNH are present in 201 (93.1%) out of the 216 districts in the country. In the implementation of health related projects, the members collaborate with District Health Directorates, Ghana Education Service, District Assemblies, the media and others NGOs. At the district health directorates, member CSOs participates in planning and review meetings. During supplementary immunization activities such as national immunization days (NIDs) against polio e.t.c, CSOs contribute in the development of communication and social mobilization strategies. Being members of the Social Mobilization Sub-committee, they advocate and provide for financial and logistical support during campaigns. For instance, two motorbikes that were used to support project implementation in two districts were donated to the districts by the NGOs (HFFG) after completion of the project. CSOs teamup with district health directorates to provide joint monitoring and support visits to sub-districts and health facilities.

At the community level, the Coalition, together with partners from the health directorate, meets regularly with chiefs, queen mothers, opinion leaders, organized community groups, faith-based organizations (FBOs) and other community-based organizations (CBOs) in the planning of activities, mobilization and implementation. Such activities include community mobilization, focus group discussions, durbars, health education and sensitization etc. Members of the coalition support immunization activities at the community level especially in hard-to-reach communities. This includes transportation of community health nurses to outreach sites, provision of snack/lunch to nurses, organization of immunization sites, mobilization of community members to the immunization sites etc. For instance, FUGI donated 22 chairs and 66 tables for an outreach site.

3**. To create demand for immunization and RCH services in 100 hard-to-reach communities in the selected districts in 18 months**

The GCNH, through implementing CSOs, has heightened awareness on immunization in particular and reproductive and child health services as a whole in the 100 hard-to-reach communities. Volunteers of the coalition move from house-to-house within their assigned communities and educate mothers and caregivers about immunization and RCH services. During such visits, the immunization records of children are reviewed and defaulters are sent to the vaccination site for vaccination. A number of social mobilization activities were organized by implementing NGOs in these communities to create demand. Regular meetings were held with mother support groups to discuss issues relating to the health of children and mothers. Durbas were organized in most of these communities to sensitize the populates including opinion leaders on the benefits of immunization and the need to complete the immunization schedule. The

durbas were also used to advocate for ownership of health interventions by the communities. To bring men on board, games (particularly football matches) were organized in these communities as well. Health talks were delivered during these games to sensitize them on the health of children and for them to ensure their children receive all vaccinations.

Sensitization activities were not limited to immunization but also included antenatal care, postnatal care, skilled delivery, family planning as well as reproductive Health issues among young people.

Other strategies included organization of weekly community durbars, fun games, video shows, Drama, church and mosque outreaches which brought the communities together for education on immunisation.

4.To facilitate the delivery of outreach services to the 100 hard-to-reach communities in the selected districts from 3 to 18 months

Baseline information gathered before the implementation of this project indicated that some outreach sessions were either cancelled or postponed due to lack of transport or funds for transport. Some vaccination sites were also not very conducive as mothers had to stand and wait to be served. In collaboration with district health officers and community leaders, tables and chairs were provided at outreach sites. New outreach sites were also opened to bring immunization services to the door step of caregivers. The implementing NGOs also supported severally in transporting community health nurses to outreach sites.

During outreach sessions volunteers of the coalition move from house-to-house to mobilize caregivers. At the vaccination center, sensitization messages are also given to these caregivers.

Also, implementing NGOS were part of quarterly district Health management meetings to update them periodically on the progress of the project and also solicit their support. Joint workplans were developed at district levels with the DHMT for outreach activities.

5. To create awareness and build capacity in advocacy, community monitoring of community stakeholders (chiefs,opinion leaders, queen mothers, Assembly men, etc) in 100 hard to reach communities in the AAD and THLD districts

In all selected communities, trained advocates (chiefs, queen mothers, Mother support groups, daddy clubs and opinion leaders) were retrained to continue as community advocates and members of the oversight committees. Their role is to monitor project implementation for improved health delivery at the community level. The objective of the refresher training was to remind participants of the key messages of child immunisation and reproductive and child health issues. The training was also used to review the project in respective communities and devise effective strategies for getting the support of these authorities. As a result of this, the traditional leaders reaffirmed their support to continue to mobilize mothers for child welfare clinics and monitor activities of the CBHVs.

6. To strengthen the capacity of 100 community volunteers in advocacy, I.E&C and vital data collection system in AAD and THLD districts

After the identification and mapping of 100 hard-to-reach communities and the subsequent selection of implementing CSOs to work in these communities, 122 volunteer were recruited and trained in these communities. The training agenda included; 1. Advocacy for support for immunization activities, 2. sensitization of community members, 3. delivery of information on immunization, 4. RCH and 5. data collection. The training equipped the volunteers to carry out community mobilization and to effectively collect community level data.

To facilitate the work of these community volunteers, 1000 IE&C materials particularly on the importance of child immunizations were printed and distributed. The IE&C materials were used to guide and generate discussions with caregivers and pregnant women at antenatal visits and CWC.

7. To set up a standardized system to identify and document pregnancies, deliveries, neonatal, infant and maternal deaths

As part of project implementation, a community register has been developed in consultation with the Ghana Health Service to capture vital health events at the community level. The register is used by trained volunteers to capture records of pregnant women and deliveries. It is also used to record service data such as neonatal, infants and maternal deaths. Additionally, the register is used to document vaccinations and trace defaulters. These registers are verified and signed by M&E officers.

Please indicate any major problems (including delays in implementation), and how these have been overcome. Please also identify the lead organisation responsible for managing the grant implementation (and if this has changed from the proposal), the role of the HSCC (or equivalent).

The lead organization for managing the grant implementation is Ghana Coalition of NGOs in Health and this has not changed. <?xml:namespace prefix = "o" />

Major problems encountered during this period are:

- The dilapidated nature of some roads in the district compounds makes it difficult in getting to the hard to reach communities. To overcome this, project staff used motorbikes for portions of road that are a bit motorable and had to continue on foot in order to access some communities.
- High volunteer attrition and apathy on the part of some volunteers. This was mitigated by conducting periodic recruitment and training.
- Postponement of outreach activities due to breakdown of GHS vehicle in

Adaklu District. CSOs supported by using project motorbikes to convey CHNs to outreach centers.

- Unwillingness of some CHNs to ride motorbikes out of fear. These nurses were helped to overcome this fear. Riders were also hired to convey nurses to outreach sites.
- Inadequate and non-functional equipment to support child health services (refrigerators, vaccine carriers, weighing scale). This was reported at the ICC meeting of the GHS and steps are being taken to procure more equipment.
- Relocation of parents of children resulted in high defaulter rates in the registers. As a result of this, a column has been created to gather information on such caregivers so it could be given to health officers in their new communities.
- Due to weak signals from communication networks, CBHVs could not always be reached with vital information. Project staff had to go to these communities to deliver information.

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<!--[endif]-->

Please state whether the GAVI Alliance Type B support to CSOs has resulted in a change in the way that CSOs interact with the Ministry of Health, and or / how CSOs interact with each other.

GCNH has been working very closely with Ministry of Health, Ghana Health Service and other CSOs. The Coalition is seen as a key partner of the health sector. There is high recognition of the coalition at the Ministry of Health and its agencies including the Ghana Health Service. The coalition participates in health summits and partners meetings which are key activities on the calendar of the health sector.

The Ghana Coalition of NGOs in Health has strong relationship with other platforms and networks such as the Stop TB partnership, World Vision,Coalition of NGOs in Malaria, Essential Services Platform, GHANET, Alliance for Reproductive Health (ARH) on matters of common interest. We undertake joint advocacy activities, we also organise Annual Civil Society Health Fora for sharing of information and best practices as well as the development of strategies. GCNH has worked effectively with these platforms and networks to ensure MOH and other policymakers engage CSO throughout the HSFP processes to address the constraints in immunisation and other health areas. GCNH strengthened the capacity of its members in lobbying skills and network building to effectively

participate in the various health systems planning platforms to move intentions and objectives to real deliverables that ultimately brings about real change at where the changes are most desired.

Please outline whether the support has led to a change in the level and type of involvement by CSOs in immunisation and health systems strengthening (give the current number and names of CSOs involved, and the initial number and names of CSOs).

The support has led to a change in the level and type of involvement by CSOs in immunization and health systems strengthening at all levels of service delivery. Prior to the Gavi CSO support, few CSOs were involved in immunization activities. The membership of the coalition has increased to over 400 CSOs. This has resulted in an increased in the number of CSOs involved in immunization activities at the operational level. The coalition is also a member of the highest decision making body for immunizations in Ghana, the ICC. In terms of service delivery, CSOs are tasked to create demand for immunization by heightening awareness. Joint monitoring visits have also been organized with GHS both at the national, regional and districts levels to hard-to-reach communities in the implementing districts.

With regards to health systems strengthening, the coalition plays a role in the development of HSS proposals, budgets and also participates in review and partners meetings. In consultation with regional and district health authorities, CSOs are deployed to work in deprived districts and communities.

Please outline any impact of the delayed disbursement of funds may have had on implementation and the need for any other support.

Late disbursement of funds impacted negatively on the implementation of activities. Specifically, the bridge funding which was expected in 2013 was received in June 2014. As a result, activities which were outlined for the 1st Quarter of the year under review had to be shifted to the middle of the year. As a result, implementing CSOs were put under pressure to carry out all activities as outlined in the proposal within a short period of time.

The current cash support has an allocation for CSOs to implement planned activities in 20 hard to reach districts. However, the CSOs have the capacity to deliver immunization services in 25 additional low performing and hard to reach districts. Hence, additional funding will be required to support immunization programme in this 25 low coverage districts.

Please give the names of the CSOs that have been supported so far with GAVI Alliance Type B CSO support and the type of organisation. Please state if were previously involved in immunisation and / or health systems strengthening activities, and their relationship with the Ministry of Health.

For each CSO, please indicate the major activities that have been undertaken, and the outcomes that have been achieved as a result. Please refer to the expected outcomes listed in the proposal.

Table 9.2.1a: Outcomes of CSOs activities

Name of CSO (and type of organisation)	Previous involvement in immunisation / HSS	GAVI supported activities undertaken in 2014	Outcomes achieved
Future Generations International (FUGI)	GAVI Project in Adaklu District	• Participation in NIDs, Measles and Rubella Campaign • Regional and district stakeholders meeting • Collaborate with GHS staff in Outreach activities to30 communities, • Community Leadership Educated on "Community Ownership", and guided to form "Oversight Committees" to supervise and motivate Volunteers, , Facilitate and participate in Outreach activities and BCC/ IEC in 30 Project Communities, Develop uniform immunization data register for CBHVs & CSOs, • Monitor immunization data collection by CBHVs, Undertake Supportive Participation in Monthly Outreach Activities and BCC/IEC in Communities, • Design and discuss Composite Community Register with Key Stakeholders (WHO, GHS, Oversight Committee, • Organize Refresher Training for CBHVs and Health Facilities Nurses.	• Successful Stakeholders Meeting with all levels for technical support determined, Awareness of the importance of Child Immunization and attendance at ANCs by pregnant women increased in Project communities as a result of GAVI/GHS/FUGI Project. • Compilation of child immunization data by CVs and Health Centre • Importance of community environmental sanitation and hygiene, to the welfare of children and well-being of community members being promoted by Project Staff, The literacy level, commitment of the Health Volunteers, and community ownership of the Immunization and RCH Services, highlighted for improvement
Hope for Future Generations	Implemented first phase of GAVI Project in the Twifo Hemang Lower Denkyira District	• Procurement of equipment • Participation in 2 GHS stakeholders meeting to discuss outcome and sustainability at the district level • Participation in National steering committee meeting • Organization of a regional steering committee meeting • Organized community refresher and review trainings with traditional and opinion leaders • Development and printing of IE & C materials for outreach activities on EPI and RCH services • Quarterly community health durbars • Monthly community outreach activities (video shows, drama, church and mosque outreaches) • Participation in NID and Measles and Rubella campaign • Annual community volunteer refresher and review training • Training of field staff on M&E tool • Facilitation and participation in Child welfare clinics	• Renewed commitment for the project from the GHS • DHMT and project staff agreed on ways to improve on their collaboration on how to provide accessible healthcare services to hard to reach communities • GHS agreed to equip DMHT with stronger motorbikes • CHPS zones heads were encouraged to revive the management teams and to monitor activities and volunteers in their zones and provide feedback to directorate • Traditional leaders ready to support in cash and in kind. Traditional leaders pledged their support by agreeing to continue to mobilize mothers for CWC and monitor volunteers • Over 5000 people were educated on child immunizations, Antenatal care, Postnatal care, skilled delivery and family planning Dispelled of misconceptions of family planning • Male representation and involvement in the talks was high • Traditional leaders advocate the need to access immunizations and RCH services and gave testimonies to buttress their submissions • Patronage of CWC increased, indicating and increased awareness of the importance of immunizations among community members. • 17,763 children between 0 and 59 months were given the OPV vaccine during the NIDs as against the target of 16, 163. This represents a

			coverage of 109.90% • Identification of CBHVs who are active and inactive • Referral of minor ailments detected to nearest health facility
Seek to Save Foundation	GAVI project in Agortime-Ziope District	• Participate in NID, Measles and Rubella Campaign • Review and update of standardized system to identify and document pregnancies, deliveries, neonatal, infant, maternal deaths and defaulting mothers • Organised biannual review meetings with community volunteers • Biannual district stakeholder meeting to discuss project outcomes and sustainability strategies • Organise refresher training for Community Health nurses on EPI • Undertake monthly community outreach activities in the 30 communities • Conduct monthly monitoring and evaluation of project • Organized Biannual community meeting with traditional leaders and community volunteers in selected communities • Orgnised biannual community durbars • Developed and printed IE&C material for immunization services	• 1252 children were given oral Polio Vaccine whilst another 1135 were given Vitamin A during the NID in the Adaklu district • 60 copies of community EPI records were developed and distributed to communities for EPI data collection on antigens basis • 52 community volunteers capacity enhanced for immunization services • Stakeholders pledged their support by mobilizing the community for immunization services • Interest in community leaderships renewed • Strong mobilization by GHS and volunteers • A total of 895 children immunized from 30 communities

Please list the CSOs that have not yet been funded, but are due to receive support in 2014/2015, with the expected activities and related outcomes. Please indicate the year you expect support to start. Please state if are currently involved in immunisation and / or health systems strengthening.

Please also indicate the new activities to be undertaken by those CSOs already supported.

Table 9.2.1b: Planned activities and expected outcomes for 2014/2015

Name of CSO (and type of organisation)	Current involvement in immunisation / HSS	GAVI supported activities due in 2014/2015	Expected outcomes
Ghana Coalition of NGOs in Health	Lead Organization	Monitoring and documentation of best practices	Best practices documented and shared

9.2.2. **Future of CSO involvement to health systems, health sector planning and immunisation**

Please describe CSO involvement to future health systems planning and implementation as well as CSO involvement to immunisation related activities. Provide rationale and summary of plans of CSO engagement to such processes including funding options and figures if available.

If the country is planning for HSFP, please describe CSO engagement to the process.

CSOs will be involved in future health systems strengthening activities, health sector planning and immunization. As already indicated, the coalition participates in health summit and planning meetings of the health sector. The coalition will continue to actively participate and contribute to this important discourse.

The coalition will participate in meetings of the health sector working group as well as any other planning and decision making meeting which the coalition can make inputs. The coalition was actively involved in the development of the HSS proposal. The coalition will also actively

participate in review of activities in the HSS cash support as well as the preparation of Gavi Annual Progress Reports in collaboration with the Ghana Health Service.

With regards to immunizations, the coalition will continuously participate in ICC meetings, planning meetings for supplemental immunization activities (SIAs)/national immunization days (NIDs) and also serve on the Advocacy and Social Mobilization Sub-committee of the immunization programme.

At the community level, CSOs will continue to use different strategies to stimulate demand for immunisation services in hard to reach communities and facilitate outreached services in the 20 low performing districts outlined in the HSS cash support.

<!--[endif]--><?xml:namespace prefix = "o" />

9.2.3. Please provide names, representatives and contact information of the CSOs involved to the implementation.

Gabriel Gbiel Benarkuu<?xml:namespace prefix = "o" />

The Chairman

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<!--[if !supportLineBreakNewLine]-->
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9.2.4. **Receipt and expenditure of CSO Type B funds**

Please ensure that the figures reported below are consistent with financial reports and/or audit reports submitted for CSO Type B funds for the 2014 year

	Amount US$	Amount local currency
Funds received during 2014 *(A)*	382,000	1,061,960
Remaining funds (carry over) from 2013 *(B)*	438	1,217
Total funds available in 2014 *(C=A+B)*	382,438	1,063,177
Total Expenditures in 2014 *(D)*	375,796	1,044,712
Balance carried over to 2015 *(E=C-D)*	6,642	18,465

Is GAVI's CSO Type B support reported on the national health sector budget? **Yes**

Briefly describe the financial management arrangements and process used for your CSO Type B funds. Indicate whether CSO Type B funds have been included in national health sector plans and budgets. Report also on any problems that have been encountered involving the use of CSO Type B funds, such as delays in availability of funds for programme use.

Please include details on: the type of bank account(s) used (commercial versus government accounts); how budgets are approved; how funds are channelled to the sub-national levels; financial reporting arrangements at both the sub-national and national levels; and the overall role of the HSCC in this process.

Funds are transferred from the Ghana Health Service to the Coalition's accounts. GCNH signs contract with implementing NGOs based on the number of communities they are covering and their approved work plans. The monies are transferred in tranches upon submission of quarterly reports. GCNH undertakes periodic financial and technical monitoring visits to the implementing NGOs to assess status implementation of activities. The final transfer is done upon the submission of final technical and financial report.<?xml:namespace prefix = "o" />

Detailed expenditure of CSO Type B funds during the 2014 calendar year

Please attach a detailed financial statement for the use of CSO Type B funds during the 2014 calendar year **(Document Number 24)**. Financial statements should be signed by the principal officer in charge of the

management of CSO type B funds.

Has an external audit been conducted? Yes

External audit reports for CSO Type B programmes are due to the GAVI Secretariat six months following the close of your governments fiscal year. If an external audit report is available during your governments most recent fiscal year, this must also be attached (Document Number 25).

9.2.5. **Monitoring and Evaluation**

Please give details of the indicators that are being used to monitor performance; outline progress in the last year (baseline value and current status), and the targets (with dates for achievement).

These indicators will be in the CSO application and reflect the cMYP and / or GAVI HSS proposal.

Table 9.2.5: Progress of CSOs project implementation

Activity / outcome	Indicator	Data source	Baseline value and date	Current status	Date recorded	Target	Date for target
Conduct a baseline survey	Baseline report	Baseline survey, 2012	ND	100%	June 2013	100	July 2014
EPI Outreach activities in 100 communities	No. of outreaches conducted	GCNH Annual Report - 2014	April 2012	100%	June 2013	100	July 2014
Organise quarterly community health durbar	No. of durbas held	GCNH Annual Report - 2014	April 2012	100%	June 2013	100	July 2014
Organize quarterly community meetings	No. community meetings held	GCNH Annual Report - 2014	April 2012	100%	June 2013	100	July 2014
Quarterly stakeholder meeting	No. of stakeholder meeting held	GCNH Annual Report - 2014	April 2012	100%	June 2013	100	July 2014
Reach 100 Hard to reach communities	No. communities of communities reached	GCNH Annual Report - 2014	April 2012	100%	June 2013	100	July 2014
Set up standardized data collection system	Community register	CSO Platform for Immun. Quarter meeting report	April 2012	100%	June 2013	100	July 2014
Train CBHVs to undertake BCC/IEC on EPI	No. of CBHV trained	GCNH Annual Report - 2014	April 2012	100%	June 2013	100	July 2014
Train Tradtional Authorities (TAs) as advocate for	No. of TAs trained	GCNH Annual Report - 2014	April 2012	100%	June 2013	100	July 2014

Planned activities :

Please give details of the mechanisms that are being used to monitor these indicators, including the role of beneficiaries in monitoring the progress of activities, and how often this occurs. Indicate any problems experienced in measuring the indicators, and any changes proposed.

Monitoring has been a critical component of this project since its inception.This involves stakeholders at the national, regional and community levels. At the national level, the National Steering committee, made up of MOH/GHS, WHO, UNICEF, NGOs and the media, meet every quarter to plan activities of NGOs at the community level. The committee reviews and provides recommendations on the tools to be used to monitor

progress of indicators. Joint monitoring at all levels by GHS and community leadership were done periodically to provide support to the implementing NGOs. Communities were empowered to monitor NGO activities and the work of volunteers. Community leaders gave periodic reports of the activities of volunteers and GHS at community durbars. At the community level, established oversight committees and trained traditional authorities will continue to monitor the work of community volunteers and also continue to play their role as advocates for immunization services.

The Evaluation of Gavi HSS activities in Ghana which was recently commissioned by the Ghana Health Service involved the evaluation of project and interventions by the Ghana Coalition of NGOs in Health. Lessons that will be documented through this evaluation will guide future implementation of projects and policies.<?xml:namespace prefix = "o" />

10. Comments from ICC/HSCC Chairs

Please provide any comments that you may wish to bring to the attention of the monitoring IRC in the course of this review and any information you may wish to share in relation to challenges you have experienced during the year under review. These could be in addition to the approved minutes, which should be included in the attachments

11. Annexes

11.1. Annex 1 – Terms of reference ISS

TERMS OF REFERENCE:

FINANCIAL STATEMENTS **FOR IMMUNISATION SERVICES SUPPORT (ISS)** AND **NEW VACCINE INTRODUCTION GRANTS**

I. All countries that have received ISS /new vaccine introduction grants during the 2014 calendar year, or had balances of funding remaining from previously disbursed ISS/new vaccine introduction grants in 2014, are required to submit financial statements for these programmes as part of their Annual Progress Reports.

II. Financial statements should be compiled based upon countries' own national standards for accounting, thus GAVI will not provide a single template to countries with pre-determined cost categories.

III. **At a minimum**, GAVI requires a simple statement of income and expenditure for activity during the 2014 calendar year, to be comprised of points (a) through (f), below. A sample basic statement of income and expenditure is provided on the next page.

a. Funds carried forward from the 2013 calendar year (opening balance as of 1 January 2014)

b. Income received from GAVI during 2014

c. Other income received during 2014 (interest, fees, etc)

d. Total expenditure during the calendar year

e. Closing balance as of 31 December 2014

f. A detailed analysis of expenditures during 2014, based on ***your government's own system of economic classification.*** This analysis should summarise total annual expenditure for the year by your government's own system of economic classification, and relevant cost categories, for example: wages & salaries. If possible, please report on the budget for each category at the beginning of the calendar year, actual expenditure during the calendar year, and the balance remaining for each cost category as of 31 December 2014 (referred to as the "variance").

IV. Financial statements should be compiled in local currency, with an indication of the USD exchange rate applied. Countries should provide additional explanation of how and why a particular rate of exchange has been applied, and any supplementary notes that may help the GAVI Alliance in its review of the financial statements.

V. Financial statements need not have been audited/certified prior to their submission to GAVI. However, it is understood that these statements should be subjected to scrutiny during each country's external audit for the 2014 financial year. Audits for ISS are due to the GAVI Secretariat 6 months following the close of each country's financial year.

11.2. Annex 2 – Example income & expenditure ISS

MINIMUM REQUIREMENTS FOR **ISS** AND VACCINE INTRODUCTION GRANT FINANCIAL STATEMENTS *1*

An example statement of income & expenditure

Summary of income and expenditure – GAVI ISS		
	Local currency (CFA)	**Value in USD ***
Balance brought forward from 2013 (balance as of *31Decembre 2013*)	25,392,830	53,000
Summary of income received during 2014		
Income received from GAVI	57,493,200	120,000
Income from interest	7,665,760	16,000
Other income (fees)	179,666	375
Total Income	38,987,576	81,375
Total expenditure during 2014	30,592,132	63,852
Balance as of 31 December 2014 (balance carried forward to 2015)	60,139,325	125,523

* Indicate the exchange rate at opening 01.01.2014, the exchange rate at closing 31.12.2014, and also indicate the exchange rate used for the conversion of local currency to US$ in these financial statements.

Detailed analysis of expenditure by economic classification ** – GAVI ISS						
	Budget in CFA	**Budget in USD**	**Actual in CFA**	**Actual in USD**	**Variance in CFA**	**Variance in USD**
Salary expenditure						
Wedges & salaries	2,000,000	4,174	0	0	2,000,000	4,174
Per diem payments	9,000,000	18,785	6,150,000	12,836	2,850,000	5,949
Non-salary expenditure						
Training	13,000,000	27,134	12,650,000	26,403	350,000	731
Fuel	3,000,000	6,262	4,000,000	8,349	-1,000,000	-2,087
Maintenance & overheads	2,500,000	5,218	1,000,000	2,087	1,500,000	3,131
Other expenditures						
Vehicles	12,500,000	26,090	6,792,132	14,177	5,707,868	11,913
TOTALS FOR 2014	42,000,000	87,663	30,592,132	63,852	11,407,868	23,811

** Expenditure categories are indicative and only included for demonstration purpose. Each implementing government should provide statements in accordance with its own system for economic classification.

11.3. Annex 3 – Terms of reference HSS

TERMS OF REFERENCE:

FINANCIAL STATEMENTS FOR **HEALTH SYSTEMS STRENGTHENING (HSS)**

I. All countries that have received HSS grants during the 2014 calendar year, or had balances of funding remaining from previously disbursed HSS grants in 2014, are required to submit financial statements for these programmes as part of their Annual Progress Reports.

II. Financial statements should be compiled based upon countries' own national standards for accounting, thus GAVI will not provide a single template to countries with pre-determined cost categories.

III. At a minimum, GAVI requires a simple statement of income and expenditure for activity during the 2014 calendar year, to be comprised of points (a) through (f), below. A sample basic statement of income and expenditure is provided on the next page.

a. Funds carried forward from the 2013 calendar year (opening balance as of 1 January 2014)

b. Income received from GAVI during 2014

c. Other income received during 2014 (interest, fees, etc)

d. Total expenditure during the calendar year

e. Closing balance as of 31 December 2014

f. A detailed analysis of expenditures during 2014, based on your government's own system of economic classification. This analysis should summarise total annual expenditure for each HSS objective and activity, per your government's originally approved HSS proposal, with further breakdown by cost category (for example: wages & salaries). Cost categories used should be based upon your government's own system for economic classification. Please report the budget for each objective, activity and cost category at the beginning of the calendar year, the actual expenditure during the calendar year, and the balance remaining for each objective, activity and cost category as of 31 December 2014 (referred to as the "variance").

IV. Financial statements should be compiled in local currency, with an indication of the USD exchange rate applied. Countries should provide additional explanation of how and why a particular rate of exchange has been applied, and any supplementary notes that may help the GAVI Alliance in its review of the financial statements.

V. Financial statements need not have been audited/certified prior to their submission to GAVI. However, it is understood that these statements should be subjected to scrutiny during each country's external audit for the 2014 financial year. Audits for HSS are due to the GAVI Secretariat 6 months following the close of each country's financial year.

11.4. Annex 4 – Example income & expenditure HSS

MINIMUM REQUIREMENTS FOR **HSS** FINANCIAL STATEMENTS:

An example statement of income & expenditure

Summary of income and expenditure – GAVI HSS		
	Local currency (CFA)	**Value in USD ***
Balance brought forward from 2013 (balance as of *31Decembre 2013*)	25,392,830	53,000
Summary of income received during 2014		
Income received from GAVI	57,493,200	120,000
Income from interest	7,665,760	16,000
Other income (fees)	179,666	375
Total Income	38,987,576	81,375
Total expenditure during 2014	30,592,132	63,852
Balance as of 31 December 2014 (balance carried forward to 2015)	60,139,325	125,523

* Indicate the exchange rate at opening 01.01.2014, the exchange rate at closing 31.12.2014, and also indicate the exchange rate used for the conversion of local currency to US$ in these financial statements.

Detailed analysis of expenditure by economic classification ** - GAVI HSS						
	Budget in CFA	**Budget in USD**	**Actual in CFA**	**Actual in USD**	**Variance in CFA**	**Variance in USD**
Salary expenditure						
Wedges & salaries	2,000,000	4,174	0	0	2,000,000	4,174
Per diem payments	9,000,000	18,785	6,150,000	12,836	2,850,000	5,949
Non-salary expenditure						
Training	13,000,000	27,134	12,650,000	26,403	350,000	731
Fuel	3,000,000	6,262	4,000,000	8,349	-1,000,000	-2,087
Maintenance & overheads	2,500,000	5,218	1,000,000	2,087	1,500,000	3,131
Other expenditures						
Vehicles	12,500,000	26,090	6,792,132	14,177	5,707,868	11,913
TOTALS FOR 2014	42,000,000	87,663	30,592,132	63,852	11,407,868	23,811

** Expenditure categories are indicative and only included for demonstration purpose. Each implementing government should provide statements in accordance with its own system for economic classification.

11.5. Annex 5 – Terms of reference CSO

TERMS OF REFERENCE:

FINANCIAL STATEMENTS FOR **CIVIL SOCIETY ORGANISATION (CSO)** TYPE B

I. All countries that have received CSO 'Type B' grants during the 2014 calendar year, or had balances of funding remaining from previously disbursed CSO 'Type B' grants in 2014, are required to submit financial statements for these programmes as part of their Annual Progress Reports.

II. Financial statements should be compiled based upon countries' own national standards for accounting, thus GAVI will not provide a single template to countries with pre-determined cost categories.

III. At a minimum, GAVI requires a simple statement of income and expenditure for activity during the 2014 calendar year, to be comprised of points (a) through (f), below. A sample basic statement of income and expenditure is provided on page 3 of this annex.

a. Funds carried forward from the 2013 calendar year (opening balance as of 1 January 2014)

b. Income received from GAVI during 2014

c. Other income received during 2014 (interest, fees, etc)

d. Total expenditure during the calendar year

e. Closing balance as of 31 December 2014

f. A detailed analysis of expenditures during 2014, based on your government's own system of economic classification. This analysis should summarise total annual expenditure by each civil society partner, per your government's originally approved CSO 'Type B' proposal, with further breakdown by cost category (for example: wages & salaries). Cost categories used should be based upon your government's own system for economic classification. Please report the budget for each objective, activity and cost category at the beginning of the calendar year, the actual expenditure during the calendar year, and the balance remaining for each objective, activity and cost category as of 31 December 2014 (referred to as the "variance").

IV. Financial statements should be compiled in local currency, with an indication of the USD exchange rate applied. Countries should provide additional explanation of how and why a particular rate of exchange has been applied, and any supplementary notes that may help the GAVI Alliance in its review of the financial statements.

V. Financial statements need not have been audited/certified prior to their submission to GAVI. However, it is understood that these statements should be subjected to scrutiny during each country's external audit for the 2014 financial year. Audits for CSO 'Type B' are due to the GAVI Secretariat 6 months following the close of each country's financial year.

11.6. Annex 6 – Example income & expenditure CSO

MINIMUM REQUIREMENTS FOR **CSO 'Type B'** FINANCIAL STATEMENTS

An example statement of income & expenditure

Summary of income and expenditure – GAVI CSO		
	Local currency (CFA)	**Value in USD ***
Balance brought forward from 2013 (balance as of *31Decembre 2013*)	25,392,830	53,000
Summary of income received during 2014		
Income received from GAVI	57,493,200	120,000
Income from interest	7,665,760	16,000
Other income (fees)	179,666	375
Total Income	38,987,576	81,375
Total expenditure during 2014	30,592,132	63,852
Balance as of 31 December 2014 (balance carried forward to 2015)	60,139,325	125,523

* Indicate the exchange rate at opening 01.01.2014, the exchange rate at closing 31.12.2014, and also indicate the exchange rate used for the conversion of local currency to US$ in these financial statements.

Detailed analysis of expenditure by economic classification ** - GAVI CSO						
	Budget in CFA	**Budget in USD**	**Actual in CFA**	**Actual in USD**	**Variance in CFA**	**Variance in USD**
Salary expenditure						
Wedges & salaries	2,000,000	4,174	0	0	2,000,000	4,174
Per diem payments	9,000,000	18,785	6,150,000	12,836	2,850,000	5,949
Non-salary expenditure						
Training	13,000,000	27,134	12,650,000	26,403	350,000	731
Fuel	3,000,000	6,262	4,000,000	8,349	-1,000,000	-2,087
Maintenance & overheads	2,500,000	5,218	1,000,000	2,087	1,500,000	3,131
Other expenditures						
Vehicles	12,500,000	26,090	6,792,132	14,177	5,707,868	11,913
TOTALS FOR 2014	42,000,000	87,663	30,592,132	63,852	11,407,868	23,811

** Expenditure categories are indicative and only included for demonstration purpose. Each implementing government should provide statements in accordance with its own system for economic classification.

12. Attachments

Document Number	Document	Section	Mandatory	File
1	Signature of Minister of Health (or delegated authority)	2.1	✓	Signature MoH.PDF **File desc:** Signature of the Chief Director of the Ministry of Health (for the Minister) **Date/time :** 12/05/2015 07:50:32 **Size:** 484 KB
2	Signature of Minister of Finance (or delegated authority)	2.1	✓	From MoH to MoFEP.doc **File desc:** This is letter requesting for endorsement by the Minister of Finance. The endorse form will be sent later **Date/time :** 15/05/2015 11:03:27 **Size:** 80 KB
3	Signatures of members of ICC	2.2	✓	Signature ICC.pdf **File desc:** Signature of ICC members endorsing the APR and extension of vaccine support **Date/time :** 12/05/2015 01:06:40 **Size:** 1 MB
4	Minutes of ICC meeting in 2015 endorsing the APR 2014	5.4	✓	Minutes of ICC meeting_22_04_15.pdf **File desc:** PIE Summary Report **Date/time :** 12/05/2015 10:20:16 **Size:** 407 KB
5	Signatures of members of HSCC	2.3	✓	HSCC signature.pdf **File desc:** Signature of Health Sector Lead **Date/time :** 14/05/2015 09:06:01 **Size:** 130 KB
6	Minutes of HSCC meeting in 2015 endorsing the APR 2014	8.9.3	✓	The HSCC is yet to meet.docx **File desc:** NA **Date/time :** 12/05/2015 10:21:36 **Size:** 11 KB
7	Financial statement for ISS grant (Fiscal year 2014) signed by the Chief Accountant or Permanent Secretary in the Ministry of Health	6.2.1	✗	Not applicable.docx **File desc:** NA **Date/time :** 12/05/2015 10:30:55 **Size:** 11 KB
8	External audit report for ISS grant (Fiscal Year 2014)	6.2.3	✗	Not applicable.docx **File desc:** NA **Date/time :** 12/05/2015 10:30:33 **Size:** 11 KB

9	Post Introduction Evaluation Report	7.2.1	✗	PIE - Ghana Summary Report_Aug 2013.doc **File desc:** PIE Summary Report **Date/time :** 12/05/2015 10:36:07 **Size:** 78 KB
10	Financial statement for NVS introduction grant (Fiscal year 2014) signed by the Chief Accountant or Permanent Secretary in the Ministry of Health	7.3.1	✓	Not applicable.docx **File desc:** NA **Date/time :** 12/05/2015 10:37:06 **Size:** 11 KB
11	External audit report for NVS introduction grant (Fiscal year 2014) if total expenditures in 2014 is greater than US$ 250,000	7.3.1	✓	Not applicable.docx **File desc:** NA **Date/time :** 12/05/2015 10:37:27 **Size:** 11 KB
12	Latest EVSM/VMA/EVM report	7.5	✓	Ghana EVM Assessment Report - 2014.pdf **File desc:** Report of EVMA conducted in October 2014 **Date/time :** 12/05/2015 10:23:38 **Size:** 3 MB
13	Latest EVSM/VMA/EVM improvement plan	7.5	✓	Ghana_EVM_improvement_plan_081214.xls **File desc:** Improvement plan for EVMA **Date/time :** 12/05/2015 10:25:01 **Size:** 224 KB
14	EVSM/VMA/EVM improvement plan implementation status	7.5	✓	Ghana_EVM_improvement_plan_081214.xls **File desc:** Status of implementation of EVMA is part of the improvement plan **Date/time :** 12/05/2015 10:25:43 **Size:** 224 KB
16	Valid cMYP if requesting extension of support	7.8	✓	Ghana cMYP 2015-2019_250115.doc **File desc:** cMYP for Ghana 2015-2019 **Date/time :** 12/05/2015 10:26:37 **Size:** 1 MB
17	Valid cMYP costing tool if requesting extension of support	7.8	✓	cMYP_Costing_Tool_3 6_EPIedit_200215.xlsx **File desc:** cMYP costing tool for Ghana **Date/time :** 12/05/2015 10:27:47 **Size:** 2 MB
18	Minutes of ICC meeting endorsing extension of vaccine support if applicable	7.8	✓	Minutes of ICC meeting_22_04_15.pdf **File desc:** ICC meeting endorsing extension of vaccine support **Date/time :** 12/05/2015 10:28:28 **Size:** 407 KB

19	Financial statement for HSS grant (Fiscal year 2014) signed by the Chief Accountant or Permanent Secretary in the Ministry of Health	8.1.3	✓	The report will be sent later.docx **File desc:** Financial Statement will be sent later **Date/time :** 15/05/2015 11:00:35 **Size:** 11 KB
20	Financial statement for HSS grant for January-April 2015 signed by the Chief Accountant or Permanent Secretary in the Ministry of Health	8.1.3	✓	The report will be sent later.docx **File desc:** 2015 Financial statement will be sent later **Date/time :** 15/05/2015 11:01:08 **Size:** 11 KB
21	External audit report for HSS grant (Fiscal Year 2014)	8.1.3	✓	MOH-GHANA Executive Summary 2013.pdf **File desc:** External Audit report 2013 **Date/time :** 14/05/2015 11:03:27 **Size:** 15 MB
22	HSS Health Sector review report	8.9.3	✓	Holistic Assessment pre-summit draft report 02.05.2015.doc **File desc:** Draft Report: Holistic Assessment of the Health Sector 2014 **Date/time :** 14/05/2015 09:26:31 **Size:** 3 MB
23	Report for Mapping Exercise CSO Type A	9.1.1	✓	CSO FINAL REPORT 01-03-11.pdf **File desc:** CSO Mapping report **Date/time :** 14/05/2015 09:15:41 **Size:** 11 MB
24	Financial statement for CSO Type B grant (Fiscal year 2014)	9.2.4	✓	CSOs Financial Statement.zip **File desc:** **Date/time :** 13/05/2015 04:13:51 **Size:** 1 MB
25	External audit report for CSO Type B (Fiscal Year 2014)	9.2.4	✓	GCNH 2013 Auditors report.zip **File desc:** **Date/time :** 14/05/2015 10:08:02 **Size:** 5 MB
26	Bank statements for each cash programme or consolidated bank statements for all existing cash programmes if funds are comingled in the same bank account, showing the opening and closing balance for year 2014 on (i) 1st January 2014 and (ii) 31st December 2014	0	✓	Not applicable.docx **File desc:** NA **Date/time :** 14/05/2015 10:43:09 **Size:** 12 KB
27	Minutes ICC meeting endorsing change of vaccine prensentation	7.7	✗	Not applicable.docx **File desc:** NA **Date/time :** 12/05/2015 10:29:46 **Size:** 11 KB

28	Justification for changes in target population	5.1	✕	Not applicable.docx **File desc:** NA **Date/time :** 12/05/2015 10:29:35 **Size:** 11 KB
	Other		✕	CSO endorsement 001.jpg **File desc:** **Date/time :** 13/05/2015 07:00:21 **Size:** 716 KB
				GAVI BANK STATEMENTS.zip **File desc:** **Date/time :** 13/05/2015 07:06:41 **Size:** 6 MB
				Reports from GAVI Type B implementing NGOs.zip **File desc:** **Date/time :** 13/05/2015 06:47:15 **Size:** 97 MB
				HSCC_27th feb.2014docx.docx **File desc:** Minutes of HSCC for Feb 2014 **Date/time :** 14/05/2015 09:44:16 **Size:** 39 KB
				HSWG MEETING, FOR JULY 2014.doc **File desc:** Minutes of HSCC July 2014 **Date/time :** 14/05/2015 09:48:18 **Size:** 103 KB
				HSCC_4TH SEPTEMBER,_2014.docx **File desc:** Minutes of HSCC meeting held on 4th September 2014 **Date/time :** 14/05/2015 08:23:26 **Size:** 44 KB
				HSCC_5TH JUNE 2015.doc **File desc:** Minutes of HSCC meeting held on 5th June 2014 **Date/time :** 14/05/2015 08:23:51 **Size:** 112 KB
				5th March 2015 HSWG FINAL WORK.docx **File desc:** Minutes of HSCC meeting held on 5th March 2014

				Date/time : 14/05/2015 08:22:59 **Size:** 49 KB