Gavi

Application Form for Country Proposals

For Support to:

Routine New Vaccines Support
Preventive Campaign Support

Submitted by

The Government of

Malawi

Date of submission: **18 September 2015**

Deadline for submission: 8 September 2015

Select Start and End Year of your Comprehensive Multi-Year Plan (cMYP)

Start Year	2016	End Year	2020

Form revised in 2015

(To be used with Guidelines of October 2014)

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

Enquiries to: proposals@gavi.org or representatives of a Gavi partner agency. Unless otherwise specified, the documents can be shared with Gavi partners, collaborators and the general public. The Proposal and attachments must be submitted in English, French, Spanish, or Russian.

Note: Please ensure that the application has been received by Gavi on or before the day of the deadline.

Gavi is unable to return submitted documents and attachments to countries.

Gavi
GRANT TERMS AND CONDITIONS

FUNDING USED SOLELY FOR APPROVED PROGRAMMES

The applicant country ("Country") confirms that all funding provided by the Gavi 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. All funding decisions for the application are made at the discretion of the Gavi Board and are subject to IRC processes and the availability of funds.

AMENDMENT TO THE APPLICATION

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

RETURN OF FUNDS

The Country agrees to reimburse to the Gavi 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, within sixty (60) days after the Country receives the Gavi's request for a reimbursement and be paid to the account or accounts as directed by the Gavi.

SUSPENSION/ TERMINATION

The Gavi 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-approved amendment to the application.The Gavi retains the right to terminate its support to the Country for the programmes described in its application if a misuse of Gavi funds is confirmed.

ANTICORRUPTION

The Country confirms that funds provided by the Gavi 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, as requested. The Gavi 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 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 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 in connection with any audit.

CONFIRMATION OF LEGAL VALIDITY

The Country and the signatories for the Country confirm that its application, and Annual Progress Report, 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 TRANSPARANCY AND ACCOUNTABILITY POLICY

The Country confirms that it is familiar with the Gavi 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 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 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. 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 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 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.

1. Application Specification

Please specify for which type of Gavi support you would like to apply to.

Type of Support	Vaccine	Start Year	End Year	Preferred second presentation[1]
Preventive Campaign Support	MR, 10 dose(s) per vial, LYOPHILISED	2016	2020	
Routine New Vaccines Support	HPV quadrivalent, 1 dose(s) per vial, LIQUID	2016	2020	

[1] Gavi may not be in a position to accommodate all countries first product preferences, and in such cases, Gavi will contact the country and partners to explore alternative options. A country will not be obliged to accept its second or third preference, however Gavi will engage with the country to fully explore a variety of factors (such as implications on introduction timing, cold chain capacity, disease burden, etc.) which may have an implication for the most suitable selection of vaccine. If a country does not indicate a second or third preference, it will be assumed that the country prefers to postpone introduction until the first preference is available. It should be noted that this may delay the introduction in the country.

[2] Gavi would 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. Please refer to section 6.2.

2. Table of Contents

3. Executive Summary

Please provide a summary of your country's proposal, including the following the information:

- For each specific request, NVS routine support or NVS campaign :
  - The duration of support
  - The total amount of funds requested
  - Details of the vaccine(s), if applicable, including the reason for the choice of presentation
  - Projected month and year of introduction of the vaccine
- Relevant baseline data, including:
  - DTP3 and Measles coverage data (as reported on the WHO/UNICEF Joint Reporting Form)
  - Birth cohort, targets and immunisation coverage by vaccines
- Country preparedness
  - Summary of EVM assessment and progress on EVM improvement plan
- The nature of stakeholders' participation in developing this proposal
  - Inter-Agency Coordinating Committee
  - Partners, including CSO involvement

HPV National Roll Out

Cancer is a leading cause of morbidity and mortality worldwide. In 2008, globally, there were 12.7million new cancer cases and 7.6 million cancer deaths (around 13% of all deaths) with 56% of the new cases and 63% of the cancer deaths occurring in developing countries (WHO, 2007).According to Msyamboza et al (2012) of the 10,541 new cancer cases among females registered in Malawi between 2007 and 2010, cancer of the cervix was the commonest accounting for 45.4% of all cases followed by Kaposi sarcoma (21.1%), cancer of the oesophagus (8.2%), breast (4.6%)and others.Cervical cancer is the most frequent cancer among women in Malawi, and the 2nd most frequent cancer among women between 15 and 44 years of age.2 According to WHO, Malawi has a population of 3.72 million women ages 15 years and older who are at risk of developing cervical cancer. Current estimates indicate that every year 2,316 women are diagnosed with cervical cancer and 1,621 die from the disease. Human papilloma virus (HPV) is a very common infection among the productive age groups and is greatly associated with cervical cancer. Data is not yet available on the HPV burden in the general population of Malawi. However, in Eastern Africa, the region Malawi belongs to, about 33.6% of women in the general population are estimated to harbour cervical HPV infection at a given time.

As a result of this burden, the country developed a cervical cancer prevention and treatment strategy which is being revised based on using a single visit approach with screening through visual inspection with Acetic Acid and treatment/management through cryo-therapy and/or referral. However, one of the very important strategies for dealing with cervical cancer is through an early intervention with HPV vaccine.

Through funding from Gavi, Malawi introduced a demonstration project covering two districts of Zomba and Rumphi. The demonstration used school based approach where school going girsl in standard four were targeted and 10 year out of school girls. In the secod year the target for out of school changed from 10 years to 9-13 years. The demonstration was very successful with over 85% coverage.

In view of the successes in the demonstration and the burden of the disease, Malawi has decided to roll out the HPV vaccination starting with five districts and number of districts to be covered each year will depend on the availability of the resources until all districts are covered by 2020. The phased approach/stepwise will use routine vaccination sites unlike the school based which had high operational costs.Girls aged 10 will be targeted with the HPV vaccination regardless of whether in school or out of school. . The government of

Malawi is requesting GAVI about US$100,000 for vaccine introduction grant. The vaccine preference is quadrivalent gardasil single dose presentation which was also used during the demonstration project in 2014 and 2015 period. It is anticipated that the national roll out of HPV vaccine will be launched together with measles rubella in August, 2016. The target for year one is about 26,947 in the five districts.

Malawi has successfully introduced new vaccines since 2002 and these vaccines include DPT-HepB-Hib in 2002, PCV13 in 2011, rotavirus in 2012, HPV demonstration in 2014. The immunization coverage for both traditional and new vaccines have always been >80%. For instance, the DPT-HepB-Hib and PCV coverages for 2014 were 91%. About 97% of the children aged one year got BCG while 91% were administered with measles vaccine.

The EVM assessment was conducted in 2012 the following key areas were addressed between 2013 and 2016.

i. To conduct temperature monitoring study: This was done with technical assistance from UNICEF ESARO.

ii.Replacing kerosene and gas refrigerators with solar: With support from KfW and UNICEF, the country has procured over 120 solar direct drive and will soon be installed in health facilities based on the findings of the Cold Chain Inventory that was conducted in 2014.

iii.To introduce electronic temperature monitoring deveices for national and regional vaccine stores:The devices have been procured and delivered and will installed by the first week of October, 2015 by the technician from the supplier.

iv. Construction of the new regional vaccine store: The Regional Vaccine Store for the south has completed and is operational.

v. Use of freeze indicators for transportation of freeze sensitive vaccines. About 3,000 freeze indicators have been procured and will be delivered before end october and will soon be in use.

vi. Use of electronic stock management tools at sub-nation levels: Training on the use of SMT in all the districts was conducted in 2014.

vii. Revision of Temperature Monitoring Tool: The temperature monitoring tool was revised in 2014 and the training on the use covered all health facilities in addition to the use of freeze tags for monitoring temperatures in the refrigerators.

viii. Develop SOPs: Standadard Operating Procedures have been developed for all levels with assistance from UNICEF. Documents are being printed and will soon be distributed all regions, districts and health facilities.

ix. Develop stickers for MDVP, VVM and Shake Test: The stickers have been developed with assistance from UNICEF and will be distributed to all health facilities after being printed.

x. Procure voltage stabilizers for the national and regional vaccine stores: These devices have been procured and installed.

Some members of the EPI Sub-TWG have participated in the development of the national roll out of the HPV vaccination and the measles rubella application and this included the civil society organization. The EPI Sub-TWG which is similar to ICC were presented with application documents. Comments and clarifications were made and later the documents were endorsed.

Measles Rubella Vaccine

Malawi introduced measles case based surveillance in 1999 after a successful national measles catch up campaign in 1998. During the 2010 measles outbreak in the country, a total of 118,712 measles cases were reported and 249 deaths, representing a case fatality rate (CFR) of 0.21. Out of the 28 districts, Lilongwe reported the highest number of cases (24,455) and 43 deaths with a CFR of 0.002 Through the measles cases based surveillance and parallel testing, it has been demonstrated that rubella infection is prevalent in Malawi as demonstrated by the number of cases over the past three years.

It is from this background that Malawi is planning to introduce measles rubella vaccine into routine immunization services. The country will start with measles rubella catch up campaign targeting children from 9 months to 14 years. The campaign is proposed to be conducted in August 2016 and thereafter introduce the vaccine in September, 2015 into routine immunuzation services. Gavi has already approved MSD for a

period of five years. The government of Malawi will contribute towards the procurement of the rubella vaccine and the first dose of the measles vaccine while Gavi will contribute towards the purchase of the measles second dose, which has already been approved by Gavi. Funds for contribution towards the procurement of the vaccine by the Malawi Government have already been secured and are reflected in the cMYP 2016-2020.

The National Task Force for the measles rubella campaign as well as vaccine introduction will be set up to oversee the planning and implementation of the activities. The activities will include sensitization meetings, revision of the monitoring tools, training of health workers. Volunnteers who will assist in the campaign will also be briefed. It is proposed that other interventions such as vitamin A will also be included during the campaign.

The target for the measles rubella campaign is 7,738,999 and the vaccine introduction grant is US$5,030,349 which is US$0.65 per target population. The target for the introduction of MR into routine is 711,236 and the VIG is US$568,989 which translates US$0.80 per target population.

The Government of Malawi is therefore requesting Gavi to support the purchase of measles rubella vaccine for the campaign, the VIG for the campaign, the VIG for the introduction of the measles rubella vaccine into routine immunization services and the national roll out of HPV vaccination.

4. Signatures

4.1. Signatures of the Government and National Coordinating Bodies

4.1.1. Government and the Inter-Agency Coordinating Committee for Immunisation

The Government of Malawi would like to expand the existing partnership with the Gavi for the improvement of the infants routine immunisation programme of the country, and specifically hereby requests Gavi support for:

HPV quadrivalent, 1 dose(s) per vial, LIQUID routine introduction

MR, 10 dose(s) per vial, LYOPHILISED preventive campaigns

The Government of Malawi commits itself to developing national immunisation services on a sustainable basis in accordance with the Comprehensive Multi-Year Plan presented with this document. The Government requests that the Gavi and its partners contribute financial and technical assistance to support immunisation of children as outlined in this application.

Table(s) 6.2.4 in the NVS Routine section of this application shows the amount of support in either supply or cash that is required from the Gavi. Table(s) 6.2.3 of this application shows the Government financial commitment for the procurement of this new vaccine (NVS support only).

Following the regulations of the internal budgeting and financing cycles the Government will annually release its portion of the co-financing funds in the month of **December**.

The payment for the first year of co-financed support will be around **July 2016** for HPV quadrivalent, 1 dose(s) per vial, LIQUID.

Please note that this application will not be reviewed or recommended for approval by the Independent Review Committee (IRC) without the signatures of both the Minister of Health and Minister of Finance or their delegated authority. These signatures are attached as DOCUMENT NUMBER : 1 and 2 in Section 10. Attachments.

Minister of Health (or delegated authority)		Minister of Finance (or delegated authority)	
Name	Dr Peter Kampalume	**Name**	Dr Goodal Gondwe
Date		**Date**	
Signature		**Signature**	

Proof of involvement of the Ministry of Education will also be required for HPV Routine Support. The Ministry of Education will either have to be involved in the ICC process (preferred option) and/or the Minister of Education (or delegated authority) must provide its signature. The signature is attached as DOCUMENT NUMBER : {0} in Section 10. Attachments.

Minister of Education (or delegated authority)	
Name	Dr Emmanuel Fabiano
Date	
Signature	

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

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4.1.2. National Coordinating Body - Inter-Agency Coordinating Committee for Immunisation

Agencies and partners (including development partners and NGOs) supporting immunisation services are co-ordinated and organised through an inter-agency coordinating mechanism (ICC, Health Sector Coordinating Committee (HSCC), or equivalent committee). The ICC, HSCC, or equivalent committee is responsible for coordinating and guiding the use of the GaviGavi NVS routine support and/or campaign support. Please provide information about the ICC, HSCC, or equivalent committee in your country in the table below.

Profile of the ICC, HSCC, or equivalent committee

Name of the committee	EPI Sub Technical Working Group
Year of constitution of the current committee	1996
Organisational structure (e.g., sub-committee, stand-alone)	Sub-Committee
Frequency of meetings	Quarterly

The Terms of Reference or Standard Operating Principles for the ICC, including details on the ICC membership, quorum, dispute resolution process and meeting schedules is attached as DOCUMENT NUMBER : 4.

Major functions and responsibilities of the ICC/HSCC:

During the past years, the EPI programme had been functioning with the support of the Interagency Coordination Committee(ICC). The core function of the ICC was to ensure collaboration of all partnerswith a view to fostering a strong partnership and facilitate resourcemobilization for the programme.

With the introduction of the SWApmechanism in the Ministry of Health, the need for an independent ICC is nolonger necessary because the Essential Health Package (EHP) Technical Working Groupunder the SWAp addresses issues of the various programmes including EPI.However, the ministry and its partners support the idea of having sub TechnicalWorking Group for selected programmes including EPI. This document outlines thescope of work for the EPI Sub-TWG whose main functions are:

i) **Technical Support**

· Mobilizes support for EPI from variouspartners to ensure efficient and effective functioning of the EPI programme.

· Supports and participates in theimplementation, monitoring and evaluation of short, medium and long term EPIPlans.

· Advises the EPI programme onimplementation of the EPI Plan of action for both routine services and SIAs.

· Participates in National Task Force for SIAsmeetings as necessary.

· Participates in New Vaccine introductionactivities as necessary

ii) Advocacy

· The committee advocates for EPI at higherlevel eg. EHP and internationally for effective and efficient implementation ofthe planned activities and resources.

· Recommends for revision of membership forEPI Sub TWG as need arises.

iii) Social mobilization

· Supports programme with socialmobilization to ensure wide publicity of the programme for both routine, Newand Underutilised Vaccine Introduction, surveillance and supplementalimmunization activities.

iv) Mode of Operation

· DPHS is the chair and one co-chair fromthe partners. The co-chair position will be rotated amongst the partner onyearly basis.

· EPI unit is the secretariat of the EPIsubTWG.

· Quarterly EPI Sub Technical Working GroupMeetings.

· Ad-hoc meetings whenever necessary,especially during SIAs and NUVI.

Please describe how partners have provided support in preparation of the proposal:

Partners have supported the preparation of the HPV national roll out plan and the Measles Rubella application by providing financial and technical support throughout the process.

4.1.3. Signature Table for the Coordinating Committee for Immunisation

We the members of the ICC, HSCC, or equivalent committee *[1]* met on the **11/09/2015** to review this proposal. At that meeting we endorsed this proposal on the basis of the supporting documentation which is attached. The minutes of the meeting endorsing this proposal are attached as Document number 5. The signatures endorsing the proposal are attached as Document number 6 (please use the list for signatures in the section below).

Please refer to Annex C of the 'Gavi HSS and NVS General Guidelines' for more information on ICCs.

Function	Title / Organisation	Name	Please sign below to indicate the attendance at the meeting where the	Please sign below to indicate the endorsement of the minutes

			proposal was endorsed	where the proposal was discussed
Chair	Head of Environmental Health	Mr. Allone Mark GANIZANI		
Secretary	Deputy EPI Logistics Officer	Evance Mwendo PHIRI		
Members	Chair person of Civil Society Platform on Vaccines and Immunization	Mr. David KAMKWAMBA		
	Advocacy Officer-Eye for Development (CSO)	Mr. Hopeson KAONONGERA		
	Unicef Consultant	Dr. Abebe GOBEZE		
	National EPI Logistics Officer	Mr. Moussa VALLE		
	Deputy EPI Data Manager	Mrs. Rhoda CHADO		
	Central Region Vaccine Manager	Mr. Edward SOKO		
	Dry Stores Manager	Mr. Nixon MTAMBALIKA		
	NPO/CAN-WHO	Dr. Susan KAMBALE		
	National Programme Manager	Mr. Geoffrey Zimkambani CHIRWA		
	National PHC Coordinator	Mr. Precious William PHIRI		
	Child Survival and Development Specialist-UNICEF	Mr. Allan MACHESO		
	Health Services Manager-Christioan Health Association (CHAM)	Mr. Elled MWENYEKONDE		
	MNCH Manager-Save the Children	Mr. Reuben LIGOWE		

By submitting the proposal we confirm that the quorum has been met. **Yes**

The minutes from the three most recent ICC meetings are attached as DOCUMENT NUMBER : 7.

4.2. National Immunization Technical Advisory Group (NITAG)

Has a NITAG been established in the country ? **No**

In the absence of a NITAG, countries should clarify the role and functioning of the advisory group and describe plans to establish a NITAG. This document is attached as **(Document Number: 10)**

5. Immunisation Programme Data

5.1 Background information

Please complete the table below, using data from available sources. Please identify the source of the data, and the date. Where possible use the most recent data and attach the source document.

- Please refer to the Comprehensive Multi-Year Plan for Immunisation (cMYP) (or equivalent plan) and attach a complete copy (with an Executive Summary) as DOCUMENT NUMBER 11. Please attach the cMYP costing tool as DOCUMENT NUMBER 12.
- Please attach relevant Vaccine Introduction Plan(s) as DOCUMENT NUMBER : 14
- Please refer to the two most recent annual WHO/UNICEF Joint Reporting Forms (JRF) on Vaccine Preventable Diseases
- Please refer to Health Sector Strategy documents, budgetary documents, and other reports, surveys etc, as appropriate.
- Please refer to the attached risk assessments in the case of yellow fever and meningitis A mass preventive campaigns.

Please use the most recent data available and specify the source and date.

	Figure	Year	Source
Total population	15,805,239	2014	NSO
Birth cohort	711,236	2014	NSO
Infant mortality rate (per 1000)	53	2014	Millennium Development Goals (MDG) end line survey
Surviving infants*[1]*	673,540	2014	NSO
GNI per capita (US$)	250 %	2015	World Bank
Total Health Expenditure (THE) as a percentage of GDP	9 %	2011	NHA
General government expenditure on health (GGHE) as % of General government expenditure	6 %	2011	NHA

[3] Surviving infants = Infants surviving the first 12 months of life

5.1.1 Lessons learned

Routine New Vaccines Support

If new or under-used vaccines have already been introduced in your country, please give details of the lessons learned from previous introduction(s) specifically for: storage capacity, protection from accidental freezing, staff training, cold chain, logistics, coverage and drop-out rates, wastage rate, etc., and suggest action points or actions taken to address them. Please refer to previous Post Introduction Evaluations (PIE), if applicable. If they are included in the Introduction Plan, please cite the section only.

Lessons Learned	Action Points
Formation of National Task Force 6 months before introduction of new vaccine ensures smooth implementation of the planned activities	Maintain early formation of the national task force
Multi-sectoral collaboration was key to successful introduction of new vaccines.	Maintain early involvement ofstakeholders
Late disbursement of funds of funds affected the implementation of the planned activities.	Timely submission of budget proposals.
Inadequate funding for planned activities	Enganging local partners for adequate and additional resource moblization
Misconception of the objective of the HPV vaccine demonstration project	Misconception of the objective of the HPV vaccine demonstration project Intensify social mobilization and sensitization meetings in the communities

Preventive campaign support

If campaigns with MR vaccines have already been conducted in your country, please give details of the lessons learned, specifically for: storage capacity, protection from additional freezing, staff training, cold chain, logistics, coverage, wastage rate, etc., and suggest action points to address them in future campaigns. If they are included in the Introduction Plan or Plan of Action, please cite the section only.

Lessons Learned	Action Points
A mix of social mobilisation and public awareness strategies including local structure like use of chiefs and other community leaders to sensitise their subjects results in more people sensitised.	Maintain the same approach to achieve more coverage
Conducting campaigns in the second half of the year coincide with the cultural calendars for initiation ceremonies in many rural areas where religious leaders and gate keepers allow vaccinations to take place after initiation.	There is need to dialogue with gate keepers / religious and traditional leaders responsible for initiation camps to allow children in the camps to be vaccinated.
Late disbursement of funds to districts affected the distribution of supplies; training of health workers and orientation of volunteers.	Districts budgets should be submitted in time to allow funds to be disbursed for all planned activities to be conducted as planned.
In previous campaigns, registration for Free Farm Input subsidy and registration of voters for Parliamentary and presidential election coincided with the actual campaign days.	Scheduled campaign activities should not coincide with national events.
In 2013, for the first time, the campaign spanned over the week-end. In areas where Adventists members are located, activities did not take place, sites were closed since it is not in line with the church teachings to work on Saturday.	Campaigns should be scheduled during working days.

5.1.2 Health planning and budgeting

Please provide information on the planning and budgeting cycle in your country

November-December: Review of budget guidelines by Ministry of Finance (MoF)

Mid year budget review and virements of current fiscal year based on budget performance

February: Dissemination of budget guidelines to ministries and government departments by MoF

First budget hearing for respective ministries and government departments by MoF

March: Communication of ceilings to ministries and government departments by MoF

Second budget hearing for respective ministries and government departments by MoF

April-May: Development and consolidation of work plans and budgets by respective ministries and government departments

June: Submission of work plans and budgets to MoF

Consolidation of budgets and printing of draft budget books by MoF • Budget approval by parliament

July: New Fiscal year begins

July-June: Budget implementation and monitoring

Please indicate the name and date of the relevant planning document for health

Health Sector Strategic Plan (HSSP): 2011-2016

Is the cMYP (or updated Multi-Year Plan) aligned with the proposal document (timing, content, etc.)

Yes for the 2011-2016 HSSP, however, the 2017-2021 HSP is in progress for development. The new cMYP 2016-2020 is one year short because it was necessary for the programme to come up with a new cMYP for the introduction of measles rubella vaccine and stepwise roll out of HPV vaccination. However, there will be a one year bridge for the cMYP to be in line with the HSSP.

Please indicate the national planning budgeting cycle for health

January: Review of Ministry of Health planning and budget templates

February-March: Dissemination of MoH Planning and budgeting templates

Ministry of Finance budget guidelines

Mid-year SWAp review of the implementation plan of the previous financial year

March: District Implementation Plans (DIPs) peer reviews at zonal level

April: Allocation of budget ceilings to respective cost centres • Receipt of work plans and budgets from respective cost centres

May: Consolidation of work plans and budgets from cost centres by Department of Planning and Policy Development

June: Submission of work plans and budgets to Ministry of Finance • Budget approval by parliament • District Implementation Plans (DIPs) peer reviews at zonal level

July : New Fiscal year begins

July –June: Implementation of work plans

September: District Implementation Plans (DIPs) peer reviews at zonal level

October: Annual SWAp review of the implementation plan of the previous Financial Year

December: Mid-year budget review and virements of the current financial year based on budget performance • District Implementation Plans (DIPs) peer reviews at zonal level

Please indicate the national planning cycle for immunisation

The calendar for immunization in Malawi run from 1st January to 31st December of each year. There is a comprehensive multi-year plan (cMYP) which covers a 5 year period. Each year an annual plan is derived from the cMYP which is updated yearly. The current cMYP which covers the period 2012 to 2016, expires on 31 December 2015. The new CMYP for 2016-2020 has been completed. The Health Sector Strategic Plan (HSSP) which is expected to finish by 30th June 2016, is also under review. The health sector is developing a new HSSP which will cover a period of July 2017 to June 2021. There will be a one year bridge for the cMYP to be in line with the HSSP.

5.1.3 Preparatory activities

Please provide an outline of all **preparatory** activities for vaccine(s) introduction or campaigns. If they are included in detail the Introduction Plan and/or Plan of Action, please cite the sections only.

The Introduction Plan for National Roll Out of the HPV vaccine has sections 10, 11, 12 and 13 which ouline detailed preparatory activities which will be conducted before the roll out both at national and the selected districts.

5.1.4 Gender and equity

Please describe any barriers to access, utilisation and delivery of immunisation services at district level (or equivalent) that are related to geographic, socio-economic and/or gender equity. Please describe actions taken to mitigate these barriers and highlight where these issues are addressed in the vaccine introduction plan(s).

The Immunization in Malawi is provided free regardless of sex and economic status. Children residing in hard to reach areas are provided with immunization through routine outreach clinics services. However, the national HPV vaccination will target girls aged 10 years because they are at risk of getting HPV infection.

Discuss how equity issues (geographic, socio-economic and/or gender) are being taken into account in the design of social mobilisation and other strategies to increase immunisation coverage. Highlight where these issues are addressed in the vaccine introduction plan(s).

Communication materials are produced in some key local languages besides english and aired on the public as well as private broadcasting media houses. Health talks are provided to mothers/guardians in all static and outreach clinics throughout the country. Drama shows are also staged in various communities. These areas are covered in detail in the introduction plan under social mobilization section.

Please indicate if sex disaggregated data is collected and used in immunisation routine reporting systems.

Currently it is not being done. The revised monitoring tools will capture such information by 2016

Is the country currently in a situation of fragility (e.g. insecurity, conflict, post-conflict, refugees/and or displaced persons and recent, current or potential environmental disaster, such as flooding, earthquake or drought or others)? If Yes, please describe how these issues may impact your immunisation programme, planning for introduction of routine vaccines or campaigns and financing of these activities.

During the the flood disaster and cholera outbreak which the country experienced in first quarter of 2015, funds for routine immunization services were diverted for other services due to competing priorities within the health sector.

If available, please provide additional information and documents on subnational coverage data, e.g. comparing urban/rural districts or districts with highest/lowest coverage, etc.

The coverage data for the flood affected districts were lower compared to the same period last year.

Please describe what national surveys take place routinely in country to assess gender and equity related barriers. Highlight whether this application includes any activities to assess gender and equity related barriers.

Malawi Demographic and Health Survey (MDHS) and Multiple Indicator Coverage Surveys assess gender, equity and geographic access.

5.1.5 Data quality

Please attach a data quality assessment (DQA), report if one has been completed within the previous 48 months (DOCUMENT NUMBER: 13). If available, an improvement plan and progress report on the implementation of the improvement plan should also be submitted (DOCUMENT NUMBER: 16, DOCUMENT NUMBER: 17).

If DQA not available, please briefly describe plans to establish mechanisms for data quality assessment.

DQA has not been done. However it is proposed to be done in the last quarter of 2016

Please indicate what routine mechanisms to independently assess the quality of administrative data are in place, and if so what these mechanisms are and how they enable the country to track changes in data quality over time.

The 2014 MICS

DHS

EPI Coverage survey which is done every three years to validate the routine immunization data

Please detail what household surveys have been conducted in recent years to independently assess immunisation coverage and equity, and describe any survey plans for the coming five year period.

HPV demonstration coverage survey

MICS

DQA in 2016

Coverage Survey

5.1.6 HPV specific facts

Please demonstrate country's ability to deliver a complete multi-dose series of vaccines to at least 50% of a one-year cohort selected from the population of 9-13 year old girls the target vaccination cohort in at least one typical district using a similar strategy to the one proposed for HPV vaccine delivery. For each district, fill-in:

District Information	
Name of the district	Rumphi
Size of population of the district	208,616
Describe how the district is divided into rural and urban areas:	The district is predominantly rural with few population residing at the headquarters of the district. Most of these people are civil servants and traders.
District Information	
Name of the district	Zomba
Size of population of the district	799,479
Describe how the district is divided into rural and urban areas:	About 15% of the population reside in the city and the rest are in rural areas.
District Information	
Name of the district	Mchinji
Size of population of the district	589,572
Describe how the district is divided into rural and urban areas:	The district is predominantly rural with a small population residing at the headquarters of the district.
District Information	
Name of the district	Salima
Size of population of the district	419,448
Describe how the district is divided into rural and urban areas:	The district is predominantly rural with a small population residing at the headquarters of the district.
District Information	
Name of the district	Chikwawa
Size of population of the district	533,714
Describe how the district is divided into rural and urban areas:	The district is predominantly rural with a small population residing at the headquarters of the district.

Please specify what was the multi-dose vaccine used (HPV/TT/others)? What was the vaccination schedule?

The HPV vaccination project used quadrivalent gardasil vaccine with 3 dose schedule in the first year and then to 2 dose schedule in the second after the recommendation SAGE.

Describe the vaccination strategy used (school based, health centre based, mixed)? How was it carried out, who carried it out, who was the lead department/agency? What age/sex was the multi-dose vaccine delivered to? If it was school based, how many schools were targeted? Was it age based or grade based?

The the strategy used for demonstration project was school based targeting all standard (grade) four girls and 10 year out of school girls. However, the target for out of school in the second changed from 10 years to 9-13 years. The project was conducted by the Non Communicable Diseases (NCD) Unit, RHU, EPI, Ministry of Education and other partners.

What was the number of targeted population? What was the number in target population who started the multi-dose series? What was the number in the target population who received all doses?

The second year targeted about 5,020 girls and 4,791 were vaccinated with first dose of HPV, representing 95% coverage. In the second round 4,594 were vaccinated represnting 92%. The total number of girls vaccinated included in and out of school.

Please provide the source of data for estimation of the target population:

The data during demonstration was provided by the District Education Managers office after consolidating enrolment from all the schools.

If applicable, please detail what additional people beside the target population also received the vaccine:

None

Table 5.1.6: (Please refer to WHO/UNICEF JRF)

Girl age	HPV 1*st* dose	HPV 2*st* dose	HPV 3*st* dose
9 years old	1,693	1,623	
10 year old	1,693	1,623	
11 year old	1,693	1,623	
12 year old	1,693	1,623	
13 year old	1,693	1,623	
14 year old	1,693	1,623	
15+ year old	1,693	1,623	
Unknown	1,693	1,623	

Was there an evaluation of the 'project'? If so, who performed it? Please provide a short summary of the evaluation methodology and/or provide the evaluation report if available (Document number No: 21). Please ensure this summary (and/or the attached report) includes a costing analysis of the proposed delivery strategy or strategies. Refer to section 10. Attachments.

The cost analysis, coverage survey and PIE were conducted during the first year (2014) of the HPV demonstration project.

5.1.7 MCV Immunisation coverage

Please provide information concerning immunisation coverage related to measles-containing vaccines (MCV)

Table 5.1.7: MCV Immunisation coverage

Coverage	2010		2011		2012	
	Administrative*(1)*	WUENIC*(2)*	Administrative*(1)*	WUENIC*(2)*	Administrative*(1)*	WUENIC*(2)*
Measles 1*st* dose (%)	99	93	96	96	96	90
Measles 2*nd* dose (%)						

Coverage	2013		2014	
	Administrative*(1)*	WUENIC*(2)*	Administrative*(1)*	WUENIC*(2)*
Measles 1*st* dose (%)	88	88	91	85
Measles 2*nd* dose (%)				

Coverage	2010		2011		2012	
	Administrative*(1)*	Coverage survey	Administrative*(1)*	Coverage survey	Administrative*(1)*	Coverage survey
Supplementary Immunisation Activities (SIA) (%)	107					

Coverage	2013		2014	
	Administrative*(1)*	Coverage survey	Administrative*(1)*	Coverage survey
Supplementary Immunisation Activities (SIA) (%)	105	96		

Note:

(1) National reported Administrative Coverage

(2) WHO/UNICEF estimates of national immunization coverage

Was the last Measles Supplementary Immunization Activities (SIA) administrative coverage or results of a survey of acceptable methodology **Administrative coverage**

5.2. Baseline and Annual Targets (NVS Routine Support)

Please refer to cMYP pages to assist in filling-in this section.

Number	Base Year	Baseline and Targets			
	2014	2016	2017	2018	2019
Total births	711,236	756,456	780,133	804,551	829,734
Total infants' deaths	37,696	47,013	46,904	46,796	46,686
Total surviving infants	673,540	709,443	733,229	757,755	783,048
Total pregnant women	3,556,179	3,782,280	3,900,665	4,022,756	4,148,668
Target population vaccinated with OPV3*[1]*					
OPV3 coverage*[2]*	85 %	90 %	99 %	99 %	99 %
Target population vaccinated with DTP1*[1]*	638,603	716,364	738,786	761,910	785,758
Target population vaccinated with DTP3*[1]*	603,497	702,037	724,010	754,291	777,900
DTP3 coverage*[2]*	90 %	99 %	99 %	100 %	99 %
Wastage*[3]* rate in base-year and planned thereafter (%) for DTP	5	5	5	5	5
Wastage*[3]* factor in base-year and planned thereafter for DTP	1.05	1.05	1.05	1.05	1.05
Number of girls in the target cohort	6159	34110	34789	35190	36448
Target population vaccinated with 1st dose of HPV	6,091	26,947	27,483	27,800	28,794
Target population vaccinated with the last dose of HPV	4,619	25,583	26,092	26,393	27,336
HPV quadrivalent coverage 1st dose	0 %	0 %	0 %	0 %	0 %
HPV quadrivalent coverage last dose	99 %	79 %	79 %	79 %	79 %
First Presentation: HPV quadrivalent, 1 dose(s) per vial, LIQUID					
Wastage*[3]* rate in base-year and planned thereafter (%)	5	5	5	5	5
Wastage*[3]* factor in base-year and planned thereafter (%)	1.05	1.05	1.05	1.05	1.05
Maximum wastage rate value for HPV quadrivalent, 1 dose(s) per vial, LIQUID	5 %	5 %	5 %	5 %	5 %
Target population vaccinated with 1st dose of Measles	571,670	659,782	681,903	704,712	728,235
Measles coverage*[2]*	85 %	93 %	93 %	93 %	93 %
Annual DTP Drop out rate [(DTP1 – DTP3) / DTP1] x 100	5 %	2 %	2 %	1 %	1 %

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

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

[3] 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.

Number	Baseline and Targets
	2020
Total births	855,704
Total infants' deaths	46,796
Total surviving infants	808,908
Total pregnant women	4,278,521
Target population vaccinated with OPV3*[1]*	
OPV3 coverage*[2]*	99 %
Target population vaccinated with DTP1*[1]*	810,352
Target population vaccinated with DTP3*[1]*	802,248
DTP3 coverage*[2]*	99 %
Wastage*[3]* rate in base-year and planned thereafter (%) for DTP	5
Wastage*[3]* factor in base-year and planned thereafter for DTP	1.05
Number of girls in the target cohort	37701
Target population vaccinated with 1st dose of HPV	29,784
Target population vaccinated with the last dose of HPV	28,276
HPV quadrivalent coverage 1st dose	0 %
HPV quadrivalent coverage last dose	79 %
First Presentation: HPV quadrivalent, 1 dose(s) per vial, LIQUID	
Wastage*[3]* rate in base-year and planned thereafter (%)	5
Wastage*[3]* factor in base-year and planned thereafter (%)	1.05
Maximum wastage rate value for HPV quadrivalent, 1 dose(s) per vial, LIQUID	5 %
Target population vaccinated with 1st dose of Measles	752,284
Measles coverage*[2]*	93 %
Annual DTP Drop out rate [(DTP1 – DTP3) / DTP1] x 100	1 %

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

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

[3] 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.

5.2.1 HPV specific targets

Single year cohort of girls to be vaccinated with HPV should be within the WHO-recommended target population of 9-13 years old girls

Please specify the source of data that was used to estimate the number of girls in target and reported in the above table under "Target population vaccinated with HPV"

The national roll out will target girls aged 10 years and the source of data is from Malawi Census and Population Data projected from 2008. It is estimated that 26,947 girls aged 10 years will be targeted with HPV vaccination in year one in five selected districts.

5.3. Targets for Preventive Campaign(s)

5.3.1 Targets (MR campaign)

Please specify cohort for rubella-containing vaccines (RCV):

MR Start **9 months**

MR End **14 years**

Cohort population = population 9 months - 14 years old

Gavi will only provide support to countries for rubella catch-up campaign by providing MR vaccine for a target population of males and females aged 9 months to 14 years (the exact range in the scope of 9 months to 14 years old will depend on rubella epidemiology in the country).

Table 5.3.1 Baseline NVS preventive campaign figures for MR

Number	Targets			
	2016	2017	2018	2019
Total target population	7,738,999	0	0	3,134,549
Wastage rate (%) for MR (campaign)	15	0	0	15

Number	Targets
	2020
Total target population	0
Wastage rate (%) for MR (campaign)	0

6. New and Under-Used Vaccines (NVS Routine)

6.1. Assessment of burden of relevant diseases (if available)

If already included in detail in the Introduction Plan or Plan of Action, please cite the section only.

Disease	Title of the assessment	Date	Results
Cervical Cancer	Burden of Cancer in Malawi	2012	-Cervical accounts for 45% of all cancer cases in Malawi. -2,316 women are diagnosed with cervical cancer every year. -1,600 women die from cancer every year.

6.1.1 HPV burden specific information

Has the country undertaken an assessment of the burden of cervical cancer? If so, describe the burden, and when and how the assessment was done. If not, countries may report on Globocan data (available on the WHO HPV information Centre website at http://www.who.int/hpvcentre/en).

Malawi conducted baseline survey on the burden of cervical cancer in 2012. According to study condcuted in 2012, 10,541 new cancer cases among females who were registered in Malawi between 2007 and 2010 indicated that cancer of the cervics was the commonest accounting for 45% of all cases.

Describe the existing cervical cancer prevention and control activities.

-Sensitization on cervical cancer

-HPV vaccination

-Pap smeer

-Voluntary male cicurmcision

-Leep

-Surgical

-Cald coagulation

Has the country developed a roadmap or strategy for establishing or strengthening a national comprehensive approach to cervical cancer prevention and control? **Yes**

If Yes, please attach and refer to section 10. Attachments. (Document N°**19**)

If No, are there plans for the country to develop such a roadmap or strategy in the future? Please describe- when, who will be leading the development of the plan, and which agencies will be involved.

The strategic plan for the cervical cancer is being revised

6.1.2 Delivery strategy for HPV vaccine

Please specify the chosen age cohort for HPV vaccination: **10 years old**

Please describe the HPV vaccination strategy and plan (when vaccinations will be scheduled, who will do vaccinations, how will the vaccine logistics be assured, coordination between the schools and health personnel, the plan to ensure all three doses are delivered, and plans for reaching girls who may be absent on the day of scheduled vaccinations, etc.)

All government , CHAM and private health facilities in the selected districts will provide the HPV vaccination to girls aged 10, on any immunization clinic days. Health workers in the selected districts will be trained to administer HPV vaccination. Distribution, storage and transportation for HPV will be part of other childhood vaccination supplies. Malawi will use two dose HPV vaccination schedule. Girls who may have misssed the vaccinations during the routine scheduled days will be vaccinated during periodic intensified routine immunization days.

Irrespective of the strategy, provide a description of existing health services and/or health education currently being provided to young adolescents (both girls and/or boys) within the 9-13 year old age group and indicate and potential synergy by integrating with HPV vaccination:

a. For health services (this can include: what health services are provided, to which age/sex group, whether it's mandatory or voluntary, regularly or ad-hoc, in school or out of school, who provides these (government, NGOs), how often, what is the uptake in the community, how is it perceived by the community.)

-Menstrual hygiene health education messages in schools

-HIV prevention and control in schools

-Youth friendly health services

b. For health education (this can include: the topic, whether it is national, sub-national, in school or out of school, who provides the education, how often, is it in the school curriculum, are there NGOs providing these? How is it perceived by the community? Has there been an evaluation and if so, how was it evaluated and what were the findings?)

-Health talks on menstrual hyiegine target only girls while HIV prevention and youth friendly issues are covered in the primary school curriculum.

-Commutiy meetings on HPV vaccination were conducted during the demonstration and this approach will continue for national roll out.

Please describe the communications and social mobilisation plan for the HPV vaccination strategy (what activities will be done to educate and raise awareness of the vaccination plan to the target population, their parents/guardians, the wider community, community leaders, groups of influence, etc.; who will provide this education and what materials will be used; how often will these activities occur vis-a-vis the proposed vaccination schedule.)

-Sensitization of stakeholders

-Briedfing of senior management of the Ministry of Health and Edication

-Briefing of local leaders and faith based organizations

-Media of media engagement

-Parents and community groups like PTA

-Sensitization campaign that will target girsl and teachers, key opinion leaders and stakeholders

Please select strategy that the country will choose to deliver the HPV vaccine: **Health center-based strategy**

School-based strategy

Malawi strategy to deliver HPV vaccine does not include a "School-based strategy"

Health center-based strategy

Malawi strategy to deliver HPV vaccine does not include a "Health center-based strategy"

Malawi has total of 786 health facilities that provide immunization services out of which 573 belong to Mnistry of Health. CHAM has 146 health facilities and the rest are owned by private health institutions. The following are provided at the health facilities:

-Youth friendly health services are provided in these health facilities.

-TT vacciantion

-Family planning

-STI

Health facilities operate from Monday to Friday providing all services including immunizations which are provided by Health Surveillance Assistants.

How will the health centre-based strategy capture all the girls who are eligible?

All health centres in Malawi provide free immunization services on scheduled days. Some busy health facilities especiall in urban areas, immunization and other interventions are provided daily from Monday to Friday and eligible girls will be administered with HPV vaccine on these days. In additional, each health centre has a number of provides outreach clinics which operate once a month and girls residing far from health centres will get the HPV vaccine in these facilities.

If applicable, please describe special considerations to be made for marginalised or migrating populations?

Girsl residing in communities far from health centres and hard to reach areas will receive HPV vaccination through outreach services which are conducted in the communites once a month.

6.2. Requested vaccine (HPV quadrivalent, 1 dose(s) per vial, LIQUID)

As reported in the cMYP, the country plans to introduce HPV quadrivalent, using HPV quadrivalent, 1 dose(s) per vial, LIQUID.

When is the country planning to introduce this vaccine? **September 2016**

Please note that, due to a variety of factors, the launch date may vary compared to the date stipulated in the application. Gavi will work closely with countries and their partners to address these issues.

6.2.1. Co-financing information

If you would like to co-finance an amount higher than the minimum, please provide information in Your co-financing row.

Country group	Low

	Year 1	Year 2	Year 3	Year 4
	2016	2017	2018	2019
Minimum co-financing	0.20	0.20	0.20	0.20
Your co-financing (please change if higher)	0.20	0.20	0.20	0.20

	Year 1
	2020
Minimum co-financing	0.20
Your co-financing (please change if higher)	0.20

6.2.2. Specifications of vaccinations with new vaccine

	Data from		Year 1	Year 2	Year 3	Year 4
			2016	2017	2018	2019
Number of children to be vaccinated with the first dose	Table 5.2	#	26,947	27,483	27,800	28,794
Number of children to be vaccinated with the second dose	Table 5.2	#	25,583	26,092	26,393	27,336
Immunisation coverage with the second dose	Table 5.2	#	0 %	0 %	0 %	0 %
Country co-financing per dose	Table 6.2.1	$	0.2	0.2	0.2	0.2

	Data from		Year 1
			2020
Number of children to be vaccinated with the first dose	Table 5.2	#	29,784
Number of children to be vaccinated with the second dose	Table 5.2	#	28,276
Immunisation coverage with the second dose	Table 5.2	#	0 %
Country co-financing per dose	Table 6.2.1	$	0.2

6.2.3. Portion of supply to be procured by the country (and cost estimate, US$)

		2016	2017	2018	2019
Number of vaccine doses	#	3,100	2,600	2,800	3,000
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]***	**$**	14,500	12,000	12,000	12,500

[1] The co-financing amount for low-income countries indicates costs for the vaccines and any freight charges. The total co-financing amount does not contain the costs and fees of the relevant Procurement Agency, such as contingency buffer and handling fees. Information on these extra costs and fees will be provided by the relevant Procurement Agency as part of the cost estimate to be requested by the Country.

		2020
Number of vaccine doses	#	3,200
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]***	**$**	13,000

[1] The co-financing amount for low-income countries indicates costs for the vaccines and any freight charges. The total co-financing amount does not contain the costs and fees of the relevant Procurement Agency, such as contingency buffer and handling fees. Information on these extra costs and fees will be provided by the relevant Procurement Agency as part of the cost estimate to be requested by the Country.

6.2.4. Portion of supply to be procured by the Gavi (and cost estimate, US$)

		2016	2017	2018	2019
Number of vaccine doses	#	67,800	55,500	55,900	58,100
Number of AD syringes	#	75,600	61,400	62,000	64,600
Number of re-constitution syringes	#	0	0	0	0
Number of safety boxes	#	0	0	0	0
Total value to be co-financed by Gavi	**$**	347,000	284,500	266,500	266,000

		2020
Number of vaccine doses	#	60,000
Number of AD syringes	#	66,700
Number of re-constitution syringes	#	0
Number of safety boxes	#	0
Total value to be co-financed by Gavi	**$**	273,500

6.2.5. New and Under-Used Vaccine Introduction Grant

Calculation of Vaccine Introduction Grant for the HPV quadrivalent, 1 dose(s) per vial, LIQUID

Year of New Vaccine Introduction	Girls in cohort (From Table 5.2)	Share per Girls in cohort in US$	Total in US$
2016	34,110	2.40	100,000

The Grant will be based on a maximum award of $2.40 per infant in the birth cohort with a minimum starting grant award of $100,000

Please describe how the Gavi Vaccine Introduction Grant will be used to facilitate the timely and effective implementation of critical activities in advance of and during the introduction of the new vaccine (refer to the cMYP and the Vaccine Introduction Plan).

-Training of health workers

-Revision of monitoring tools

-Advocacy and social mobilization

-Monitoring and supervision

-Conduct PIE

Please complete the 'Detailed budget for VIG / Operational costs' template provided by Gavi and attach as a mandatory document in the Attachment section.

Detailed budget attached as Document No. 28.

Where Gavi support is not enough to cover the full needs, please describe other sources of funding and the expected amounts to be contributed, if available, to cover your full needs.

-Government of Malawi will contribute about US10,000

-Pledges from local partners may be fulfilled during resource mobilization before introduction of the vaccine

6.2.6.Technical assistance

Please describe any particular area(s) the Ministry would require technical assistance to support the introduction of HPV quadrivalent.

7. NVS Preventive Campaigns

7.1. Assessment of burden of relevant diseases related to campaigns (if available)

Disease	Title of the assessment	Date	Results
Measles and Rubella	Measles Case based surveillance	On going	In 2014 there were a total of 1190 measles suspected cases out of which 3 were lab confirmed as measles and 214 were lab confirmed as rubella.

Please attach the Plan of Action for each campaign as Document No. 30,29 in Section 10.

7.1.1 Epidemiology and disease burden for Measles-Rubella

Please select at least one of the following information sources to justify RCV diseases burden results:

Epidemiological information on burden of disease:

☑ 1 - Rubella data from the measles case-based surveillance system (including the age distribution of rubella cases)

☐ 2 - Rubella seroprevalence surveys

☐ 3 - Congenital Rubella Syndrome (CRS) burden information, e.g. retrospective search, modelled estimates for CRS burden, prospective surveillance

☐ 4 - Other

7.2.Request for MR, 10 dose(s) per vial, LYOPHILISED campaign support

7.2.1. Summary for MR campaign support

When is the country planning to conduct the MR catchup campaign? **August 2016**

When is the country planning to introduce MR into routine immunisation? **September 2016**

Please note that, due to a variety of factors, the launch date may vary compared to the date stipulated in the application. Gavi will work closely with countries and their partners to address this issue.

Please give a summary of the cMYP and/or the MR, 10 dose(s) per vial, LYOPHILISED introduction plan sections that refer to the introduction of MR, 10 dose(s) per vial, LYOPHILISED. Outline the key points that informed the decision-making process (data considered etc) and describe the plans for social mobilisation and microplanning, including strategies for insecure or hard-to-reach areas. If they are included in the introduction plan or plan of action, please cite the sections only.

The choice of MR 10 dose lyophilised vaccine has been made largely due to what is available on the global market. Previously Malawi made an attempt to switch from 10-dose to 5 dose vials measles only containing vaccine. However this was not possible due to unavailability of the latter. If in the course of time 5 dose MR vials will be available it is the wish of the government to switch to that presentation.

During the MR SIA, the Ministry of Health will establish a National Task Force (NTF) whose mandate will be to oversee the planning and implementation of activities. There will sub-committees responsible for social mobilisation and public awareness; training and microplanning. The regular static and out-reach clinics will serve as immunization sites for the campaign. Temporary sites will also be established in hard to reach areas to increase accessibility during the activity. Some schools will operate as vaccination sites. Mobile immunization teams will be set up to catch travelling clients and conducting house to house vaccinations.

Public awareness and social mobilization activities will be conducted before and during the actual immunization days in order to get the nation prepared and informed about the national immunization campaign. Inter-personal communication and mass awareness through the existing community health system and school health programmes will be used. This will entail development of messages, printing and distribution of publicity materials, conducting village meetings and radio announcements, in some districts and areas house to house social mobilization will be conducted.

Please summarise the cold chain capacity (at central and other levels) and readiness to accommodate new vaccines, taking into consideration training, cold chain and other logistic requirements. If cold chain expansion is required, state how it will be financed, and when it will be in place. Please describe how the surge capacity for campaigns will be managed. Please indicate if the supplies for the campaign will have any impact in the shipment plans for your routine vaccines and how it will be handled. The Independent Review Committee requires a certain level of assurance that the cold chain is ready or will be ready for the campaign, and evidence/plans need to be provided (if they are included in detail in the plan of action, please cite the section here).
New Requirement: As approved by Gavi in June 2014 all future proposals (2015 and beyond) that include Gavi-financing for cold chain equipment intended for vaccine storage shall need to procure equipment pre-qualified by WHO under their Performance Quality and Safety (PQS) program. The purchase of non-PQS equipment will only be considered on an exceptional basis, with justification and advance agreement from Gavi. Please note that all Gavi-financed cold chain equipment needs to be WHO pre-qualified. The purchase of non-PQS equipment will only be considered on exceptional basis, with justification and advance agreement from Gavi.

The current cold chain capacity for freezer rooms at national level is adequate. In 2015 the capacity at national level increased from 5,103 litres to 9,605 litres which is adequate for the expected MR doses for the campaign.

At regional level, the storage capacity has also increased in the southern region with the installation of 2 walk in cold rooms of 40 cubic meters and 2 walk in freezer rooms of 20 cubic meters. The population for the southern region is about 43% of the total target population and the two walk in freezer rooms have a capacity of about 10,300 litres which can accommodate more than their MR requirement for the campaign. Procurement of additional one 40 cubic meter cold room and one 20 cubic meter freezer room for

the central regional has been done.

Please describe how the campaign activities will contribute to strengthening routine immunisation services. Please refer to specific activities to be undertaken during planning and implementation, to evaluate the implementation of the routine strengthening activities completed during the campaign, and to assess, via an independent survey, the quality and coverage achieved through the campaign.

The IEC Materials that will be developed for SIAs will also have messages to encourage communities for routine immunization services. The electronic media will continue to encourage women and caretakers to bring their children for routine vaccination in the existing immunization clinics. In addition, the launch involve high level government leaders who help to generate high demand for new vaccines and builds awareness on the new and existing vaccines.

Health workers will be trained in the key areas of vaccine management, safety, AEFI surveillance and data management before the campaign as part of preparations.The knowledge and skills to be gained will be used during routine activities. Supportive supervisory visits at different levels will also help to monitor the implementation of new and existing vaccines.

Please describe any plans for expanding measles surveillance to include rubella and plans for the introduction of Congenital Rubella Syndrome (CRS) surveillance.

Measles case based surveillance was introduced in Malawi in 1999. The Kamuzu Central Hospital Measles Laboratory in Lilongwe, is a WHO accredited National Laboratory for Malawi. Over the years, the laboratory has complemented surveillance activities of the National EPI programme though the provision of timely results. Blood samples from across the country for suspected cases of measles presenting with febrile rash are sent for both measles and rubella Igm testing at Kamuzu Central Hospital. Congenital rubella syndrome (CRS) is not yet established in Malawi. Consultations are underway to establish sentinel surveillance sites at Queen Elizabeth Central Hospital, Kamuzu Central Hopsital and Mzuzu Central Hospital. The existing system is functional but will need strengthening.

Please submit relevant documentation to support the estimates of the size of the campaign target population (as DOCUMENT NUMBER : 23).

7.2.2. Grant Support for Operational Costs of the MR Campaign

Table 7.2.2: calculation of grant to support the operational costs of the campaigns

Year of MR support	Total target population (from Table 5.3)	Gavi contribution per target person in US$	Total in US$
2016	7,738,999	0.65	5,030,349
2017	0	0.65	0
2018	0	0.65	0
2019	3,134,549	0.65	2,037,457
2020	0	0.65	0

[1] The Grant will be based on a maximum award of $0.65 per target person

[2] Please add a line for each calendar year for SIAs being implemented over different years.

Please describe how the grant will be used to facilitate the preparation and timely and effective delivery of the campaigns to the target population (refer to the cMYP and the Vaccine Introduction Plan).

Funds for measles rubella will be used for the following activities:
i. Training of health workers
ii. Briefing of volunteers who will assist health workers
iii. Sensitization of policy makers and other stakeholders

iv. Development of publicity materials
v. Radio and TV announcements

vi. Distribution of vaccines and other supplies

In addition, the VIG will help to strengthen routine immunization during the introduction of measles rubella vaccine. The assessments and reviews conducted between 2012 and 2014 revealed gaps and weaknesses in data and vaccine management, disease and AEFI surveillance. The reviews came up with recommendations for implementation, however funding has been a major constraint to implement the recommendations in full. Some recommendations have been addressed using funding from GAVI HSS1,KFW, FICA, NORAD, WHO. UNICEF, MCSP, CHAI and Save the Children. However the majority of the recommendations of these assessments and reviews have not been addressed.
The VIG will address some of the gaps observed during the assessements:
i. Data management: During MR training, health workers will be trained in calculation on drop out rate, PAB, coverage rate, wastage rate, data archiving and reporting.
ii. Vaccine Management: Health workers will be trained on VVM, MDVP, Shake test, vaccine and injection material estimation, Use of FT2 in monitoring temperatures.
iii.Disease surveillance: Health workers will be trained on strengthening surveillance on measles and rubella.
iv. AEFI Surveillance: Health workers will be trained to strengthen AEFI detection and reporting.
v. Tracking on availability of stocks using mobile phone: This is being done in some pilot districts and health workers will also be trained on the importance of the system.
vi. Microplanning: Health workers will be trained in microplanning at health facility level.

Where Gavi support is not enough to cover the full needs, please describe other sources of funding and the expected amounts to be contributed, if available, to cover your full needs.

The measles rubella SIAs has a shortfall **US$35,225. H**owever, the VIG for measles rubella introudction will cover the shortfall as some of the activities are overlapping.

Please complete also the 'Detailed budget for VIG / Operational costs' template provided by Gavi and attach as a mandatory document in the Attachment section.

Detailed budget attached as Document No. 28.

7.2.3 Evidence of introduction of MR in routine programme

Please provide evidence that the country can finance the introduction of Rubella-Containing-Vaccine (RCV) into the routine programme through one of the following:(Please attach available documents AS DOCUMENT NUMBER 22 in Section 10. Attachments)

☐ 1 - A commercial contract for purchase of MR/MMR vaccine with or without shipping documents, invoice, etc.

☑ 2 - Integration of RCV into the cMYP with a corresponding increase in the budget line for vaccines in the health sector budget adequate to cover purchase of RCV (please highlight the budget line in the cMYP costing or other document showing the corresponding increase to cover the purchase of RCV).

☐ 3 - An MOU between government and donor(s) (or other written document) committing the donor(s) to support for at least one year, the purchase of RCV for use in the routine programme **OR** a letter from the Minister of Finance or Budget ensuring additional funding for RCV purchase. In this case, the country must show additional evidence that the country will include MR vaccination in the routine immediately after the campaign.

7.2.4 Introduction planning for RCV

Countries should describe their plan for introduction including surveillance activities:

Does Malawi's cMYP include a plan for the introduction of RCV into the national programme? **Yes**

Please attach the Introduction Plan for the introduction of RCV into the national programme as **Document number 15** in Section 10 and also attach the Plan of Action for the campaign as **Document number 20** in Section 10. Please refer to the Gavi application guidelines for required components in the introduction plan and plan of action.

All compenemts have been covered in the measles rubella Action Plan for SIAs and measles rubella introduction Plan.

7.2.5 Rubella Containing Vaccine introduction Grant

Has a Rubella Containing vaccine already been introduced nationally on a routine basis? **No**

Calculation of Vaccine Introduction Grant for the MR, 10 dose(s) per vial, LYOPHILISED

Please indicate in the tables below how the one-time Introduction Grant***[1]*** will be used to support the costs of vaccine introduction and critical pre-introduction activities (refer to the cMYP). Gavi's support may not be enough to cover the full needs so please indicate in the table below how much and who will be complementing the funds needed.

Year of New Vaccine Introduction	Birth cohort (from Table 5.1)	Gavi contribution per target person in US$	Total in US$
2016	711,236	0.80	568,989

[1] The Grant will be based on a maximum award of $0.80 per person in the birth cohort with a minimum starting grant award of $100,000

Please describe how the Gavi Vaccine Introduction Grant will be used to facilitate the timely and effective implementation of critical activities in advance of and during the introduction of the new vaccine (refer to the cMYP and the Vaccine Introduction Plan).

VIG for MR Introduction will be used for:

i. Planning activities.

ii. Training of health workers.

iii. Supportive supervision to assess level of preparedness and the actual implementation.

iv. Social moblization activities

v. Distribution of supplies

In addition, VIG will help to strengthen routine immunization during the introduction of measles rubella vaccine. The assessments and reviews conducted between 2012 and 2014 revealed gaps and weaknesses in data and vaccine management, disease and AEFI surveillance. The reviews came up with recommendations for implementation, however funding has been a major constraint to implement the recommendations in full. Some recommendations have been addressed using funding from GAVI HSS1,KFW, FICA, NORAD, WHO. UNICEF, MCSP, CHAI and Save the Children. However the majority of the recommendations of these assessments and reviews have not been addressed.
The VIG will address some of the gaps observed during the assessements:
i. Data management: During MR training, health workers will be trained in calculation on drop out rate, PAB, coverage rate, wastage rate, data archiving and reporting.
ii. Vaccine Management: Health workers will be trained on VVM, MDVP, Shake test, vaccine and injection material estimation, Use of FT2 in monitoring temperatures.
iii.Disease surveillance: Health workers will be trained on strengthening surveillance on measles and rubella.
iv. AEFI Surveillance: Health workers will be trained to strengthen AEFI detection and reporting.
v. Tracking on availability of stocks using mobile phone: This is being done in some pilot districts and health workers will also be trained on the importance of the system.
vi. Microplanning: Health workers will be trained in microplanning at health facility level.

8. Procurement and Management

8.1 Procurement and Management of New and Under-Used Vaccines Routine

Note: The PCV vaccine must be procured through UNICEF to be able to access the price awarded by the Advance Market Commitment (AMC).

a) Please show how the support will operate and be managed including procurement of vaccines (Gavi expects that most countries will procure vaccine and injection supplies through UNICEF or PAHO's Revolving Fund):

HPV vaccine will be procured through UNICEF Supply Division just like any traditional and new vaccines.

b) If an alternative mechanism for procurement and delivery of vaccine supply (financed by the country or the Gavi) is requested, please document

- A description of the mechanism and the vaccines or commodities to be procured by the country
- Assurance that vaccines will be procured from the WHO list of pre-qualified vaccines, indicating the specific vaccine from the list of pre-qualification. For the procurement of locally-produced vaccines directly from a manufacturer which may not have been prequalified by WHO, assurance should also be provided that the vaccines purchased comply with WHO's definition of quality vaccines, for which there are no unresolved quality problems reported to WHO, and for which compliance is assured by a fully functional National Regulatory Authority (NRA), as assessed by WHO in the countries where they are manufactured and where they are purchased.

Not applicable

c) If receiving direct financial support from Gavi (such as operational support for campaigns or VIG activities), please indicate how the funds should be transferred by Gavi.

The Minstry of Health has opened Foreign Currency Denominated Account (FCDA) with Reserve Bank of Malawi, the Account Name MOH-GAVI, Account Number is 0013001600081, currency USD. Funds should be deposited into FCDA from the donor.

Bank name: Reserve Bank of Malawi

Bank Address: P.O. Box 30063

Branch: (If applicable) NA

Account Name: MoH-GAVI

Account Number: 0013001600081

Beneficiary of the Account: Expanded Programme on Immunization

Currency of the bank account: US$

Swift Number: RBMAMWMW

d) Please indicate how the co-financing amounts will be paid (and who is responsible for this)

The Ministry Health, through SWAp commits funds for procurement of traditional and new vaccines. The country started co-financing in 2006 and is committed to contine to co-financing for HPV vaccine and other new vaccines. The co-financing of HPV and other new vaccines have been included in the revised cMYP 2016-200 and the EPI budget.

e) Please describe the financial management procedures that will be applied for the management of the NVS direct financial support, including procurement.

The Government financial management processes shall be applied in the management of financial support as per standing Circulars, Public Financial Management Act 2003, Public Procurement Act 2003, Public Audit Act 2003, Desk Instructions and also Treasury Instruction Documents.

f) Please outline how coverage of the introduced vaccine will be monitored, reported and evaluated (refer to cMYP and Introduction Plan)

Monitoring of HPV vaccinationand measles rubella will be part of the routine EPI monitoring system. Immunization monitoring tools will be revised to include HPV and MR.

g) If applying for measles second dose, does the country wish to have the support in cash or in-kind? **N/A**

8.2 Procurement and Management for NVS Preventive Campaign(s)

8.2.1 Procurement and Management for MR, 10 dose(s) per vial, LYOPHILISED campaign

a) Please show how the support will operate and be managed including procurement of vaccines (Gavi expects that countries will procure vaccine and injection supplies through UNICEF):

Measles rubella vaccines and injection devices will be procured through UNICEF procurement system

b) Please describe the financial management procedures that will be applied for the management of the preventive campaign cash support, including any procurement to be incurred.

The Government financial management processes shall be applied in the management of cash support as per standing Circulars, Public Financial Management Act 2003, Public Procurement Act 2003, Public Audit Act 2003, Desk Instructions and also Treasury Instruction Documents.

c) Please indicate if the campaign is going to be phased, and if so, how this will be done.

The country has proposed to conduct a national measles rubella vaccination campaign coverage all the districts at once.

d) Please outline how coverage of the campaign will be monitored, reported and evaluated (refer to the cMYP and/or the MR, 10 dose(s) per vial, LYOPHILISED campaign introduction plan)

As indicated in the action plan, monitoring tools will be developed, printed and sent to all health facilties. There will be daily vaccination summary sheets for the site, daily vaccination sheet for the health facility and district summary sheets which will consolidate all the campaign immunization data. There will be independent monitors who will assess low performing areas for mop up. In additional to administrative data, it has also been proposed to conduct post campaign coverage survey which has been budgeted for.

8.3 Product Licensure

For each of the vaccine(s) requested, please state whether manufacturer registration and/or national vaccine licensure will be needed in addition to WHO prequalification and, if so, describe the procedure and its duration. In addition, state whether the country accepts the Expedited Procedure for national registration of WHO-prequalified vaccines.

Note that the necessary time for licensure should be factored into the introduction timeline and reflected in the Vaccine Introduction Plan or Plan of Action.

The Pharmacy Medicines and Poisons Board (PMPB) is the regulatory authority in Malawi.Licensing of drugs and vaccine products is done by the PMPB. All the vaccinescurrently in use in Malawi are procured through UNICEF and from WHOprequalified suppliers. MR will also be procured through the same mechanisms.However in order to satisfy the requirements a formal application for licensingof MR will be made to PMPB. Since MR isalready prequalified by WHO, it is expected that the licensing process will be expedited.

For each of the vaccine(s) requested, please provide the actual licensure status of the preferred presentation and of any alternative presentations, if required.

The requested MR lyophilized 10 dose vaccine isnot yet registered in Malawi with Pharmacies, Medicines and Poisons Board (PMPB).

Please describe local customs regulations, requirements for pre-delivery inspection, special documentation requirements that may potentially cause delays in receiving the vaccine. If such delays are anticipated, explain what steps are planned to handle these.

Malawi Regulatory Authority (MRA) inspect all incoming vaccine shipments. However this process has been smooth with no hitches experienced. Pre-shipment documents are served to MRA before the arrival dateof the vaccines. The Ministry has a valid contract with Allied Freight (Malawi) as clearing agent for clearing and handling.

Please provide information on NRA in the country, including status (e.g. whether it is WHO-certified). Please include points of contact with phone numbers and e-mail addresses. UNICEF will support the process by communicating licensing requirements to the vaccine manufacturers where relevant.

The Pharmacy Medicines and Poisons Board (PMPB) isthe regulatory authority in Malawi. It is certified by WHO and a member of theWHO coordinated Africa Vaccination Regulatory Authorities Forum (AVAREF).

8.4 Vaccine Management (EVSM/EVM/VMA)

It is mandatory for countries to conduct an Effective Vaccine Management (EVM) assessment prior to an application for introduction of new vaccine. This EVM should have been conducted within the preceding 36 months.

When was the EVM conducted? **November 2012**

Please attach the most recent EVM assessment report (DOCUMENT NUMBER : 25,26,27), the corresponding EVM improvement plan (DOCUMENT NUMBER : 26) and progress on the EVM improvement plan (DOCUMENT NUMBER : 27). The improvement plan should include a timeline, budget of committed resources for these activities and funding gaps, if any, as well as M&E indicators to monitor progress of implementation.

If any of the above mandatory documents (EVM Assessment Report, EVM Improvement Plan, Progress on the EVM Improvement Plan) are not available, please provide justification and reference to additional documents such as PIE and External EPI Reviews.

When is the next Effective Vaccine Management (EVM) Assessment planned? **October 2016**

1. Document Number 25: EVM Assessment Report
2. Document Number 26: EVM Improvement Plan
3. Document Number 27: Progress on EVM Improvement Plan

8.5 Waste management

Countries must have a detailed waste management and monitoring plan as appropriate for their immunisation activities. This should include details on sufficient availability of waste management supplies (including safety boxes), the safe handling, storage, transportation and disposal of immunisation waste, as part of a healthcare waste management strategy. Please describe the country's waste management plan for immunisation activities (including campaigns).

During immunisation clinics, vaccines are administered using AD syringes. The used syringes are disposed of into safety boxes immediately after use. These safety boxes are leak-proof and tamper-proof. Used vials are disposed into separate containers. The filled safety boxes are then taken for incineration.

If incinerators are not available, the other recommended method is open burning in designated pits. The pits are dug in an unused area as far from building as possible. Once the burning is over, the residual are buried or covered with soil. During campaigns, the filled safety boxes are transported from outreach and temporary sites to a central point for incineration and/or burn and burn.

9. Additional Comments and Recommendations from the National Coordinating Body (ICC/HSCC)

Comments and Recommendations from the National Coordinating Body (ICC/HSCC)

The EPI Sub-TWG met on Friday 11th September where MR campaign, MR introduction and HP national roll out documents were presented for their endorsement. Members wanted to know the financial sustainability for the procurement of measles rubella vaccine in view of the fact that Gavi will not support the measles rubella vaccine (RCV) and the high cost of the vaccine as compared to measles vaccine. Clarification was provided in that the government will strive to allocate more resources towards the Immunization Programme despite other competing priorities within the health sector.

Members appplauded the team that participated in the developments of the application documents.

10. List of documents attached to this proposal

10.1. List of documents attached to this proposal

Document Number	Document	Section	Mandatory	File
1	MoH Signature (or delegated authority) of Proposal	4.1.1	☑	Attachments 1 MOH Signature or Delegated Authority.docx **File desc:** **Date/time :** 09/09/2015 06:11:29 **Size:** 11 KB
				Attachments 1 MOH Signature or Delegated Authority.docx **File desc:** **Date/time :** 18/09/2015 10:53:53 **Size:** 11 KB
2	MoF Signature (or delegated authority) of Proposal	4.1.1	☑	Attachments 2MOF_ Signature or delegated authority.docx **File desc:** **Date/time :** 09/09/2015 06:12:12 **Size:** 10 KB
3	MoE signature (or delegated authority) of HPV Proposal	4.1.1	☑	Attachments 3 MOE_ Signature or delegated authority.docx **File desc:** **Date/time :** 09/09/2015 06:12:43 **Size:** 10 KB
4	Terms of Reference for the ICC	4.1.2	☑	Attachment 4 Revised TORs for EPI TWG_15022013.doc **File desc:** **Date/time :** 09/09/2015 06:13:20 **Size:** 42 KB
5	Minutes of ICC/HSCC meeting endorsing Proposal	4.1.3	☑	Attachments 5Minutes of the EPI Sub.docx **File desc:** **Date/time :** 09/09/2015 06:14:22 **Size:** 10 KB
6	Signatures of ICC or HSCC or equivalent in Proposal	4.1.3	☑	Attachments 6Signature of the EPI Sub.docx **File desc:** **Date/time :** 09/09/2015 06:15:14 **Size:** 10 KB
7	Minutes of last three ICC/HSCC meetings	4.1.3	☑	Attachment 7 EPI Sub TWGMinutes.zip **File desc:** **Date/time :** 09/09/2015 08:22:50

				Size: 32 KB
8	A description of partner participation in preparing the application	4.1.3	☒	Attachments 8Partner participation in the development of the proposal.docx **File desc:** **Date/time :** 09/09/2015 07:46:37 **Size:** 10 KB
9	Minutes of NITAG meeting with specific recommendations on the NVS introduction or campaign	4.2	☒	Attachments 9 Minutes of NITAG meeting.docx **File desc:** **Date/time :** 09/09/2015 07:51:34 **Size:** 10 KB
10	Role and functioning of the advisory group, description of plans to establish a NITAG	4.2.1	☑	Attachment 10 TERMS OF REFERENCE-NITAG MALAWI_06092015.doc **File desc:** **Date/time :** 09/09/2015 06:32:53 **Size:** 41 KB
11	comprehensive Multi Year Plan - cMYP	5.1	☑	Malawi cMYP 2016 TO 2020.docx **File desc:** **Date/time :** 09/09/2015 06:35:33 **Size:** 1 MB
12	cMYP Costing tool for financial analysis	5.1	☑	cMYP_V3.8_MAL 20150901.xlsx **File desc:** **Date/time :** 09/09/2015 06:42:37 **Size:** 3 MB
13	Monitoring and evaluation and surveillance (M&E) plan for the support requested, within the context of the country's existing monitoring plan for the EPI programme	5.1.5	☑	Attachment 13 M&E Framework.docx **File desc:** **Date/time :** 09/09/2015 08:25:16 **Size:** 10 KB
14	Vaccine introduction plan	5.1	☑	Attachment 14 Malawi HPV_Introduction Plan 20150904.doc **File desc:** **Date/time :** 09/09/2015 06:40:06 **Size:** 227 KB Malawi Action Plan for Measles Rubella SIAs 20150917.docx **File desc:** **Date/time :** 18/09/2015 10:43:50 **Size:** 112 KB

				Malawi Measles Rubella Introduction Plan 20150917.doc **File desc:** **Date/time :** 18/09/2015 10:42:38 **Size:** 272 KB
15	Introduction Plan for the introduction of RCV / JE / Men A into the national programme	7.x.4	☑	Attachments 15Introduction for Introduction of RCV.docx **File desc:** **Date/time :** 09/09/2015 07:48:52 **Size:** 10 KB
16	Data quality assessment (DQA) report	5.1.5	☒	Attachments 16Data Quality Assessment_Report.docx **File desc:** **Date/time :** 09/09/2015 07:53:35 **Size:** 10 KB
17	DQA improvement plan	5.1.5	☒	Attachments 17Data Quality Assessment_Improvement Plan.docx **File desc:** **Date/time :** 09/09/2015 07:54:50 **Size:** 10 KB
19	HPV roadmap or strategy	6.1.1	☑	Attachment 19 a NATIONAL CERVICAL CANCER PROGRAMME STRATEGY.pdf **File desc:** **Date/time :** 09/09/2015 06:49:20 **Size:** 611 KB
20	Introduction Plan for the introduction of RCV into the national programme	7.x.4	☑	Attachments 20Introduction Plan for the Introduction of RCV into the national programme.docx **File desc:** **Date/time :** 09/09/2015 07:57:22 **Size:** 10 KB
21	HPV summary of the evaluation methodology	5.1.6	☑	Attachment 21 HPV Vaccination year 1 Coverage Survey_Report_Revised_11February,2015.pdf **File desc:** **Date/time :** 09/09/2015 07:34:37 **Size:** 1 MB
22	Evidence of commitment to fund purchase of RCV for use in the routine system in place of the first dose of MCV	7.x.3	☑	Attachments 22_Evidence of commitment to fund purchase of RCV for use in the routine system in place of the first dose of M.docx **File desc:** **Date/time :** 09/09/2015 07:58:48 **Size:** 10 KB

23	Campaign target population documentation	7.x.1	☑	Attachment 23_Campaign target population documentation.docx **File desc:** **Date/time :** 09/09/2015 08:02:51 **Size:** 10 KB
24	Roadmap or strategy for strengthening a comprehensive approach to pneumonia and/or diarrhoea prevention and treatment	6.x.6	☒	Attachment 24_Roadmap or strategy for strengthening a comprehensive approach to pneumonia and.docx **File desc:** **Date/time :** 09/09/2015 08:04:22 **Size:** 10 KB
25	EVM report	8.3	☑	Malawi-EVM Report-14 Dec 12.docx **File desc:** **Date/time :** 09/09/2015 07:39:12 **Size:** 3 MB
26	Improvement plan based on EVM	8.3	☑	Attachment 16 and 17 EVM Implementation Plan Status-20150909.xlsx **File desc:** **Date/time :** 09/09/2015 07:41:30 **Size:** 75 KB
27	EVM improvement plan progress report	8.3	☑	Attachment 16 and 17 EVM Implementation Plan Status-20150917.xlsx **File desc:** **Date/time :** 18/09/2015 10:48:07 **Size:** 65 KB
28	Detailed budget template for VIG / Operational Costs	6.x,7.x.2	☑	Attachment 18 Malawi VIG and Op Cost Details for HPV National Roll Out 20150904.xlsx **File desc:** **Date/time :** 09/09/2015 07:42:20 **Size:** 27 KB Malawi MR Campaign Operational_Cost Details- 20150718.xlsx **File desc:** **Date/time :** 18/09/2015 10:50:28 **Size:** 23 KB Malawi MR Introduction VIG and Op Cost Details- 20150718.xlsx **File desc:**

				Date/time : 18/09/2015 10:49:40 **Size:** 24 KB
29	Risk assessment and consensus meeting report for Meningitis / Yellow Fever: (for yellow fever please include information required in the NVS guidelines on YF Risk Assessment process)	7.1	☒	Attachment 29_Risk assessment and consensus meeting report for Meningitis.docx **File desc:** **Date/time :** 09/09/2015 08:05:26 **Size:** 10 KB
30	Plan of Action for campaigns	7.1, 7.x.4	☑	Attachment 30_Plan of Action for campaigns.docx **File desc:** **Date/time :** 09/09/2015 08:06:40 **Size:** 9 KB
	Other		☒	Other attachments.docx **File desc:** **Date/time :** 09/09/2015 08:08:19 **Size:** 9 KB

11. Annexes

Annex 1 - NVS Routine Support

Annex 1.1 - NVS Routine Support (HPV quadrivalent, 1 dose(s) per vial, LIQUID)

Table Annex 1.1 A: Rounded up portion of supply that is procured by the country and estimate of relative costs in US$

		2016	2017	2018	2019
Number of vaccine doses	#	3,100	2,600	2,800	3,000
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]***	$	14,500	12,000	12,000	12,500

		2020
Number of vaccine doses	#	3,200
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]***	$	13,000

Table Annex 1.1 B: Rounded up portion of supply that is procured by Gavi and estimate of relative costs in US$

		2016	2017	2018	2019
Number of vaccine doses	#	67,800	55,500	55,900	58,100
Number of AD syringes	#	75,600	61,400	62,000	64,600
Number of re-constitution syringes	#	0	0	0	0
Number of safety boxes	#	0	0	0	0
Total value to be co-financed by Gavi	$	347,000	284,500	266,500	266,000

		2020
Number of vaccine doses	#	60,000
Number of AD syringes	#	66,700
Number of re-constitution syringes	#	0
Number of safety boxes	#	0
Total value to be co-financed by Gavi	$	273,500

Table Annex 1.1 C: Summary table for vaccine HPV quadrivalent, 1 dose(s) per vial, LIQUID

ID		Data from		2016	2017	2018	2019
	Number of surviving infants	Table 5.2	#	709,443	733,229	757,755	783,048
	Number of children to be vaccinated with the first dose	Table 5.2	#	26,947	27,483	27,800	28,794
	Number of children to be vaccinated with the second dose	Table 5.2	#	25,583	26,092	26,393	27,336
	Immunisation coverage with the second dose	Table 5.2	%	0	0	0	0
	Number of doses per child	Parameter	#	2	2	2	2
	Estimated vaccine wastage factor	Table 5.2	#	1.05	1.05	1.05	1.05
	Number of doses per vial	Parameter	#	1	1	1	1
	AD syringes required	Parameter	#	Yes	Yes	Yes	Yes
	Reconstitution syringes required	Parameter	#	Yes	Yes	Yes	Yes
	Safety boxes required	Parameter	#	No	No	No	No
cc	**Country co-financing per dose**	Table 6.4.1	$	0.2	0.2	0.2	0.2
ca	**AD syringe price per unit**	Table Annexes 4A	$	0.448	0.448	0.448	0.448
cr	**Reconstitution syringe price per unit**	Table Annexes 4A	$	0.448	0.448	0.448	0.448
cs	**Safety box price per unit**	Table Annexes 4A	$	0.0054	0.0054	0.0054	0.0054
fv	**Freight cost as % of vaccines value**	Table Annexes 4B	%	2.00 %	2.00 %	3.00 %	3.00 %
fd	**Freight cost as % of devices value**	Parameter	%	0	0	0	0

ID		Data from		2020
	Number of surviving infants	Table 5.2	#	808,908
	Number of children to be vaccinated with the first dose	Table 5.2	#	29,784
	Number of children to be vaccinated with the second dose	Table 5.2	#	28,276
	Immunisation coverage with the second dose	Table 5.2	%	0
	Number of doses per child	Parameter	#	2
	Estimated vaccine wastage factor	Table 5.2	#	1.05
	Number of doses per vial	Parameter	#	1
	AD syringes required	Parameter	#	Yes
	Reconstitution syringes required	Parameter	#	Yes
	Safety boxes required	Parameter	#	No
cc	**Country co-financing per dose**	Table 6.4.1	$	0.2
ca	**AD syringe price per unit**	Table Annexes 4A	$	0.448
cr	**Reconstitution syringe price per unit**	Table Annexes 4A	$	0.448
cs	**Safety box price per unit**	Table Annexes 4A	$	0.0054
fv	**Freight cost as % of vaccines value**	Table Annexes 4B	%	3.00 %
fd	**Freight cost as % of devices value**	Parameter	%	0

Table Annex 1.1 D: Estimated numbers for HPV quadrivalent, 1 dose(s) per vial, LIQUID, associated injection safety material and related co-financing budget (page 1)

		Formula	2016		
			Total	Government	Gavi
A	Country co-finance	*V*	4.33 %		
B	Number of children to be vaccinated with the first dose	*Table 5.2*	26,947	1,168	25,779
C	Number of doses per child	*Vaccine parameter (schedule)*	2		
D	Number of doses needed	*B x C*	53,894	2,335	51,559
E	Estimated vaccine wastage factor	*Table 5.2*	1.05		
F	Number of doses needed including wastage	*D x E*	56,589	2,452	54,137
G	Vaccines buffer stock	*Buffer on doses needed = (D - D of previous year) x 25% Buffer on wastages = ((F - D) - (F of previous year - D of previous year)) x 25%, = 0 if negative result G = [buffer on doses needed] + [buffer on wastages]*	14,148	613	13,535
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	70,800	3,068	67,732
J	Number of doses per vial	*Vaccine parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.11*	75,527	0	75,527
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.11*	0	0	0
M	Total of safety boxes (+ 10% of extra need) needed	*(K + L) / 100 x 1.11*	0	0	0
N	Cost of vaccines needed	*I x vaccine price per dose (g)*	319,041	13,823	305,218
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	33,837	0	33,837
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)*	7,789	338	7,451
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)*	360,667	14,160	346,507
U	Total country co-financing	*I x country co-financing per dose (cc)*	14,160		
V	Country co-financing % of Gavi supported proportion	*U / (N + R)*	4.33 %		

Table Annex 1.1 D: Estimated numbers for HPV quadrivalent, 1 dose(s) per vial, LIQUID, associated injection safety material and related co-financing budget (page 2)

		Formula	2017		
			Total	Government	Gavi
A	Country co-finance	*V*	4.32 %		
B	Number of children to be vaccinated with the first dose	*Table 5.2*	27,483	1,188	26,295
C	Number of doses per child	*Vaccine parameter (schedule)*	2		
D	Number of doses needed	*B x C*	54,966	2,375	52,591
E	Estimated vaccine wastage factor	*Table 5.2*	1.05		
F	Number of doses needed including wastage	*D x E*	57,715	2,494	55,221
G	Vaccines buffer stock	*Buffer on doses needed = (D - D of previous year) x 25% Buffer on wastages = ((F - D) - (F of previous year - D of previous year)) x 25%, = 0 if negative result G = [buffer on doses needed] + [buffer on wastages]*	282	13	269
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	58,000	2,506	55,494
J	Number of doses per vial	*Vaccine parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.11*	61,326	0	61,326
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.11*	0	0	0
M	Total of safety boxes (+ 10% of extra need) needed	*(K + L) / 100 x 1.11*	0	0	0
N	Cost of vaccines needed	*I x vaccine price per dose (g)*	262,126	11,325	250,801
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	27,475	0	27,475
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)*	6,381	276	6,105
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)*	295,982	11,601	284,381
U	Total country co-financing	*I x country co-financing per dose (cc)*	11,600		
V	Country co-financing % of Gavi supported proportion	*U / (N + R)*	4.32 %		

Table Annex 1.1 D: Estimated numbers for HPV quadrivalent, 1 dose(s) per vial, LIQUID, associated injection safety material and related co-financing budget (page 3)

		Formula	2018		
			Total	Government	Gavi
A	Country co-finance	*V*	4.68 %		
B	Number of children to be vaccinated with the first dose	*Table 5.2*	27,800	1,302	26,498
C	Number of doses per child	*Vaccine parameter (schedule)*	2		
D	Number of doses needed	*B x C*	55,600	2,603	52,997
E	Estimated vaccine wastage factor	*Table 5.2*	1.05		
F	Number of doses needed including wastage	*D x E*	58,380	2,733	55,647
G	Vaccines buffer stock	*Buffer on doses needed = (D - D of previous year) x 25% Buffer on wastages = ((F - D) - (F of previous year - D of previous year)) x 25%, = 0 if negative result G = [buffer on doses needed] + [buffer on wastages]*	167	8	159
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	58,600	2,743	55,857
J	Number of doses per vial	*Vaccine parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.11*	61,902	0	61,902
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.11*	0	0	0
M	Total of safety boxes (+ 10% of extra need) needed	*(K + L) / 100 x 1.11*	0	0	0
N	Cost of vaccines needed	*I x vaccine price per dose (g)*	243,971	11,419	232,552
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	27,733	0	27,733
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)*	6,447	302	6,145
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)*	278,151	11,720	266,431
U	Total country co-financing	*I x country co-financing per dose (cc)*	11,720		
V	Country co-financing % of Gavi supported proportion	*U / (N + R)*	4.68 %		

Table Annex 1.1 D: Estimated numbers for HPV quadrivalent, 1 dose(s) per vial, LIQUID, associated injection safety material and related co-financing budget (page 4)

		Formula	2019		
			Total	Government	Gavi
A	Country co-finance	*V*	4.90 %		
B	Number of children to be vaccinated with the first dose	*Table 5.2*	28,794	1,410	27,384
C	Number of doses per child	*Vaccine parameter (schedule)*	2		
D	Number of doses needed	*B x C*	57,588	2,820	54,768
E	Estimated vaccine wastage factor	*Table 5.2*	1.05		
F	Number of doses needed including wastage	*D x E*	60,468	2,961	57,507
G	Vaccines buffer stock	*Buffer on doses needed = (D - D of previous year) x 25% Buffer on wastages = ((F - D) - (F of previous year - D of previous year)) x 25%, = 0 if negative result G = [buffer on doses needed] + [buffer on wastages]*	522	26	496
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	61,000	2,987	58,013
J	Number of doses per vial	*Vaccine parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.11*	64,503	0	64,503
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.11*	0	0	0
M	Total of safety boxes (+ 10% of extra need) needed	*(K + L) / 100 x 1.11*	0	0	0
N	Cost of vaccines needed	*I x vaccine price per dose (g)*	242,475	11,872	230,603
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	28,898	0	28,898
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)*	6,711	329	6,382
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)*	278,084	12,200	265,884
U	Total country co-financing	*I x country co-financing per dose (cc)*	12,200		
V	Country co-financing % of Gavi supported proportion	*U / (N + R)*	4.90 %		

Table Annex 1.1 D: Estimated numbers for HPV quadrivalent, 1 dose(s) per vial, LIQUID, associated injection safety material and related co-financing budget (page 5)

		Formula	2020		
			Total	Government	Gavi
A	Country co-finance	*V*	4.93 %		
B	Number of children to be vaccinated with the first dose	*Table 5.2*	29,784	1,468	28,316
C	Number of doses per child	*Vaccine parameter (schedule)*	2		
D	Number of doses needed	*B x C*	59,568	2,935	56,633
E	Estimated vaccine wastage factor	*Table 5.2*	1.05		
F	Number of doses needed including wastage	*D x E*	62,547	3,082	59,465
G	Vaccines buffer stock	*Buffer on doses needed = (D - D of previous year) x 25% Buffer on wastages = ((F - D) - (F of previous year - D of previous year)) x 25%, = 0 if negative result G = [buffer on doses needed] + [buffer on wastages]*	520	26	494
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	63,100	3,109	59,991
J	Number of doses per vial	*Vaccine parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.11*	66,698	0	66,698
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.11*	0	0	0
M	Total of safety boxes (+ 10% of extra need) needed	*(K + L) / 100 x 1.11*	0	0	0
N	Cost of vaccines needed	*I x vaccine price per dose (g)*	249,245	12,279	236,966
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	29,881	0	29,881
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)*	6,942	342	6,600
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)*	286,068	12,620	273,448
U	Total country co-financing	*I x country co-financing per dose (cc)*	12,620		
V	Country co-financing % of Gavi supported proportion	*U / (N + R)*	4.93 %		

Annex 2 - NVS Routine – Preferred Second Presentation

No NVS Routine – Preferred Second Presentation requested this year

Annex 3 - NVS Preventive campaign(s)

Annex 3.1 - NVS Preventive campaign(s) (MR, 10 dose(s) per vial, LYOPHILISED)

Table Annex 3.1 C: Summary table for CAMPAIGN MR, 10 dose(s) per vial, LYOPHILISED

	Data from		2016	2017	2018	2019
Total target population	Table 5.3.1	#	7,738,999	0	0	3,134,549
Number of doses per persons	Parameter	#	1	1	1	1
Wastage Rate	Table 5.3.1	#	15	0	0	15
Estimated vaccine wastage factor		#	1.18	1	1	1.18
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
AD syringe price per unit	Table Annexes 4A	$	0.448	0.448	0.448	0.448
Reconstitution syringe price per unit	Table Annexes 4A	$	0.035	0.035	0.035	0.035
Safety box price per unit	Table Annexes 4A	$	0.0054	0.0054	0.0054	0.0054
Freight cost as % of vaccines value	Table Annexes 4B	%	2.00 %	3.00 %	3.00 %	3.00 %
Freight cost as % of devices value	Parameter	%	0	0	0	0

	Data from		2020
Total target population	Table 5.3.1	#	0
Number of doses per persons	Parameter	#	1
Wastage Rate	Table 5.3.1	#	0
Estimated vaccine wastage factor		#	1
Number of doses per vial	Parameter	#	10
AD syringes required	Parameter	#	Yes
Reconstitution syringes required	Parameter	#	Yes
Safety boxes required	Parameter	#	Yes
AD syringe price per unit	Table Annexes 4A	$	0.448
Reconstitution syringe price per unit	Table Annexes 4A	$	0.035
Safety box price per unit	Table Annexes 4A	$	0.0054
Freight cost as % of vaccines value	Table Annexes 4B	%	3.00 %
Freight cost as % of devices value	Parameter	%	0.00 %

Table Annex 3.1 D: Estimated number of MR, 10 dose(s) per vial, LYOPHILISED associated injection safety material and related co-financing budget (page 1)

		Formula	Gavi		
			2016	2017	2018
B	Total target population	*Table 5.3.1*	7,738,999	0	0
C	Number of doses per persons	*Vaccine parameter (schedule)*	1	1	1
D	Number of doses needed	*B x C*	7,738,999	0	0
E	Estimated vaccine wastage factor	*100 / (100 - Vaccine wastage rate)*	1.18	1	1
F	Number of doses needed including wastage	*D x E*	9,132,019	0	0
G	Vaccines buffer stock	*0*	0	0	0
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	9,132,100	0	0
J	Number of doses per vial	*Vaccine parameter*	10	10	10
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.11*	8,590,289	0	0
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.11*	1,013,664	0	0
M	Total of safety boxes (+ 10% of extra need) needed	*(K + L) / 100 x 1.11*	106,604	0	0
N	Cost of vaccines needed	*I x vaccine price per dose (g)*	5,534,053	0	0
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	3,848,450	0	0
P	Cost of reconstitution syringes needed	*L x reconstitution price per unit (cr)*	35,479	0	0
Q	Cost of safety boxes needed	*M x safety box price per unit (cs)*	576	0	0
R	Freight cost for vaccines needed	*N x freight cost as of % of vaccines value (fv)*	136,982	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)*	9,555,540	0	0

		Formula	Gavi	
			2019	2020
B	Total target population		3,134,549	0
C	Number of doses per persons		1	1
D	Number of doses needed	*B x C*	3,134,549	0
E	Estimated vaccine wastage factor	*100 / (100 - Vaccine wastage rate)*	1.18	1
F	Number of doses needed including wastage	*D x E*	3,698,768	0
G	Vaccines buffer stock	*0*	0	0
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	3,698,800	0
J	Number of doses per vial	*Vaccine parameter*	10	10
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.11*	3,479,350	0
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.11*	410,567	0

M	**Total of safety boxes (+ 10% of extra need) needed**	*(K + L) / 100 x 1.11*	43,179	0
N	**Cost of vaccines needed**	*I x vaccine price per dose (g)*	2,121,354	0
O	**Cost of AD syringes needed**	*K x AD syringe price per unit (ca)*	1,558,749	0
P	**Cost of reconstitution syringes needed**	*L x reconstitution price per unit (cr)*	14,370	0
Q	**Cost of safety boxes needed**	*M x safety box price per unit (cs)*	234	0
R	**Freight cost for vaccines needed**	*N x freight cost as of % of vaccines value (fv)*	55,483	0
S	**Freight cost for devices needed**	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0
T	**Total fund needed**	*(N+O+P+Q+R+S)*	3,750,190	0

Note: There is no co-financing for NVS preventive campaigns

Annex 4

Table Annex 4A: Commodities Cost

Estimated prices of supply are not disclosed

Table Annex 4B: Freight cost as percentage of value

Vaccine Antigen	Vaccine Type	2016	2017	2018	2019	2020
HPV quadrivalent, 1 dose(s) per vial, LIQUID	HPV	2.44 %	2.43 %	2.64 %	2.77 %	2.78 %
MR, 10 dose(s) per vial, LYOPHILISED	MR	2.48 %	2.51 %	2.50 %	2.62 %	2.57 %

Table Annex 4C: Low - Minimum country's co-payment per dose of co-financed vaccine.

Vaccine	2016	2017	2018	2019
HPV quadrivalent, 1 dose(s) per vial, LIQUID	0.2	0.2	0.2	0.2

Vaccine	2020
HPV quadrivalent, 1 dose(s) per vial, LIQUID	0.2

Table Annex 4D: Wastage rates and factors

The following table shows the wastage rates for routine and campaign vaccines, set for 2016.

Vaccine	dose(s) per vial	Maximum Vaccine wastage rate*		Benchmark Wastage Rate**
		Routine	Campaign	
HPV bivalent, 2 dose(s) per vial, LIQUID	2	10 %	10 %	
HPV quadrivalent, 1 dose(s) per vial, LIQUID	1	5 %	5 %	
JE, 5 dose(s) per vial, LYOPHILISED	5	10 %	10 %	
Measles second dose, 10 dose(s) per vial, LYOPHILISED	10	40 %	40 %	
Meningococcal A, 10 dose(s) per vial, LYOPHILISED	10	50 %	10 %	
MR, 10 dose(s) per vial, LYOPHILISED	10	15 %	15 %	
Pneumococcal (PCV10), 2 dose(s) per vial, LIQUID	2	10 %	10 %	
Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID	1	5 %	5 %	
Rotavirus, 2-dose schedule	1	5 %	5 %	
Rotavirus, 3-dose schedule	1	5 %	5 %	
Yellow Fever, 10 dose(s) per vial, LYOPHILISED	10	40 %	40 %	
Yellow Fever, 5 dose(s) per vial, LYOPHILISED	5	10 %	10 %	

Comments:

* Source - WHO indicative wastage rates

** Source - Country APRs and studies, approved by WHO, UNICEF, and the Gavi Secretariat

Note: HPV demonstration project wastage rates are the same as for the national introduction of the vaccine

Table Annex 4E: Vaccine maximum packed volumes

Kindly note that this table is for reference purposes only and includes Gavi- and non Gavi-supported vaccines.

Vaccine product	Designation	Vaccine formulation	Admin route	No. Of doses in the schedule	Presentation (doses/vial, prefilled)	Packed volume vaccine (cm3/dose)	Packed volume diluents (cm3/dose)
BCG	BCG	lyophilized	ID	1	20	1.2	0.7
Diphtheria-Tetanus	DT	liquid	IM	3	10	3	
Diphtheria-Tetanus-Pertussis	DTP	liquid	IM	3	20	2.5	
Diphtheria-Tetanus-Pertussis	DTP	liquid	IM	3	10	3	
DTP liquid + Hib freeze-dried	DTP+Hib	liquid+lyop.	IM	3	1	45	
DTP-HepB combined	DTP-HepB	liquid	IM	3	1	9.7	
DTP-HepB combined	DTP-HepB	liquid	IM	3	2	6	
DTP-HepB combined	DTP-HepB	liquid	IM	3	10	3	
DTP-HepB liquid + Hib freeze-dried	DTP-Hib	liquid	IM	3	10	2.5	
DTP-HepB liquid + Hib freeze-dried	DTP-HepB+Hib	liquid+lyop.	IM	3	1	22	

DTP-HepB-Hib liquid	DTP-HepB+Hib	liquid+lyop.	IM	3	2	11	
DTP-HepB-Hib liquid	DTP-HepB-Hib	liquid	IM	3	10	4.4	
DTP-HepB-Hib liquid	DTP-HepB-Hib	liquid	IM	3	2	13.1	
DTP-HepB-Hib liquid	DTP-HepB-Hib	liquid	IM	3	1	19.2	
DTP-Hib combined liquid	DTP+Hib	liquid+lyop.	IM	3	10	12	
DTP-Hib combined liquid	DTP-Hib	liquid	IM	3	1	32.3	
Hepatitis B	HepB	liquid	IM	3	1	18	
Hepatitis B	HepB	liquid	IM	3	2	13	
Hepatitis B	HepB	liquid	IM	3	6	4.5	
Hepatitis B	HepB	liquid	IM	3	10	4	
Hepatitis B UniJect	HepB	liquid	IM	3	Uniject	12	
Hib freeze-dried	Hib_lyo	lyophilized	IM	3	1	13	35
Hib freeze-dried	Hib_lyo	lyophilized	IM	3	2	6	
Hib freeze-dried	Hib_lyo	lyophilized	IM	3	10	2.5	3
Hib liquid	Hib_liq	liquid	IM	3	1	15	
Hib liquid	Hib_liq	liquid	IM	3	10	2.5	
Human Papilomavirus vaccine	HPV	liquid	IM	3	1	15	
Human Papilomavirus vaccine	HPV	liquid	IM	3	2	5.7	
Japanese Encephalitis	JE_lyo	lyophilized	SC	1	5	2.5	2.9
Measles	Measles	lyophilized	SC	1	1	26.1	20
Measles	Measles	lyophilized	SC	1	2	13.1	13.1
Measles	Measles	lyophilized	SC	1	5	5.2	7
Measles	Measles	lyophilized	SC	1	10	3.5	4
Measles-Mumps-Rubella freeze dried	MMR	lyophilized	SC	1	1	26.1	26.1
Measles-Mumps-Rubella freeze dried	MMR	lyophilized	SC	1	2	13.1	13.1
Measles-Mumps-Rubella freeze dried	MMR	lyophilized	SC	1	5	5.2	7
Measles-Mumps-Rubella freeze dried	MMR	lyophilized	SC	1	10	3	4
Measles-Rubella freeze dried	MR	lyophilized	SC	1	1	26.1	26.1
Measles-Rubella freeze dried	MR	lyophilized	SC	1	2	13.1	13.1
Measles-Rubella freeze dried	MR	lyophilized	SC	1	5	5.2	7
Measles-Rubella freeze dried	MR	lyophilized	SC	1	10	2.5	4
Meningitis A conjugate	Men_A	lyophilized	IM	1	10	2.6	4
Meningitis A/C	MV_A/C	lyophilized	SC	1	10	2.5	4
Meningitis A/C	MV_A/C	lyophilized	SC	1	50	1.5	3
Meningitis W135	MV_W135	lyophilized	SC	1	10	2.5	4
Meningococcal A/C/W/	MV_A/C/W	lyophilized	SC	1	50	1.5	3

Meningococcal A/C/W/Y	MV_A/C/W/Y	lyophilized	SC	1	10	2.5	4
Monovalent OPV-1	mOPV1	liquid	Oral		20	1.5	
Monovalent OPV-3	mOPV3	liquid	Oral		20	1.5	
Pneumo. conjugate vaccine 10-valent	PCV-10	liquid	IM	3	1	11.5	
Pneumo. conjugate vaccine 10-valent	PCV-10	liquid	IM	3	2	4.8	
Pneumo. conjugate vaccine 13-valent	PCV-13	liquid	IM	3	1	12	
Polio	OPV	liquid	Oral	4	10	2	
Polio	OPV	liquid	Oral	4	20	1	
Polio inactivated	IPV	liquid	IM	3	PFS	107.4	
Polio inactivated	IPV	liquid	IM	3	10	2.5	
Polio inactivated	IPV	liquid	IM	3	1	15.7	
Rota vaccine	Rota_liq	liquid	Oral	2	1	17.1	
Rota vaccine	Rota_liq	liquid	Oral	3	1	45.9	
Tetanus Toxoid	TT	liquid	IM	2	10	3	
Tetanus Toxoid	TT	liquid	IM	2	20	2.5	
Tetanus Toxoid UniJect	TT	liquid	IM	2	Unijject	12	
Tetanus-Diphtheria	Td	liquid	IM	2	10	3	
Yellow fever	YF	lyophilized	SC	1	5	6.5	7
Yellow fever	YF	lyophilized	SC	1	10	2.5	3
Yellow fever	YF	lyophilized	SC	1	20	1.5	2
Yellow fever	YF	lyophilized	SC	1	50	0.7	1

12. Banking Form

In accordance with the decision on financial support made by the Gavi, the Government of Malawi hereby requests that a payment be made via electronic bank transfer as detailed below:

Name of Institution (Account Holder):	MINISTRY OF HEALTH
Address:	P.O. BOX 30377, LILONGWE, CAPITAL HILL, LILONGWE MALAWI
City Country:	MALAWI
Telephone no.:	+2651789400 **Fax no.:**
	Currency of the bank account: USD
For credit to:	
Bank account's title:	MOH-GAVI
Bank account no.:	0013001600081
Bank's name:	RESERVE BANK OF MALAWI

Is the bank account exclusively to be used by this program? True

By who is the account audited? External Auditors

Signature of Government's authorizing official

		Seal
Name:		
Title:		
Signature:		
Date:		

FINANCIAL INSTITUTION		CORRESPONDENT BANK (In the United States)	
Bank Name:	ECO BANK		CITI BANK NEW YORK
Branch Name:	CAPITAL CITY		111 WALL STREET
Address:	CENTRE HOUSE ARCADE, P.O. BOX 31503, LILONGWE		NEW YORK
City Country:	LILONGWE, MALAWI		NEW YORK. USA
Swift Code:	ECOCMWMW		
Sort Code:	NA		
ABA No.:	NA		
Telephone No.:	+2651772764		
FAX No.:	+2651772745		

I certify that the account No 0070137003214001 is held by Ministry of Health at this banking institution

The account is to be signed jointly by at least 2 (number of signatories) of the following authorized signatories:

1		
	Name:	Dr Charles MWANSAMBO
	Title:	Chief of Health Services
2		
	Name:	Mr. Malumbo KAUSI
	Title:	Chief Accountant
3		
	Name:	Mr. Yohane MISOMALI
	Title:	Senior Accountant

Name of bank's authorizing official
Signature:
Date:
Seal: