Gavi

Application Form for Country Proposals

For Support to:

Preventive Campaign Support

Submitted by

The Government of

Zambia

Date of submission: **8 September 2015**

Deadline for submission: 8 September 2015

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

Start Year	2012	End Year	2016

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	2016	

[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. 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

Zambia is applying for Measles - Rubella (MR) vaccine introduction in the national EPI programme. The country has decided to implement the intervention, which will be preceded by preventive campaign involving a wide range age group of 9 months to below 15 years children, in the year 2016. The MR campaign support from GAVI is a one off cash funding towards campaign operations.

The GAVI grant support for operational costs for the Measles - Rubella Vaccine campaign is USD4,502,392. GAVI contribution per target child/ person is USD 0.65 as the 80% GAVI contribution toward the MR preventive campaign and the target population for this support is estimated at 6,926,757 children. The country chose the only available 10 dose vial presentation of measles - rubella lyophilised vaccine. Zambia has planned to introduce Measles - Rubella Vaccine in August 2015 preceded by Measles Rubella Vaccine preventive campaign in July 2015. The July 2016 MR preventive campaign will be integrated with the First Round of the Bi-annual Child Health Weeks. The integration strengthens the linkages that exist amongst child survival interventions. This will also be an opportunity for making the Second Year of Life (2YL) interventions prominent.

The proposal has provided baseline data related to current immunisation system performance. The pentavalent dose 3 and measles containing vaccine first dose (MCV1) immunisation coverage for the year 2014 was 89% and 93% respectively. A country that decides to introduce MR vaccine in the national immunisation programme should, at least, have coverage performance of 80% or above for 3 consecutive years and Zambia meets these minimum criteria.

In July 2011, Zambia conducted an Effective Vaccine Management (EVM) training and assessment, to aid the country in strengthening its national Expanded Programme on Immunisations (EPI). The assessment covered a systematically selected sample of 37 health facilities, including the National Vaccine Store, in all the nine Provincial vaccine stores that time, 13 District Stores and 14 Health Facilities.

The country has implemented the following actions from the improvement plan:
• Vaccine arrivals: At national level, the country has recruited two (2) Logisticians who facilitated the development of a tracking system for monitoring all vaccines arriving at the national level.
• Temperature: Related to temperature monitoring, Zambia has installed at both national and provincial levels, continuous temperature monitoring devices. The national level has five (5) cold rooms with temperature monitoring devices and 8 out of 10 provinces have the devices. The district and health facility levels have in place manual temperature monitoring system.
• Stock management: At national level, batch cards and inventory control cards have been put in place to

capture Vaccine Arrival Reports (VARs), Vaccine Issues and losses/adjustments. The WHO Stock Management Tool is in use. At provincial level, manual record keeping is in place. However, it requires strengthening.
• Stock distribution: The national level has a distribution plan in place; and the inventory is updated on quarterly basis. The provincial level follows the national level distribution plan. The district level vaccine distribution is based on the needs of the health facilities.
• Maintenance - Vaccine Viability and Equipment: The national level provides technical support for equipment and continuous monitoring of vaccines.

To assure effective leadership, the country has adopted governance mechanisms that encourage responsiveness, transparent and accountability process. The EPI programme management and coordination in Zambia is through the Inter-Agency Coordinating Committee (ICC) that brings together various partners and stakeholders. The ICC approves expenditure budgets on child health related survival interventions.
The measles - rubella (MR) introduction in Zambia is yet another milestone in the growth of the health service delivery system which will contribute to the reduction of child mortality, particularly mortality that could arise from congenital rubella syndrome

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 Zambia 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:

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

The Government of Zambia 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.

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	Honourable Emerine Kabanshi, MP	**Name**	Honourable Alexander Chikwanda, MP
Date		**Date**	
Signature		**Signature**	

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

Full name	Position	Telephone	Email
Abrahams Mwanamwenge	NPO/Logistics, WHO/Zambia	+260-966-837450	mwanamwengea@who.int
Belem Matapo	NPO/Surveillance, WHO/Zambia	+260-977-792213	matapob@who.int
Chilweza Musonda Muzongwe	Planner - Development Cooperation, Ministry of Community Development Mother and Child Health	+260-967-979149	chilwezam@outlook.com
Constance Sakala Banda	EPI Logistician, Centre for Infectious Diseases Research Zambia (CIDRZ) / Ministry of Community Development Mother and Child Health	+260-955-972199	constancesakala@gmail.com
Dr Ngawa Ngoma	EPI Officer, UNICEF/Zambia	+260-966-802488	nnngoma@unicef.org
Dr Rodgers Mwale	Child Health Specialist, UNICEF/Zambia	+260-966-784501	rkmwale@unicef.org
Dr Wezi Kaonga	Ag. Deputy Director, Child Health and Nutrition, Ministry of Community Development Mother and Child Health	+260-977-365034	svichaels@yahoo.com
Dr. Penelope Kalesha Masumbu	NPO/Immunisation, WHO/Zambia	+260-955-740455	masumbup@who.int
Elesan Mshanga	Chief Cold Chain Officer, Ministry of Community Development Mother and Child Health	+260-977-314396	emshanga@yahoo.com

Elicah Kamiji	Chief EPI Officer, Ministry of Community Development Mother and Child Health	+260-971-997505	kandinda2015@gmail.com
Guissimon Phiri	Chief EPI Logistician, Ministry of Community Development Mother and Child Health	+260-977-438885	pguissimon@yahoo.com
Josephine Simwinga	Chief EPI Officer, Ministry of Community Development Mother and Child Health	+260-977-760876	jsimwinga@yahoo.com
Sydney Kaweme	Project Manager/Monitoring & Evaluation Officer, PATH / Ministry of Community Development Mother and Child Health	+260-977-528533	skaweme@path.org

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	ICC
Year of constitution of the current committee	1999
Organisational structure (e.g., sub-committee, stand-alone)	Stand-alone
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:

1. Resource mobilisation
2. Advise and approve plans for routine and supplemental activities for Reproductive Maternal New Child Health and Nutrition (RMNCHN)
3. Advocate for sustained political commitment
4. Monitor and evaluate RMNCHN programmes

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

Through the ICC:

1. Advise government on issues related to the introduction of MR vaccine
2. Assist government to mobilise resources for MR introduction
3. Support activities that will increase community involvement and participation
4. Re-enforce advocacy on MR activitiesparticularly targeted at key political leaders and policy makers and mobiliseadditional partners

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 **02/09/2015** 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 proposal was endorsed	Please sign below to indicate the endorsement of the minutes where the proposal was discussed
Chair	Honourable Minister, Minister of Community Development Mother and Child Health	Honourable Emerine Kabanshi, MP		
Secretary	Acting Deputy Director, Child Health and Nutrition, Ministry of Community Development Mother and Child Health	Dr Wezi Kaonga		
Members	Permanent Secretary, Ministry of Community Development Mother and Child Health	Professor Elwyn Chomba		
	Director, MCH, Ministry of Community Development Mother and Child Health	Dr Caroline Phiri Chibawe		
	WHO Country Representative	Dr Jacob Mufunda		
	UNICEF Representative	Hamid El-Bashir		
	PATH Country Director	Dr Nanthalile Mugala		
	CHAZ Executive Director	Ms Karen Sichinga		
	CIDRZ Scientific Director	Dr Roma Chilengi		
	Health Advisor	Sangita Patel		

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	15,198,041	2015	Census Report, CSO
Birth cohort	759,902	2015	Census Report, CSO
Infant mortality rate (per 1000)	45	2015	ZDHS, 2013/14 & cMYP, 2012-2016
Surviving infants*[1]*	725,706	2015	ZDHS, 2013/14
GNI per capita (US$)	1,469 %	2015	cMYP, 2012-2016
Total Health Expenditure (THE) as a percentage of GDP	87 %	2015	cMYP, 2012-2016
General government expenditure on health (GGHE) as % of General government expenditure	61 %	2015	cMYP, 2012-2016

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

5.1.1 Lessons learned

Routine New Vaccines Support

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
Logistics and cold chain management system - the need for adequate cold chain storage capacity: Prior to the introduction of these vaccines, the country developed an expansion strategy for cold chain storage capacity which saw the installation of five (5) new walk-in cold rooms in addition to one (1) cold room and a freezer that existed at the time. Concurrently, 8 out of the 10 provinces have each a walk-in cold room installed. Two cold rooms are already in-country awaiting installation during the course of 2015. Ongoing efforts have continued to ensure that the	Zambia developed a Cold Chain Storage Expansion Strategy before new vaccines were introduced

districts and health facility have adequate storage space through annual planned procurement and installation scheduled supported by government and partners.	
Epidemiological surveillance - the country to have evidence based decision making process: The country endeavored and ensured that all new vaccines were introduced based on evidence generated from surveillance sentinel sites at selected hospitals. The sentinel sites for Paediatric Bacterial Meningitis (PBM) and rotavirus surveillance provided valuable during the 2013 rota and PCV10 vaccine introduction and further surveillance data and information are being generated to assess post introduction vaccine impact.	The country established sentinel surveillance sites for Paediatric Bacterial Meningitis (PBM) and rotavirus to estimate disease burden before and after vaccine introduction. These efforts are being implemented by government in collaboration with the World Heath Organisation. Currently, the country is preparing to assess PCV10 vaccine impact which was introduced in July 2013.
Strong immunisation service delivery system - capacity building in readiness for implementation of new vaccines introduction: The need for health workers and community volunteers capacity to implement the activities of new vaccines introduction in the national EPI programme	Training of health workers and community based volunteers before introduction. Provision of guidelines and overall programme management
Effective communication system - the need for community mobilisation: Community involvement and participation is essential to successful introduction of new vaccines in the national EPI programme	Presence and implementation of the EPI communication strategy

5.1.2 Health planning and budgeting

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

The planning is conducted every 3 years with annual health plans in the month of July.

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

District Health Planning Handbook

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

- Yes.
- The cMYP is aligned to the proposal document and linked to all other national strategic plans/document
- The timing is that all these plans are ending in 2016 and new documents / plans will be developed for the next 5 years

Please indicate the national planning budgeting cycle for health

The national planning budgeting cycle for health takes place in July and is integrated with the national (all sectors) planning and budgeting cycle in the country.

Please indicate the national planning cycle for immunisation

The national planning cycle for immunization takes place in July and is integrated into health planning and budgeting cycle in the country

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.

See section pre-campaign in the introduction plan on page 47

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 factors related to reaching population(s) may be due to distance, difficult terrain such as mountains, rivers, valleys and sand as well as myths and misconceptions.

Boats and 4 by 4 wheel vehicles are procured for such locations.

Special communication channels are targeted at specific population groups that resist immunisation services.

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).

Through the implementation of Reaching Every District/Child (RED/C), the immunisation service delivery takes into account the geographic barriers that may hinder delivery of immunisation services. The factors related to reaching population(s) may be due to distance, difficult terrain as well as myths and misconceptions.

In addressing the challenges, the EPI programme plans for logistics to reach the under-served communities.

Giving priority to serving children accompanied by males has encouraged male involvement.

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

Zambia's HMIS system does not include sex disaggregated immunisation data

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.

No

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.

Not Applicable

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.

Zambia Demographic Health Survey (ZDHS) every five years
This application does not include any activities to access gender and equity

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.

Not applicable;
the country has planned to conduct DQS and MR PIE

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.

- Implement DQS
- EPI Coverage survey following MR campaign
- Monthly analysis feedback to sub-national arising from the electronic or web based DHIS2 HMIS immunisation coverage report(s)

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.

Conducted:

- ZDHS 2013/14
- 2012 - Post Measles SIAs coverage survey
- 2012 - DQS
- 2011 - EPI Cluster Coverage by Province

Plans:

- DQS 2016
- PIE 2016
- Post MR SIAs Coverage Survey
- ZDHS 2019

5.1.6 MCV Immunisation coverage

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

Table 5.1.6: MCV Immunisation coverage

Coverage	2010		2011		2012	
	Administrative*(1)*	WUENIC*(2)*	Administrative*(1)*	WUENIC*(2)*	Administrative*(1)*	WUENIC*(2)*
Measles 1*st* dose (%)	96	96	83	83	95	82
Measles 2*nd* dose (%)						

Coverage	2013		2014	
	Administrative*(1)*	WUENIC*(2)*	Administrative*(1)*	WUENIC*(2)*
Measles 1*st* dose (%)	80	80	93	
Measles 2*nd* dose (%)			38	

Coverage	2010		2011		2012	
	Administrative*(1)*	Coverage survey	Administrative*(1)*	Coverage survey	Administrative*(1)*	Coverage survey
Supplementary Immunisation Activities (SIA) (%)					100	96.1

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

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 **Results of a survey**

Please describe survey methodology:

- 96.1 percent
- utilising 30 by 7 cluster sampling coverage survey methodology

5.2. Baseline and Annual Targets (NVS Routine Support)

No NVS Routine Support is requested

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
Total target population	6,926,757
Wastage rate (%) for MR (campaign)	15

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

No NVS Routine Support is requested

7. NVS Preventive Campaigns

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

Disease	Title of the assessment	Date	Results
Rubella	Study: Characterization of rubella seronegative females in the Zambian blood donor community	24 April 2015	This study reveals that the rubella immunity among the female blood donors in Zambia was at 91.9% leaving a susceptible female population of 8.1%, which is within the range determined by the three largest studies in Africa on women of reproductive age that found that 6–16% were susceptible to rubella virus infection. This relatively high rate is a concern. All the rubella IgG seronegative participants were between 16 and 33 years of age (within the child bearing age) and this indicates an increased risk of CRS in this study population (Liwewe, M, 2015) (published in the Frontiers of Public Health Journal)
Rubella	National Measles Case-Based Surveillance	As of June 2015 (2015)	24 (19%) of 126 measles samples testing rubella IgM positive utilising serial testing approach
Congenital Rubella Syndrome (CRS)	National Measles Case-Based Surveillance	As of June 2015 (2015)	33 suspected CRS cases have been detected in the CRS retrospective review survey for the past 5 years

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? **July 2016**

When is the country planning to introduce MR into routine immunisation? **August 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 decision making process was triggered by observation, by ICC, that rubella monthly IgM positivity was high at about 15 to 30 percent (Source: Measles case - based surveillance data)
- Social mobilisation plan is part of the MR campaign as well as MR Introduction Plan of RCV in the national EPI programme
- Micro-planning shall follow bottom-up approach from district to national level utilising planning and budgeting templates
- Hard to access sub-populations have been identified and planned for, in both MR campaign and MR Introduction Plans

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.

At national leel, there are five by 40m3 cold chain equipment installed for vaccine storage and a minimum of 30m3 capacity at provincial levels in implementing the Cold Chain Expansion Plan. Additionally, all the cold chain equipment at the national and sub-national are equipped with backup generators in an event of power interruption. Additional Cold boxes of 20 litre capacity have been procured and distributed to all sub national levels to supplement the already existing ones. At provincial level 8 out of 10 provinces have had their vaccine stores expanded with the installation of Walk in Cold Rooms (WICR) while the remaining two (2) provinces will have the vaccine stores installed by the end of 2015. Meanwhile the storage capacity for provinces with cold chain gaps have been supplemented by provision of a total of 20 units of positive temperature refrigerator model MK-304 or TCW 3000 AC. The procurement of 12 freezer model-314 has expanded the negative temperature storage capacity for all the provinces. At district level, cold chain capacity for positive storage has been increased by procurement and distribution of 50 x 108 litres MK-304 refrigerators and 504 x 150 litres TCW 3000AC refrigerator.

At facility level, a total of 716 solar fridges were procured and delivered. In additional 341 x 24 litres storage capacity electric fridges and 132 x 150 litres storage space for health facilities have been procured to date. 550 x 2.46 litres vaccine carriers procured for health facilities and distributed. 90 x 20 litres capacity cold boxes have also been provided to different districts. In view of the above we do not anticipate any challenges in cold chain with the introduction of MR Vaccine into the immunization schedule.

The country has also adequate back up spares for repair and maintenance of cold chain equipment at all levels. Additional procurement of back up spares has also been planned for.

With the expansion and improvement programme being implemented by the government there is no need to engage the private sector. The Ministry is however engaging the national Power Utility Company in the event

of prolonged power outages.

The current cold chain capacity storage for Zambia is:

- National level:
  - gross capacity at positive storage - 220,000 litres and net capacity at positive storage - 55,000 litres
  - gross capacity at negative storage - 14,400 litres and net capacity at negative storage - 3,560 litres
- Province level:
  - available net capacity at positive storage - 83,929 litres
  - available net capacity at negative storage - 2,925 litres
- District level:
  - available net capacity at positive storage - 7,770 litres
  - available net capacity at negative storage - 19,512 litres

Prior to the introduction of the pentavalent vaccine in 2004/5 and eventual switch in formulations in 2007, the country developed an expansion strategy for cold chain storage capacity which saw the installation of five (5) new walk-in cold rooms in addition to one (1) cold room and a freezer that existed at the time at national level. Concurrently, eight (8) out of the ten (10) provinces have each a walk-in cold room installed. Two (2) cold rooms are already in-country awaiting installation during the course of the year 2015.Ongoing efforts have continued to ensure that the districts and health facilities have adequate storage space through annual planned procurements and installations scheduled and supported by government and partners

The cold chain storage space is adequate to enable the country introduce new vaccines.

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 MR Campaign will strengthen routine immunisation service delivery through health workers that will have received technical guidelines and field guide manuals, updated communication materials and updates on best practices in delivering vaccination strategies (training); partner and community involvement and participation in planning, implementation and evaluation.

The EPI programme will have generated data and information from the MR Campaign as well as from MR routine immunisation introduction from these assessments and surveys which will be used for further guidance and programming of vaccinations

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

- Zambia adopted measles case - based, laboratory based surveillance in the year 2003 following the first ever wide age range catch - up campaign as part of measles control and mortality reduction.
- The country further has adopted serial testing for rubella infection and also instituted congenital rubella syndrome (CRS) surveillance at four (4) selected major hospitals of University Teaching Hospital, Livingstone General Hospital, Arther Davidson Hospital, Kitwe Central and Livingstone General Hospital. Another site is being established at St Francis Hospital

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	6,926,757	0.65	4,502,392

[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).

The VIG will be utilised on the following areas of operation:

- Programme management and coordination
- Planning and preparations
- Social mobilization, IEC and advocacy
- Training and meetings
- Document production
- Human resources management and incentives including volunteers will assist in community mobilisation and documentation
- Cold chain equipment
- Transport for implementation and supervision
- Epidemiological surveillance including data management
- Waste management
- Monitoring and evaluation
- Vehicle and equipment maintenance

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 EPI programme is currently part of the overall planning cycle Launch taking place in July 2015 and will allocate funds for MR campaign and MR routine immunisation for the year 2016.
- The ICC will approval the budget and advocate and mobilise resources for any gaps that may exist.

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 Zambia'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.

see introduction plan and plan of action for preventive campaign for MR

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	759,902	0.80	607,922

[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).

The proposed utilisation of VIG is indicated below:

Programme management and coordination - USD5,914

Social mobilization, IEC and advocacy - USD71,748

Training and meetings - USD294,867

Document production - USD61,692

Transport for implementation and supervision - USD119,481

Epidemiological surveillance including data management - USD31,176

Monitoring and evaluation - USD15,395

Vehicle and equipment maintenance - USD7,648

8. Procurement and Management

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

No NVS Routine Support is requested

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):

Zambia has a stand-alone budget line at Ministry of Finance and National Planning for vaccines procurement through UNICEF Supply Division with support and coordination from UNICEF Country Office

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.

Zambia has a stand-alone budget line at Ministry of Finance and National Planning for vaccines procurement through UNICEF Supply Division with support and coordination from UNICEF Country Office. Each year in September, the EPI programme conducts logistics forecasting for the subsequent year. Consequently, the Ministry of Health profiles and transfers funds to UNICEF for procurement of vaccines and supplies

Financial management procedures support

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

Nationwide 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)

- Administrative reports by district
- Post MR campaign cluster coverage survey will be conducted

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.

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

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.

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.

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? **July 2011**

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? **August 2016**

Mandatory documents requested available

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).

- The overall health care waste management strategy for the health sector includes immunisation activities waster management component
- Beginning with safe handling of safe infections and waste materials, the country has mandatory use of Auto Distruct (AD) syringes and safety boxes at all health facilities or any other point of service delivery. Safe handling, storage, transportation and disposal of full safety boxes is according to waste management guidelines
- There is also a separate waste management component in the EPI Manual includes strategies such incineration and well fenced burn and bury pits where incinerators do not exit

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

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

Issues for ICC:

- Approval and endorsement of measles - rubella preventive campaign and measles - rubella vaccine routine immunisation introduction proposals
- Adopt policy for implementing selective measles rubella vaccinations for vulnerable sub-populations
- Infections prevention policy related to rubella infection for vulnerable sub-populations

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	☑	Minister ignatures_3_2015.jpg **File desc:** **Date/time :** 08/09/2015 07:55:35 **Size:** 181 KB
2	MoF Signature (or delegated authority) of Proposal	4.1.1	☑	Minister of Finance signature still being processed.docx **File desc:** **Date/time :** 08/09/2015 08:38:19 **Size:** 9 KB
3	MoE signature (or delegated authority) of HPV Proposal	4.1.1	☒	No file loaded
4	Terms of Reference for the ICC	4.1.2	☑	ToRs for ICC.pdf **File desc:** **Date/time :** 08/09/2015 02:18:50 **Size:** 293 KB
5	Minutes of ICC/HSCC meeting endorsing Proposal	4.1.3	☑	ICC held on 2nd Sept 2015Final Sept .doc **File desc:** **Date/time :** 08/09/2015 08:39:23 **Size:** 210 KB
6	Signatures of ICC or HSCC or equivalent in Proposal	4.1.3	☑	icc signatures 8 2015.jpg **File desc:** **Date/time :** 08/09/2015 07:56:05 **Size:** 116 KB icc signatures 9 2015-1.jpg **File desc:** **Date/time :** 08/09/2015 08:04:19 **Size:** 111 KB
7	Minutes of last three ICC/HSCC meetings	4.1.3	☑	ICC MEETING HELD AT MINISTRY OF COMMUNITY DEVELOPMENT-11th May, 2015.pdf **File desc:** **Date/time :** 07/09/2015 10:19:31 **Size:** 324 KB

				ICC MEETING-12th September 2014.pdf **File desc:** **Date/time :** 07/09/2015 10:19:56 **Size:** 202 KB
				Minutes of the ICC Meeting Held 15 Jan 2015.pdf **File desc:** **Date/time :** 07/09/2015 10:18:47 **Size:** 395 KB
8	A description of partner participation in preparing the application	4.1.3	☒	No file loaded
9	Minutes of NITAG meeting with specific recommendations on the NVS introduction or campaign	4.2	☒	No NITAG in place in the country yet.docx **File desc:** **Date/time :** 07/09/2015 10:21:03 **Size:** 12 KB
10	Role and functioning of the advisory group, description of plans to establish a NITAG	4.2.1	☑	NITAG formation .docx **File desc:** **Date/time :** 07/09/2015 10:21:36 **Size:** 17 KB
11	comprehensive Multi Year Plan - cMYP	5.1	☑	Zambia cMYP_V3_8 8_August_2015.xlsx **File desc:** **Date/time :** 15/07/2015 08:33:11 **Size:** 2 MB
12	cMYP Costing tool for financial analysis	5.1	☑	Zambia cMYP_V3_8 8_August_2015.xlsx **File desc:** **Date/time :** 15/07/2015 08:34:19 **Size:** 2 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	☑	Integrated in the Introduction and POA.docx **File desc:** **Date/time :** 07/09/2015 10:35:29 **Size:** 12 KB
14	Vaccine introduction plan	5.1	☒	No file loaded
15	Introduction Plan for the introduction of RCV / JE / Men A into the national programme	7.x.4	☑	Zambia - GAVI MR - Preventive_Campaign PoA_(29 August 2015).doc **File desc:**

				Date/time : 07/09/2015 10:36:26 **Size:** 1 MB
16	Data quality assessment (DQA) report	5.1.5	☒	No file loaded
17	DQA improvement plan	5.1.5	☒	No file loaded
19	HPV roadmap or strategy	6.1.1	☒	No file loaded
20	Introduction Plan for the introduction of RCV into the national programme	7.x.4	☑	Zambia - GAVI MR - Introduction Plan (29 August 2015).doc **File desc:** **Date/time :** 07/09/2015 10:37:36 **Size:** 1 MB
21	HPV summary of the evaluation methodology	5.1.6	☒	No file loaded
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	☑	Evidence of commitment to fund purchase of RCV for use in the routine system in place of the first dose of MCV.doc **File desc:** **Date/time :** 08/09/2015 08:42:56 **Size:** 22 KB
23	Campaign target population documentation	7.x.1	☑	Zambia cMYP_V3_8 8_August_2015.xlsx **File desc:** Data entry - section 2.3 for under 15 years children **Date/time :** 15/07/2015 08:59:40 **Size:** 2 MB
24	Roadmap or strategy for strengthening a comprehensive approach to pneumonia and/or diarrhoea prevention and treatment	6.x.6	☒	No file loaded

25	EVM report	8.3	☑	EVM_Zambia_report_Final_Aug28_2011.pdf **File desc:** **Date/time :** 07/09/2015 10:44:32 **Size:** 1 MB
26	Improvement plan based on EVM	8.3	☑	Zambia's EVM Improvement Plan-12th May 2014.pdf **File desc:** **Date/time :** 07/09/2015 10:45:02 **Size:** 197 KB
27	EVM improvement plan progress report	8.3	☑	Cold chain and vaccine management updat 1.docx **File desc:** **Date/time :** 07/09/2015 10:47:41 **Size:** 15 KB
28	Detailed budget template for VIG / Operational Costs	6.x,7.x.2	☑	Zambia - Detailed MR VIG Budget_Final.xls **File desc:** **Date/time :** 08/09/2015 08:47:52 **Size:** 8 MB
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	☒	No file loaded
30	Plan of Action for campaigns	7.1, 7.x.4	☑	Zambia - Detailed MR Preventive Campaign Budget_2015Final.xls **File desc:** **Date/time :** 07/09/2015 10:53:40 **Size:** 14 MB
	Other		☒	2015 Medicines Register.pdf **File desc:** **Date/time :** 08/09/2015 08:11:02 **Size:** 1 MB

11. Annexes

Annex 1 - NVS Routine Support

No NVS Routine Support is requested

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
Total target population	Table 5.3.1	#	6,926,757
Number of doses per persons	Parameter	#	1
Wastage Rate	Table 5.3.1	#	15
Estimated vaccine wastage factor		#	1.18
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	%	2.00 %
Freight cost as % of devices value	Parameter	%	0

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
B	Total target population	*Table 5.3.1*	6,926,757
C	Number of doses per persons	*Vaccine parameter (schedule)*	1
D	Number of doses needed	*B x C*	6,926,757
E	Estimated vaccine wastage factor	*100 / (100 - Vaccine wastage rate)*	1.18
F	Number of doses needed including wastage	*D x E*	8,173,574
G	Vaccines buffer stock	*0*	0
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	8,173,600
J	Number of doses per vial	*Vaccine parameter*	10
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.11*	7,688,701
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.11*	907,270
M	Total of safety boxes (+ 10% of extra need) needed	*(K + L) / 100 x 1.11*	95,416
N	Cost of vaccines needed	*I x vaccine price per dose (g)*	4,953,202
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	3,444,539
P	Cost of reconstitution syringes needed	*L x reconstitution price per unit (cr)*	31,755
Q	Cost of safety boxes needed	*M x safety box price per unit (cs)*	516
R	Freight cost for vaccines needed	*N x freight cost as of % of vaccines value (fv)*	122,605
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0
T	Total fund needed	*(N+O+P+Q+R+S)*	8,552,617

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
MR, 10 dose(s) per vial, LYOPHILISED	MR	2.48 %

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

Vaccine

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 Zambia hereby requests that a payment be made via electronic bank transfer as detailed below:

Name of Institution (Account Holder):			
Address:			
City Country:			
Telephone no.:		**Fax no.:**	
	Currency of the bank account:		
For credit to:			
Bank account's title:			
Bank account no.:			
Bank's name:			

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

By who is the account audited?

Signature of Government's authorizing official

		Seal
Name:		
Title:		
Signature:		
Date:		

FINANCIAL INSTITUTION		**CORRESPONDENT BANK (In the United States)**	
Bank Name:			
Branch Name:			
Address:			
City Country:			
Swift Code:			
Sort Code:			
ABA No.:			
Telephone No.:			
FAX No.:			

I certify that the account No is held by at this banking institution

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

1		
	Name:	
	Title:	
2		
	Name:	
	Title:	
3		
	Name:	
	Title:	

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