

*GAVI Alliance*

**Application Form for Country Proposals**

*For Support to New and Under-Used Vaccines (NVS)*

Submitted by

The Government of

***Zambia***

Date of submission: **Not submitted yet**

**Deadline for submission: 1 Jun 2011**

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

|  |  |  |  |
| --- | --- | --- | --- |
| Start Year | 2011 | End Year | 2015 |

**Revised in January 2011**

**(To be used with Guidelines of December 2010)**

Please submit the Proposal using the online platform [https://AppsPortal.gavialliance.org/PDExtranet](https://appsportal.gavialliance.org/PDExtranet).

Enquiries to: [proposals@gavialliance.org](mailto:proposals@gavialliance.org) or representatives of a GAVI partner agency. The documents can be shared with GAVI partners, collaborators and 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 the GAVI Secretariat on or before the day of the deadline.

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

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| **GAVI ALLIANCE**  **GRANT TERMS AND CONDITIONS**  **FUNDING USED SOLELY FOR APPROVED PROGRAMMES**  The applicant country (“Country”) confirms that all funding provided by the GAVI Alliance will be used and applied for the sole purpose of fulfilling the programme(s) described in the Country’s application. Any significant change from the approved programme(s) must be reviewed and approved in advance by the GAVI Alliance. All funding decisions for the application are made at the discretion of the GAVI Alliance Board and are subject to IRC processes and the availability of funds.  **AMENDMENT TO THE APPLICATION**  The Country will notify the GAVI Alliance in its Annual Progress Report if it wishes to propose any change to the programme(s) description in its application. The GAVI Alliance will document any change approved by the GAVI Alliance, and the Country’s application will be amended.  **RETURN OF FUNDS**  The Country agrees to reimburse to the GAVI Alliance all funding amounts that are not used for the programme(s) described in its application. The country’s reimbursement must be in US dollars and be provided, unless otherwise decided by the GAVI Alliance, within sixty (60) days after the Country receives the GAVI Alliance’s request for a reimbursement and be paid to the account or accounts as directed by the GAVI Alliance.  **SUSPENSION/ TERMINATION**  The GAVI Alliance may suspend all or part of its funding to the Country if it has reason to suspect that funds have been used for purpose other than for the programmes described in the Country’s application, or any GAVI Alliance-approved amendment to the application. The GAVI Alliance retains the right to terminate its support to the Country for the programmes described in its application if a misuse of GAVI Alliance funds is confirmed.  **ANTICORRUPTION**  The Country confirms that funds provided by the GAVI Alliance shall not be offered by the Country to any third person, nor will the Country seek in connection with its application any gift, payment or benefit directly or indirectly that could be construed as an illegal or corrupt practice.  **AUDITS AND RECORDS**  The Country will conduct annual financial audits, and share these with the GAVI Alliance, as requested. The GAVI Alliance reserves the right, on its own or through an agent, to perform audits or other financial management assessment to ensure the accountability of funds disbursed to the Country.  The Country will maintain accurate accounting records documenting how GAVI Alliance funds are used. The Country will maintain its accounting records in accordance with its government-approved accounting standards for at least three years after the date of last disbursement of GAVI Alliance funds. If there is any claims of misuse of funds, Country will maintain such records until the audit findings are final. The Country agrees not to assert any documentary privilege against the GAVI Alliance in connection with any audit.  **CONFIRMATION OF LEGAL VALIDITY**  The Country and the signatories for the Country confirm that its application, and 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 ALLIANCE TRANSPARANCY AND ACCOUNTABILITY POLICY**  The Country confirms that it is familiar with the GAVI Alliance Transparency and Accountability Policy (TAP) and complies with the requirements therein.  **USE OF COMMERCIAL BANK ACCOUNTS**  The Country is responsible for undertaking the necessary due diligence on all commercial banks used to manage GAVI cash-based support. The Country confirms that it will take all responsibility for replenishing GAVI cash support lost due to bank insolvency, fraud or any other unforeseen event.  **ARBITRATION**  Any dispute between the Country and the GAVI Alliance arising out of or relating to its application that is not settled amicably within a reasonable period of time, will be submitted to arbitration at the request of either the GAVI Alliance or the Country. The arbitration will be conducted in accordance with the then-current UNCITRAL Arbitration Rules. The parties agree to be bound by the arbitration award, as the final adjudication of any such dispute. The place of arbitration will be Geneva, Switzerland. The language of the arbitration will be English.  For any dispute for which the amount at issue is US$ 100,000 or less, there will be one arbitrator appointed by the GAVI Alliance. For any dispute for which the amount at issue is greater than US $100,000 there will be three arbitrators appointed as follows: The GAVI Alliance and the Country will each appoint one arbitrator, and the two arbitrators so appointed will jointly appoint a third arbitrator who shall be the chairperson.  The GAVI Alliance will not be liable to the country for any claim or loss relating to the programmes described in the application, including without limitation, any financial loss, reliance claims, any harm to property, or personal injury or death. Country is solely responsible for all aspects of managing and implementing the programmes described in its application. |

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| **Application Specification** |
| Please specify for which type of GAVI support you would like to apply to. |

**Important note**: To enable proper functioning of the form, please first select the cMYP years on the previous page.

**Note:** To add new lines click on the ***New item*** icon in the ***Action*** column. Use the ***Delete item*** icon to delete a line.

| **Type of Support** | **Vaccine** | **Start Year** | **End Year** | **Preferred second presentation[1]** | **Action** |
| --- | --- | --- | --- | --- | --- |
| New Vaccines Support | Rotavirus 2-dose schedule | 2013 | 2015 | Rotavirus 3-dose schedule |  |
| New Vaccines Support | Pneumococcal (PCV10), 2 doses/vial, Liquid | 2012 | 2015 | Pneumococcal (PCV13), 1 doses/vial, Liquid |  |
| New Vaccines Support | Measles, 10 doses/vial, Lyophilised | 2012 | 2015 |  |  |

**[1]** This "***Preferred second presentation***" will be used in case there is no supply available for the preferred presentation of the selected vaccine ("**Vaccine**" column). If left blank, it will be assumed that the country will prefer waiting until the selected vaccine becomes available.

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# **Executive Summary**

This proposal application has been developed with participation of a high profile country body, the Inter-Agency Cooordination Committee (ICC), whose membership is drawn from Heads of Agencies, Civil Society Organisations (CSOs), and Health Professional Bodies. The Child Health Unit is the secretariat. The ICC provides policy guidance on Maternal, Newborn and Child Health (MNCH) issues. The decision to introduce new vaccines was made by the ICC in 2007 with a letter of intent submitted. The decision was also influenced by the observed high disease burden of rotavirus disease amongst children with acute diarrhoeal hospitalisation at the University Teaching Hospital.   
  
The purpose of this proposal is to introduce pneumococcal, measles second dose and rotavirus vaccines. In 2009, the Ministry of Health submitted a proposal for the introduction of these vaccines. In August 2010, the country received conditional approval for pneumococcal and measles second dose vaccines and re-submission for rotavirus vaccine.   
  
  
Addressing 2009 GAVI conditionality for pneumococcal and measles second dose vaccines  
  
The conditionality for the pneumococcal and measles second dose vaccines was to provide evidence of resources to upgrade the cold chain storage capacity. In order to address the cold chain storage gap, Zambia has developed a cold chain strategy which has identified gaps and financial resources required. It is estimated, using the World Health Organisation cold chain forecasting tool, that the current national level positive storage capacity is 10,000 litres and negative capacity is 11,024 litres, while at provincial level positive storage capacity is 7,776 litres and negative storage capaicty is 9,504. It is estimated that the additional net positive capacity of 41,477 litres and 20,244 litres will be required at national and provincial level respectively. With the planned introduction of the pneumococcal vaccine and measles second dose and subsequently the rotavirus vaccine, the country is making steps to address cold chain challenges, as well as those outlined in the 2009 Vaccine Management Assessment (VMA). Key findings from the assessment indicated inadequate cold chain capacity and needed skills for vaccine management. To address these findings the Ministry of Health, WHO, UNICEF and partners have undertaken two key strategies - cold chain expansion and skills strengthening.   
  
Firstly, as part of cold chain expansion strategy, Government and CIDRZ/ARK are procuring five cold rooms in 2011 at the national level for a total of US$ 630,000 has been mobilised for their procurement. Works to refurbish the existing shelter at the central level to accommodate the five new (40m3 each) cold rooms are underway. At the provincial level, WHO recently installed a 30m3 cold room at one provincial site, covering three provinces, while the Canadian International Development Agency (CIDA)through UNICEF have committed funds (US$496,000) to secure four additional cold rooms at four provincial sites. CIDA through UNICEF assistance will support the procurement of eight provincial fridges for the remaining three provinces as well as 60 fridges for the district level. The Interagency Coordinating Committee is also working with partners to advocate and mobilise resources for additional cold chain expansion at district and health facility levels where need has been identified.  
  
Secondly, to address skills strengthening, the country has conducted Middle Level Management (MLM) trainings at provincial and district levels, and continues to provide on-site supportive supervision. We are also planning to conduct an Effective Vaccine Management assessment and training before the year end, of which funds have been secured from partners to conduct this activity. In addition, trainings targeting all cold chain technicians at all levels are planned with the installation of additional cold chain equipment. The support requested for pneumococcal vaccines from GAVI worth US$ 27,585,500 with the Ministry of Health committing to co-financing US$ 1,558,000 for the period 2012-2015. GAVI Support requested for second dose measles vaccine is US$2,428,000 for the period of 2012 to 2015.  
  
  
Rotavirus vaccine proposal re-submission  
  
The Expanded Programme on Immunisations (EPI spans over the past decade with significant progress made in reducing morbidity and mortality in children due to vaccine preventable diseases. This is a result of heightened attention given to routine immunisations, the Zambia Ministry of Health’s commitment to strengthen the national EPI and efforts to prioritise the health of children. The country with assistance from GAVI and partners has made huge investments in improving the quality of immunisation services with the introduction of new injection equipment, new vaccines and training health workers. Attention to child health is further intensified through national social mobilisation campaigns including the bi-annual Child Health Weeks and outreach immunisation sessions through the Reaching Every District (RED) strategy. At the policy level, strong support for child health has been demonstrated amongst partners and has been strengthened with the expansion of the ICC to include Maternal, Neonatal and Child Health (MNCH). In support of Zambia’s focus to reduce childhood morbidity and mortality, Zambia is applying for GAVI support to introduce the rotavirus vaccine. With a birth cohort of about 650,000, it is hoped to reach 60% of children below the age of one year with the rotavirus vaccine in the first year and subsequently reduce the diarrhoeal disease burden due to rotavirus in the country and contribute to the attainment of Millennium Development Goal 4, to reduce child mortality.  
  
Located in Southern Africa, Zambia is a large landlocked country covering a surface area of 752,000 km2. According to the 2010 census reported by the Central Statistical Office (CSO), Zambia has a population of about 13 million, 61% of which is rural. The country has a relatively low population density with about 17 persons per square kilometre (distributed throughout 9 provinces and 72 districts), which poses a challenge in the provision of basic social services. Though a significant decline in morbidity and mortality trends has been achieved, the infant and under five child mortality rates for Zambia are still among the highest in the world and in the sub-region with 70 infant deaths per 1,000 live births and 119 under five deaths per 1,000 live births respectively (Zambia Demographic Health Survey, 2007). Immunisation coverage rates for DPT3 have consistently remained above 80% over the last decade, with 2010 rates for DPT3 at 82%, while Measles coverage for the same period is 97%. The burden of infectious diseases in Zambia is high and contributes significantly to child morbidity and mortality. Childhood death and disease is compounded by the high overall HIV prevalence of 14.3% (Zambia Demographic Health Survey, 2007) and further exacerbated by poverty and the vulnerability of children.   
  
In this proposal, Zambia is making a re-submission for introduction of the rotavirus vaccine. Zambia has a high burden of childhood death attributable to diarrhoeal diseases. Diarrhoea is currently the third leading cause of death in children under five, after malaria and pneumonia (WHO 2006). Rotavirus contributes heavily to a large number of diarrhoeal cases and it is estimated that about 30-50% of acute diarrhoea hospitalisations in Zambia are associated with rotavirus among children aged 0 to 59 months (Rotavirus surveillance, University Teaching Hospital, Lusaka, 2009). The World Health Organisation (WHO)'s Strategic Group of Experts (SAGE) recommends the inclusion of rotavirus vaccination of infants into all national immunisation programmes. In countries where diarrhoeal deaths account for > 10% of mortality among children aged less than 5 years, the introduction of the vaccine is strongly recommended. Rotavirus vaccines stand to make the greatest impact in high-burden regions in Africa and Asia, Zambia included, where 85% of global rotavirus disease deaths occur. Limited access to vital medical care along with poor health seeking behaviours by caregivers in many developing world settings puts prevention through rotavirus vaccination as a principal solution for child survival. SAGE also states that rotavirus vaccination should be a part of a comprehensive diarrhoeal disease control strategy, that includes improvements in hygiene and sanitation, zinc supplementation, community-based administration of oral rehydration solution and overall improvements in case management. Zambia echoes this sentiment and is committed to not only the introduction of the rotavirus vaccine, but also to all aspects of diarrhoeal disease control. To this effect, the Ministry of Health is currently collaborating with partners to booster community mobilisation to advocate for the rotavirus vaccine, to increase awareness and improve behaviours for diarrhoea-related prevention and treatment in the community, as well as to improve clinical management in health facilities.  
  
To address the disease burden caused by rotavirus and in response to the WHO recommendation, Zambia is an ideal candidate to receive the vaccine and is keen for its roll-out to further decrease morbidity and mortality of children from rotavirus, a preventable disease causing unnecessary death. Therefore Zambia seeks GAVI support to introduce the rotavirus vaccine. Introduction of the rotavirus vaccine is in line with Zambia's efforts to achieve the Millennium Development Goals to reduce under five mortality and aligns with the updated Comprehensive Multi Year Plan (cMYP) for the period 2011-2015. Zambia plans to introduce the rotavirus vaccine in 2013, after the planned introduction of the pneumococcal vaccine, both of which will be integrated into the normal EPI programme, given to children at 6 weeks and 10 weeks along with DPT-Hib-HepB1 and DPT-Hib-HepB2. The administrative DPT3 coverage trends over past has been consistently above 90% with the exception of 2010 where the country noted a significant drop.This is due to funding gaps in the sector which resulted in reduced outreach activities. The following are vaccines in the national EPI programme: BCG, OPV, DPT-HepB-Hib, Measles and TT. Following the 2003 measles catch-up immunisation campaign, Zambia achieved more than 90% reduction in measles mortality which has been sustained. However, the country has noted with concern the resurgence of measles cases.  
  
After considering both rotavirus vaccine options, Rotarix®, the 2-dose vaccine was chosen, primarily because of the number of dosages and the drop-out rates experienced between the second and third dose, along with cold chain storage required and genotypes. Of the licensed vaccine choices, Rotarix® was also the preferable choice due to early full protection against rotavirus diarrhoea at 10 weeks. Target rates for the first year of rotavirus introduction (2013) is 60%, 70% for 2014 and 95% for 2015. The total support requested for the introduction of the rotavirus vaccine is US$17,199,000 worth of vaccines.  
  
The country will be undertaking pre-introduction activities for the rotavirus vaccine introduction in 2013. These activities will include training health workers, social mobilisation, disease surveillance, revision of M&E tools and printing new guidelines. Preparations and plans for the vaccine’s introduction will be supported by the existing Child Health Technical Working Group and will seek policy guidance from the ICC. A post introduction evaluation will be done one year after introduction of the new vaccine.  
  
Zambia has a National Health Strategic Plan (NHSP) in which EPI is one of the components. The recently developed NHSP (still in the finalisation process) which will run from 2011-2015 has been costed and also aligned to the Six National Development (SNDP). The country is also committed to sustained financing for immunisation. This is demonstrated by the country’s procurement of all the traditional vaccines and co-financing obligations for the underused vaccines. The 2010 financing toward immunisation services indicated that governement was the major source of funding at 69% with cooperating partners supplementing.  
  
It is evident that diarrhoea caused by rotavirus contributes to a heavy disease burden among infants and young children in Zambia, corroborating our GAVI application for support of the rotavirus vaccination. The Ministry of Health is confident that we will be able to successfully accelerate the introduction of the rotavirus vaccine into the national EPI and would like to introduce the rotavirus vaccine in 2013 to 2015, aligned with the cMYP and the National Health Strategic Plan.   
  
Zambia is eager and equipped for the introduction of the rotavirus vaccine and keen to be a leader in the region combating childhood illness and death.

# **Signatures**

# **Signatures of the Government and National Coordinating Bodies**

# **Government and the Inter-Agency Coordinating Committee for Immunisation**

The Government of Zambia would like to expand the existing partnership with the GAVI Alliance for the improvement of the infants routine immunisation programme of the country, and specifically hereby requests for GAVI support for Rotavirus 2-dose schedule , Pneumococcal (PCV10) 2 doses/vial Liquid , Measles 10 doses/vial Lyophilised introduction.

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

Tables 6.(n).5. (where (n) depends on the vaccine) in the NVS section of this application shows the amount of support in either supply or cash that is required from the GAVI Alliance. Tables 6.(n).4. 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 June.

Please note that this application will not be reviewed or approved by the Independent Review Committee (IRC) without the signatures of both the Minister of Health & Minister of Finance or their delegated authority.

Enter the family name in capital letters.

| **Minister of Health (or delegated authority)** | | **Minister of Finance (or delegated authority)** | |
| --- | --- | --- | --- |
| **Name** | Mr. Kapembwa Simbao, MP | **Name** | Dr. Situmbeko Musokotwane |
| **Date** |  | **Date** |  |
| **Signature** |  | **Signature** |  |

*This report has been compiled by*

**Note:** To add new lines click on the ***New item*** icon in the ***Action*** column. Use the ***Delete item*** icon to delete a line.

Enter the family name in capital letters.

| **Full name** | **Position** | **Telephone** | **Email** | **Action** |
| --- | --- | --- | --- | --- |
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|  |  |  |  |  |

# **National Coordinating Body - Inter-Agency Coordinating Committee for Immunisation**

We the members of the ICC, HSCC, or equivalent committee**[1]** met on the 11.05.2011 to review this proposal. At that meeting we endorsed this proposal on the basis of the supporting documentation which is attached.

**[1]** Inter-agency Coordinating Committee or Health Sector Coordinating Committee, or equivalent committee which has the authority to endorse this application in the country in question.

The endorsed minutes of this meeting are attached as DOCUMENT NUMBER: 10.

**Note:** To add new lines click on the ***New item*** icon in the ***Action*** column. Use the ***Delete item*** icon to delete a line.

Enter the family name in capital letters.

| **Name/Title** | **Agency/Organisation** | **Signature** | **Action** |
| --- | --- | --- | --- |
| Honorable Kapembwa Simbao- Minister | Ministry of Health |  |  |
| Dr. Victor Mukonka, Director Public Health & Research | Ministry of Health |  |  |
| Dr Olusegun Babaniyi, Country Representative | World Health Organisation |  |  |
| Dr. Nilda Lambo, Chief of Health | UNICEF |  |  |
| Ms. Angela Spilsbury, Health Advisor | DFID |  |  |
| Dr Madani Thiam, Head of Cooperation | CIDA |  |  |
| Dr. Randy Kolstad, Director, HPN | USAID |  |  |
| Dr. Jeff Stringer- Director | CIDRZ |  |  |
| Mr. Mark Vandervort, Country Director | CARE International |  |  |
| Mr. Dev Barbbar, Rotarian | Rotary International |  |  |
| Dr. Nanthalile Mugala, President | Paediatric Association of Zambia |  |  |
| Ms. Yvonne Mulenga, Country Director | Valid International |  |  |
| Ms. Karen Simwinga, Executive Director | CHAZ |  |  |
|  |  |  |  |

In case the GAVI Secretariat has queries on this submission, please contact

Enter the family name in capital letters.

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | Dr. Penelope Kalesha-MASUMBU | **Title** | Child Health Specialist |
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| **Fax no** | +260 211 222 692 | **Address** | Ministry of Health Child Health Unit P.O. Box 30205 LUSAKA, ZAMBIA |
| **Email** | pennykalesha@yahoo.co.uk |

# **The 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, HSCC, or equivalent committee). The ICC, HSCC, or equivalent committee is responsible for coordinating and guiding the use of the GAVI NVS 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** | Inter-Agency Coordinating Committee |
| **Year of constitution of the current committee** | 2002 |
| **Organisational structure (e.g., sub-committee, stand-alone)** | Stand alone |
| **Frequency of meetings** | Quarterly and Adhoc |

**Composition**

**Note:** To add new lines click on the ***New item*** icon in the ***Action*** column. Use the ***Delete item*** icon to delete a line.

Enter the family name in capital letters.

| **Function** | **Title / Organisation** | **Name** |
| --- | --- | --- |
| **Chair** | Deputy Minister, Ministry of Health | Dr. Christopher Kalila |
| **Secretary** | Child Health Specialist, Ministry of Heallth | Dr. Penelope Kalesha |
| **Members** | Director Public Health & Research, Ministry of Health | Dr. Victor Mukonka | **Action** |
|  | Chief of Health, UNICEF | Dr. Nilda Lambo |  |
|  | Country Representative, World Health Organization | Dr Olusegun Babaniyi, |  |
|  | Health Advisor, DFID | Ms. Angela Spilsbury |  |
|  | Head of Cooperation, CIDA | Dr. Madani Thiam |  |
|  | Director, HPN, USAID | Dr. Randy Kolstad |  |
|  | Director, CIDRZ | Dr. Jeff Stringer |  |
|  | Country Director, CARE International | Mr. Mark Vandervort |  |
|  | Rotarian, Rotary International | Mr. Dev Babar |  |
|  | President, Paediatric Association of Zambia | Dr. Nanthalile Mugala |  |
|  | Country Director, Valid International | Ms. Yvonne Mulenga |  |
|  | Executive Director, CHAZ | Ms. Karen Sichinga |  |
|  |  |  |  |

Major functions and responsibilities of the committee

|  |
| --- |
| **• The broad terms of reference for the ICC for Child Health are to: • Advise the Ministry of Health and other private sector / NGOs/ implementing agency on issues related to child health. • The MoH shall designate an official, department or institution to perform the function of Secretariat • Members shall be drawn from all relevant fields (Ministry of Health, University Teaching Hospital, Tropical Diseases Research Centre, National Malaria Control Centre, National Food and Nutrition Commission, Pharmaceutical services, Laboratory services and Child Health Co-operating partners, etc).  • The ICC shall set up and monitor sub-committees as deemed necessary. • Additional persons and / or Institutions shall be co-opted to sit on any of the sub-committees.  • The group shall meet every 2-3 months, or as may be deemed necessary.  • The ICC shall endeavour to assist the Government (MOH) to mobilise resources for the implementation of child health interventions. • To reinforce advocacy for child health with activities particularly targeted at key political leaders and policy makers. To mobilise other partners for child health and expand partnerships. • To increase community participation in child health activities. • The ICC shall endeavor to mobilise other partners to invest in various child health programmes.   The major functions and Responsibilities of the Inter-Agency Coordinating Committee include: 1. Advising the Ministry of Health on issues of Child health 2. Assisting the Ministry of Health to mobilise resources for implementing child health activities 3. Reinforcing advocacy for child health particularly targeted at key political leaders and policy makers 4. Increasing community participation of child health activities 5. Monitoring and evaluating EPI and other child health activities** |

Three major strategies to enhance the committee's role and functions in the next 12 months

|  |  |
| --- | --- |
| **1.** | **Strengthen linkages with other sector committees for greater advocacy of MNCH issues** |
| **2.** | **Increase ICC partner collaboration and information sharing to leverage programmes and resources** |
| **3.** | **Expand ICC membership to include non-traditional partners and opportunities (e.g. private sector, Public Private Partnerships)** |

# **National Immunization Technical Advisory Group for Immunisation**

(If it has been established in the country)

We the members of the NITAG met on the to review this proposal. At that meeting we endorsed this proposal on the basis of the supporting documentation which is attached.

The endorsed minutes of this meeting are attached as DOCUMENT NUMBER: .

In case the GAVI Secretariat has queries on this submission, please contact

Enter the family name in capital letters.

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | NOT APPLICABLE | **Title** | NOT APPLICABLE |
| **Tel no** | NOT APPLICABLE |
| **Fax no** |  | **Address** |  |
| **Email** |  |

# **The NITAG Group for Immunisation**

**Profile of the NITAG**

|  |  |
| --- | --- |
| **Name of the NITAG** | NOT APPLICABLE |
| **Year of constitution of the current NITAG** | NOT APPLICABLE |
| **Organisational structure (e.g., sub-committee, stand-alone)** | NOT APPLICABLE |
| **Frequency of meetings** | NOT APPLICABLE |

**Composition**

**Note:** To add new lines click on the ***New item*** icon in the ***Action*** column. Use the ***Delete item*** icon to delete a line.

Enter the family name in capital letters.

| **Function** | **Title / Organisation** | **Name** |
| --- | --- | --- |
| **Chair** | NOT APPLICABLE | NOT APPLICABLE |
| **Secretary** | NOT APPLICABLE | NOT APPLICABLE |
| **Members** |  |  | **Action** |
|  |  |  |  |

Major functions and responsibilities of the NITAG

|  |
| --- |
| **NOT APPLICABLE** |

Three major strategies to enhance the NITAG’s role and functions in the next 12 months

|  |  |
| --- | --- |
| **1.** | **NOT APPLICABLE** |
| **2.** | **NOT APPLICABLE** |
| **3.** | **NOT APPLICABLE** |

# **Immunisation Programme Data**

Please complete the tables 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 4
* 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.

# **Basic facts**

For the year 2010 (most recent; specify dates of data provided)

|  | **Figure** | | **Year** | **Source** |
| --- | --- | --- | --- | --- |
| Total population | 13,046,508 |  | 2010 | Central Statistical Office/Preliminary 2010 Census Report |
| Infant mortality rate (per 1000) | 70 |  | 2007 | ZDHS 2007 |
| Surviving Infants**[1]** | 606,663 |  | 2010 | Central Statistical Office |
| GNI per capita (US$) | 1,053 |  | 2008 | Central Statistical Office |
| Total Health Expenditure (THE) as a percentage of GDP | 4.80 | % | 2009 | www.who.int/nha/country |
| General government expenditure on health (GGHE) as % of General government expenditure | 10.80 | % | 2009 | www.who.int/nha/country |

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

Please provide some additional information on the planning and budgeting context in your country; also indicate the name and date of the relevant planning document for health

|  |
| --- |
| **The Ministry of Finance and National Planning provides a block figure to be allocated to the Health sector for the following year. The Ministry of Health through the Directorate of Planning and Policy apportions planning indicative figures to health programmes as well as various levels of service delivery. These levels develop action plans within the ceilings provided.   The documents used for planning include: 1. Green Paper from Ministry of Finance and National Planning which contains the national expenditure and revenue plan. 2. The Ministry of Health develops technical updates as well as action planning handbooks for various levels of service delivery 2011. 3. The National Health Strategic Plan 2011-2015.  The planning cycle starts in April/May of each year. Submission of finalised action plans to the Ministry of Finance and National Planning is in September. Parliamentary approval is December.** |

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

|  |
| --- |
| **YES  The planning documents for Health in Zambia are guided by the National Health Strategic Plan (NHSP). The current NHSP runs from 2011 – 2015 and is in the process of finalisation. The cMYP has been updated and covers the same period. The NHSP addresses key issues for the introduction of new vaccines, strengthening of routine immunisation, improving and sustaining efficient health systems and commodities for child health such as vaccines and cold chain equipment. Other key issues include the improvement and expansion of health information systems, operational research, Integrated Disease Surveillance and Response (IDSR) to generate evidence for programme management. All key issues mentioned are addressed in the cMYP.** |

Please indicate the national planning budgeting cycle for health

|  |
| --- |
| **The planning cycle starts in May with the national launch. The provinces and districts are provided with national guidelines for planning purposes. Two provincial/district reviews of the draft plans are conducted by the central level planning teams which include various programme managers, planners and partners. The final plans are submitted by the end of August to the Ministry of Health planning unit for consolidation and submission to the Ministry of Finance and National Planning in September. The sector budget is presented to parliament in October for funding for the subsequent fiscal year.** |

Please indicate the national planning cycle for immunisation

|  |
| --- |
| **The planning cycle for immunisation falls within the planning cycle for health as explained above.** |

Please indicate if sex disaggregated data (SDD) is used in immunisation routine reporting systems

|  |
| --- |
| **The Health Management Information System (HMIS) has a provision for analysing sex disaggregated data. However, the immunisation data is not disaggregated.** |

Please indicate if gender aspects relating to introduction of a new vaccine have been addressed in the introduction plan

|  |
| --- |
| **No.** |

# **Current vaccination schedule**

Traditional, New Vaccines and Vitamin A supplement (refer to cMYP pages)

**Note:** To add new lines click on the ***New item*** icon in the ***Action*** column. Use the ***Delete item*** icon to delete a line.

| **Vaccine**  **(do not use trade name)** | **Ages of administration**  **(by routine immunisation services)** | **Given in**  **entire country** | **Comments** | **Action** |
| --- | --- | --- | --- | --- |
| Vit A Infants | Every six months from the age of six to eleven months | Yes |  |  |
| BCG | Birth | Yes |  |  |
| Penta | 6,10,14 weeks | Yes |  |  |
| Polio | 6,10,14 weeks | Yes |  |  |
| Measles | 9 months | Yes |  |  |
| **Vitamin A** |  | Yes |  |

# **Trends of immunisation coverage and disease burden**

(as per last two annual WHO/UNICEF Joint Reporting Form on Vaccine Preventable Diseases)

| **Trends of immunisation coverage (percentage)** | | | | | | **Vaccine preventable disease burden** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Vaccine** | | **Reported** | | **Survey** | | **Disease** | **Number of reported cases** | |
|  | | 2009 | 2010 | 2009 | 2010 |  | **2009** | **2010** |
| **BCG** | | 109 | 93 |  |  | **Tuberculosis** |  | 48,408 |
| **DTP** | **DTP1** | 98 | 92 |  |  | **Diphtheria** |  |  |
| **DTP3** | 98 | 84 |  |  | **Pertussis** |  |  |
| **Polio 3** | | 96 | 81 |  |  | **Polio** |  | 0 |
| **Measles (first dose)** | | 92 | 97 |  | 88 | **Measles** | 26 | 15,574 |
| **TT2+ (Pregnant women)** | | 76 | 76 |  |  | **NN Tetanus** |  | 0 |
| **Hib3** | |  |  |  |  | **Hib[2]** |  | 0 |
| **Yellow Fever** | |  |  |  |  | **Yellow fever** |  | 0 |
| **HepB3** | |  |  |  |  | **HepBsero-prevalence[1]** |  |  |
| **Vitamin A supplement**  **Mothers (< 6 weeks post-delivery)** | |  |  |  |  |  | | |
| **Vitamin A supplement**  **Infants (>6 months)** | | 90 | 86 |  |  |

**[1]** If available

**[2]** **Note**: JRF asks for Hib meningitis

If survey data is included in the table above, please indicate the years the surveys were conducted, the full title and if available, the age groups the data refers to

|  |
| --- |
| **Note for the drop in coverage in table 5.3  The drop in coverage is attributed to significant drop in immunisation outreach activities related to insufficient funding as well as competing actitivities including human resource shortages  Survey data : Post Measles Vaccination campaign survey 2010- Age group for thid survey was 9-47 months for 71 districts except for Lusaka which had a target age group of 9-59 months for the vaccination campaign.** |

# **Baseline and Annual Targets**

(refer to cMYP pages)

**Table 1:** baseline figures

| **Number** | **Base Year** | **Baseline and Targets** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **2010** | **2012** | **2013** | **2014** | **2015** |  |  |
| **Total births** | 652,325 | 689,367 | 708,669 | 728,512 | 748,910 |  |  |
| **Total infants' deaths** | 45,663 | 41,362 | 38,977 | 36,426 | 33,701 |  |  |
| **Total surviving infants** | 606,662 | 648,005 | 669,692 | 692,086 | 715,209 |  |  |
| **Total pregnant women** | 704,511 | 758,304 | 779,536 | 801,363 | 823,801 |  |  |
| **Number of infants vaccinated (to be vaccinated) with BCG** | 598,935 | 661,792 | 680,322 | 706,657 | 726,443 |  |  |
| **BCG coverage (%)[1]** | 92% | 96% | 96% | 97% | 97% |  |  |
| **Number of infants vaccinated (to be vaccinated) with OPV3** | 483,732 | 583,205 | 629,511 | 664,403 | 693,753 |  |  |
| **OPV3 coverage (%)[2]** | 80% | 90% | 94% | 96% | 97% |  |  |
| **Number of infants vaccinated (or to be vaccinated) with DTP1[3]** | 551,700 | 615,605 | 642,905 | 671,323 | 700,905 |  |  |
| **Number of infants vaccinated (to be vaccinated) with DTP3[3]** | 497,464 | 583,205 | 629,511 | 664,403 | 693,753 |  |  |
| **DTP3 coverage (%)[2]** | 82% | 90% | 94% | 96% | 97% |  |  |
| **Wastage[1] rate in base-year and planned thereafter for DTP (%)** | 5% | 5% | 5% | 5% | 5% |  |  |
| **Wastage[1] factor in base-year and planned thereafter for DTP** | 1.05 | 1.05 | 1.05 | 1.05 | 1.05 |  |  |
| **Target population vaccinated with 1st dose of Pneumococcal** |  | 421,203 | 502,270 | 671,323 | 700,905 |  |  |
| **Target population vaccinated with 3rd dose of Pneumococcal** |  | 388,803 | 468,785 | 664,403 | 693,753 |  |  |
| **Pneumococcal coverage (%)[2]** | 0% | 60% | 70% | 96% | 97% |  |  |
| **Target population vaccinated with 1st dose of Rotavirus** |  |  | 435,300 | 588,273 | 686,601 |  |  |
| **Target population vaccinated with last dose of Rotavirus** |  |  | 401,816 | 484,460 | 679,449 |  |  |
| **Rotavirus coverage (%)[2]** | 0% | 0% | 60% | 70% | 95% |  |  |
| **Infants vaccinated (to be vaccinated) with 1st dose of Measles** | 579,681 | 622,085 | 649,602 | 671,323 | 693,753 |  |  |
| **Measles coverage (%)[2]** | 96% | 96% | 97% | 97% | 97% |  |  |
| **Infants vaccinated (to be vaccinated) with 2nd dose of Measles** |  | 550,804 | 589,329 | 629,782 | 679,449 |  |  |
| **Pregnant women vaccinated with TT+** | 500,203 | 591,477 | 615,833 | 641,090 | 700,231 |  |  |
| **TT+ coverage (%)[4]** | 71% | 78% | 79% | 80% | 85% |  |  |
| **Vit A supplement to mothers within 6 weeks from delivery** |  | 615,605 | 636,208 | 671,323 | 700,905 |  |  |
| **Vit A supplement to infants after 6 months** | 288,165 | 307,802 | 318,104 | 328,741 | 339,724 |  |  |
| **Annual DTP Drop-out rate[ ( DTP1 - DTP3 ) / DTP1 ] x 100[5]** | 10% | 5% | 2% | 1% | 1% |  |  |

**[1]** Number of infants vaccinated out of total births

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

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

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

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

# **Summary of current and future immunisation budget**

(or refer to cMYP pages)

|  | **Estimated costs per annum in US$ (in thousand US$)** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Cost category** | **Base Year** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** | **Year 7** | **Year 8** | |
| 2010 | 2012 | 2013 | 2014 | 2015 |  |  |  |  | |
| **Routine Recurrent Cost** | | | | | | | | | | |
| **Vaccines (routine vaccines only)** | **6,858** | **15,081** | **24,717** | **29,825** | **32,611** |  |  |  |  | |
| **Traditional vaccines** | 897 | 1,538 | 1,627 | 1,690 | 1,763 |  |  |  |  | |
| **New and underused vaccines** | 5,961 | 13,543 | 23,090 | 28,135 | 30,848 |  |  |  |  | |
| **Injection supplies** | 532 | 806 | 853 | 942 | 975 |  |  |  |  | |
| **Personnel** | **11,896** | **12,205** | **12,453** | **12,703** | **12,957** |  |  |  |  | |
| **Salaries of full-time NIP health workers (immunisation specific)** | 684 | 760 | 775 | 791 | 807 |  |  |  |  | |
| **Per-diems for outreach vaccinators / mobile teams** | 11,212 | 11,445 | 11,678 | 11,912 | 12,150 |  |  |  |  | |
| **Transportation** | 17 | 19 | 19 | 20 | 21 |  |  |  |  | |
| **Maintenance and overheads** | 1,296 | 1,326 | 2,217 | 2,270 | 937 |  |  |  |  | |
| **Training** | 261 | 281 | 295 | 309 | 324 |  |  |  |  | |
| **Social mobilisation and IEC** | 326 | 352 | 369 | 387 | 405 |  |  |  |  | |
| **Disease surveillance** | 656 | 703 | 737 | 773 | 811 |  |  |  |  | |
| **Program management** | 587 | 633 | 664 | 696 | 730 |  |  |  |  | |
| **Other** |  |  |  |  |  |  |  |  |  | |
| ***Subtotal Recurrent Costs*** | ***22,429*** | ***31,406*** | ***42,324*** | ***47,925*** | ***49,771*** |  |  |  |  | |
|  | | | | | | | | | | |
| **Routine Capital Costs** | | | | | | | | | | |
| **Vehicle** |  |  |  |  |  |  |  |  |  | |
| **Cold chain equipment** |  |  |  |  |  |  |  |  |  | |
| **Other capital equipment** | 50 | 52 | 52 | 52 | 52 |  |  |  |  | |
| ***Subtotal Capital Costs*** | ***50*** | ***52*** | ***52*** | ***52*** | ***52*** |  |  |  |  | |
|  | | | | | | | | | | |
| **Campaigns** | | | | | | | | | | |
| **Polio** | 449 | 895 | 929 | 965 | 1,003 |  |  |  | |  |
| **Measles** | 2,023 |  | 5,904 |  |  |  |  |  | |  |
| **Yellow Fever** |  |  |  |  |  |  |  |  | |  |
| **MNT campaigns** |  |  |  |  |  |  |  |  | |  |
| **Other campaigns** |  |  |  |  |  |  |  |  | |  |
| ***Subtotal Campaign Costs*** | ***2,472*** | ***895*** | ***6,833*** | ***965*** | ***1,003*** |  |  |  | |  |
| **GRAND TOTAL** | **24,951** | **32,353** | **49,209** | **48,942** | **50,826** |  |  |  | |  |

# **Summary of current and future financing and sources of funds**

Please list in the tables below the funding sources for each type of cost category (if known). Please try and indicate which immunisation program costs are covered from the Government budget, and which costs are covered by development partners (or the GAVI Alliance), and name the partners (or refer to cMYP).

**Note:** To add new lines click on the ***New item*** icon in the ***Action*** column. Use the ***Delete item*** icon to delete a line.

|  | | **Estimated costs per annum in US$ (in thousand US$)** | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Cost category** | **Funding source** | **Base Year** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** | **Year 7** | **Year 8** |
| **2010** | **2012** | **2013** | **2014** | **2015** |  |  |  |  |
| **Routine Recurrent Cost** | | | | | | | | | | |
| Routine Recurrent Costs | Governement, UNICEF, WHO, USAID, CIDA Canada | 22,429 | 31,406 | 42,325 | 47,926 | 49,771 |  |  |  |  |  |
|  | | | | | | | | | | |  |
| **Routine Capital Costs** | | | | | | | | | | |  |
| Routine Capital Costs | Government | 50 | 52 | 52 | 52 | 52 |  |  |  |  |  |
|  | | | | | | | | | | |  |
| **Campaigns** | | | | | | | | | | |  |
| Campaigns | Governement, UNICEF, WHO, USAID, CIDA Canada | 2,472 | 895 | 6,834 | 965 | 1,003 |  |  |  |  |  |
| **GRAND TOTAL** | | **24,951** | **32,353** | **49,211** | **48,943** | **50,826** |  |  |  |  |  |

# **New and Under-Used Vaccines (NVS)**

Please summarise the cold chain capacity and readiness to accommodate new vaccines, stating how the cold chain expansion (if required) will be financed, and when it will be in place. Please indicate the additional cost, if capacity is not available and the source of funding to close the gap.

|  |
| --- |
| **It is estimated that currently at the national level, the available positive storage capacity is 10,000 litres and negative capacity is 11,024 litres. These figures differ from the last Zambian proposal to GAVI for the introduction of new vaccines because two of the cold rooms included in the assessment at that time are now obsolete.   To project the required cold chain storage capacity, the Ministry of Health along with partners received technical support from the World Health Organisation on the Effective Vaccine Management forecasting tool. This tool considers Zambia specific population data in light of current cold chain capacities and assists in the projection of bringing on additional vaccines, looking at growth rates, birth cohort, etc. The required additional capacity to bring on new vaccines in the country is in the table below. The increased cold chain capacity required with introduction of new vaccines is attached in the Zambia Vaccine Cold Chain Scale up Strategy(Document 11).   The table below shows current and needed additional net capacity required to bring pneumococcal, second measles and rotavirus into the national immunisation programme by 2013.  Table: Net Cold Chain Capacity Required  Level Current Net Capacity (litres) Additional Net Capacity Required (litres)  Positive(+2to +8°C) Negative(-25 to -15°C) Positive(+2to +8°C) Negative(-25 to -15°C) National 10,000 11,024 41,447 N/A Provincial 7,776 9,504 20,244 N/A District 19,008 8,508 18,305 N/A Health Facility 33,600 N/A 16,800 N/A  Strategies and Scale-Up  Through the Inter agency Coordinating Committee (ICC), the Ministry of Health is working with partners and will continue to do so to mobilise resources for cold chain expansion prior to introduction of the new vaccines. The Ministry of Health aims to prioritise and strengthen the national cold chain first, followed by provincial, district and health facility levels. The national level will receive five additional cold rooms with a capacity of 40m3 each, with an overall stand-by generator. In addition to the procurement of the cold rooms, the process of rehabilitation of the shelter for the five cold rooms is underway.   The provincial level will receive an additional four cold rooms with shelters rehabilitated to house them with support from CIDA through UNICEF. The additional cold chain equipment will accommodate pneumococcal, rota and measles second dose vaccines into the immunisation schedule. With the strengthening of the National and provincial cold chain, adequate storage capacity (62,000 litres) for vaccines will be assured while needed additional funds are sourced and equipment procured for the district and health facility levels. Funding totalling to the amount of US$1,281,000 for national and provincial cold chain has already been secured from the ministry of Health, Centre for Infectious Disease Research In Zambia/Absolute Return for Kids (CIDRZ/ARK), and CIDA through UNICEF. In addition Ministry of Health has secured funding (US$200,000) for infrastructure rehabilitation for the central store and tender processes are underway. At the district level, UNICEF with support from CIDA will procure 60 fridges. The World Health Organisation has procured one 30m3 cold room catering for three provinces. It is expected that the planned cold chain capacity expansion for the national and provincial level will be functional by the end of the first quarter 2012 and shall cater for additional new vaccines.  Table 6.1 below shows what will be the existing net positive capacity at the national level store in 2012 after an additional 41,447lt to the current (2010) capacity of 10,000lt. The annual positive volume requirement from 2012 through to 2015 will be adequately managed at the national and provincial level cold stores. At lower levels deliveries of vaccines will increase in frequency while efforts to mobilise financial resources to increase cold chain capacity as well as replace any obsolete equipment continue.** |

Please give a summary of the cMYP sections that refer to the introduction of new and under-used vaccines. Outline the key points that informed the decision-making process (data considered etc)

|  |
| --- |
| **The decision to introduce Pneumococcal and rota virus vaccines was discussed at the Inter Agency Coordinating Committee in 2009. Zambia had expressed interest in the inroduction of new vaccines and communicated to GAVI. However, events preceeding this decision by ICC included discussions through the child Health technical working group meetings with stakeholders including the Peadiatricts association of Zambia and took into consideration the pneumococcal (WHO data) and rota (rota surveillance) disease burdens to inform decisions.** |

# **Capacity and cost (for positive storage)**

|  |  | **Formula** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** | **Year 7** | **Year 8** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2012** | **2013** | **2014** | **2015** |  |  |  |  |
| **A** | **Annual positive volume requirement, including new vaccine (litres or m3)**  **Litres** | **Sum-product of total vaccine doses multiplied by unit packed volume of the vaccine** | 73,160 | 78,902 | 89,466 | 92,783 |  |  |  |  |
| **B** | **Existing net positive cold chain capacity (litres or m3)**  **Litres** | **#** | 51,450 | 51,450 | 51,450 | 51,450 |  |  |  |  |
| **C** | **Estimated minimum number of shipments per year required for the actual cold chain capacity** | **A / B** | **2** | **2** | **2** | **2** |  |  |  |  |
| **D** | **Number of consignments /**  **shipments per year** | **Based on national vaccine shipment plan** | 4 | 4 | 4 | 4 |  |  |  |  |
| **E** | **Gap (if any)** | **((A / D) - B)** | -33,160 | -31,725 | -29,084 | -28,254 |  |  |  |  |
| **F** | **Estimated additional cost of cold chain** | **US$** | **0** | **0** | **0** | **0** |  |  |  |  |

Please briefly describe how your country plans to move towards attaining financial sustainability for the new vaccines you intend to introduce, how the country will meet the co-financing payments, and any other issues regarding financial sustainability you have considered (refer to the cMYP)

|  |
| --- |
| **The average financial resources for routine immunisation will be growing at a rate of 6% per annum. When compared to the average per capita health expenditure for the next five years which is assumed to remain constant and a funding gap is likely to arise. Using estimates from the immunisation multi year plan there will be an annual funding gap averaging 4%. In monetary terms this will be equivalent to two million US dollars annually. Given the limited fiscal space this shortfall will have to be sourced from local partners who support the Ministry of Health in kind.  The main funding source for routine immunisation is the government which provided 69% of the total required funding for 2010. Other key funders included UNICEF, CIDA, WHO and MVN-Zambia. This share of government funding is all the more impressive as demonstrated by government's commitment to vaccine procurement which was non-existent in 2004, now with government procuring all traditional vaccines with the exception of BCG which was until last year supported by JICA. The co-financing for the pentavalent vaccine is completely funded by the government with no record of defaulting. If the current economical growth rates are sustained it is likely that there will be more financial committment from the government which will assure its sustainability.  NOTE: In this analysis there is no inclusion of cold chain and motor vehicle investments because although inputs were made in the costing tool of the cMYP data entry and financing sheets, they are not reflected in the costing sheets. Support has been requested and once this is resolved the issue shall be addressed. However, there are intentions to invest in cold chain at district and health facility levels as well as transport with indications of probable support from some partners.** |

# **Assessment of burden of relevant diseases (if available)**

**Note:** To add new lines click on the ***New item*** icon in the ***Action*** column. Use the ***Delete item*** icon to delete a line.

| **Disease** | **Title of the assessment** | **Date** | **Results** |
| --- | --- | --- | --- |
| Rota | Rota virus surveillance in hospitalised children with acute diarrhoea | 2006 to date | disease burden for rota is 30-50% of all hospitalised acute diarrhoeas. |  |

If new or under-used vaccines have already been introduced in your country, please give details of the lessons learned from storage capacity, protection from accidental freezing, staff training, cold chain, logistics, drop-out rate, wastage rate etc., and suggest action points to address them

**Note:** To add new lines click on the ***New item*** icon in the ***Action*** column. Use the ***Delete item*** icon to delete a line.

| **Lessons Learned** | **Action Points** |
| --- | --- |
| Zambia conducted a Post Introduction Evaluation for the switch of Pentavalent vaccine from lyohpilised to fully liquid vaccine: Lessons learnt included-  Staff training was key to ensure smooth safe and efficient vaccine introduction of pentavalent vaccine | Action points from the Post Introduction Evaluation for the switch of Pentavalent vaccine from lyohpilised to fully liquid vaccine included  All introductions of new vaccines or switch in the formulation of a vaccine to be preceeded by training of health workers at all levels of service delivery |  |
| Social mobilisation including increased awareness of people at all levels of society was key to the acceptance of the introuction of new vaccine and dispel myths and misconception concerning the safety of new vaccine | Intensive social mobilisation targetting the various level of members of society including the media necessary for increasing awarenes and acceptance. Dispeling of myths and misconception on vaccines to be handled. Involvement of media personnel though training on new vaccine. |  |
| provision of updated guidelines and manuals necessary for updating health workers during trainings and use as reference documents | Provide all health workers with written guidelines and manuals when introducing new vaccines |  |

Please list the vaccines to be introduced with support from the GAVI Alliance (and presentation)

|  |
| --- |
| **PCV10  Rota Virus Vaccine 2 Dose schedule MSD** |

# **6.****3.1. Requested vaccine ( Measles, 10 doses/vial, Lyophilised )**

As reported in the cMYP, the country plans to introduce Measles, 10 doses/vial, Lyophilised vaccine.

# **6.****3.2. Co-financing information**

No Co-financing for Measles

# **6.****3.3. Wastage factor**

Please indicate wastage rate:

Countries are expected to plan for a maximal wastage rate of:

* 50% - for a lyophilised vaccine in 10 or 20-dose vial,
* 25% - for a liquid vaccine in 10 or 20-dose vial or a lyophilised vaccine in 5-dose vial,
* 10% - for a lyophilised/liquid vaccine in 2-dose vial, and
* 5% - for a liquid vaccine in 1-dose vial

**Note:** Selection of this field has direct impact on automatic calculations of support you are requesting and should not be left empty.

|  | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** | **Year 7** | **Year 8** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2012 | 2013 | 2014 | 2015 |  |  |  |  |
| **Vaccine wastage rate in %** | 25% | 25% | 25% | 25% |  |  |  |  |
| **Equivalent wastage factor** | 1.33 | 1.33 | 1.33 | 1.33 |  |  |  |  |

# **6.3.4. Specifications of vaccinations with new vaccine**

|  | **Data from** |  | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** | **Year 7** | **Year 8** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2012** | **2013** | **2014** | **2015** |  |  |  |  |
| **Number of children to be vaccinated with the first dose** | Table 1 | # | 622,085 | 649,602 | 671,323 | 693,753 |  |  |  |  |
| **Number of children to be vaccinated with the third dose[1]** | Table 1 | # | 550,804 | 589,329 | 629,782 | 679,449 |  |  |  |  |
| **Immunisation coverage with the third dose** | Table 1 | # | 96.00% | 97.00% | 97.00% | 97.00% |  |  |  |  |
| **Estimated vaccine wastage factor** | Table 6.(n).3**[3]** | # | 1.33 | 1.33 | 1.33 | 1.33 |  |  |  |  |
| **Country co-financing per dose[2]** | Table 6.(n).2**[3]** | $ | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |

**[1]** 2nd dose if Measles vaccine or Rotavirus 2-dose schedule

**[2]** Total price per-dose includes vaccine cost, plus freight, supplies, insurance, visa costs etc.

**[3]** Where (n) depends on the vaccine

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

|  |  | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** | **Year 7** | **Year 8** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2012** | **2013** | **2014** | **2015** |  |  |  |  |
| **Number of vaccine doses** | # | 0 | 0 | 0 | 0 |  |  |  |  |
| **Number of AD syringes** | # | 0 | 0 | 0 | 0 |  |  |  |  |
| **Number of re-constitution syringes** | # | 0 | 0 | 0 | 0 |  |  |  |  |
| **Number of safety boxes** | # | 0 | 0 | 0 | 0 |  |  |  |  |
| **Total value to be co-financed by country** | $ | **0** | **0** | **0** | **0** |  |  |  |  |

# **6.3.6. Portion of supply to be procured by the GAVI Alliance (and cost estimate, US$)**

|  |  | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** | **Year 7** | **Year 8** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2012** | **2013** | **2014** | **2015** |  |  |  |  |
| **Number of vaccine doses** | # | 915,800 | 796,700 | 851,100 | 920,200 |  |  |  |  |
| **Number of AD syringes** | # | 814,700 | 668,400 | 714,000 | 772,600 |  |  |  |  |
| **Number of re-constitution syringes** | # | 101,700 | 88,500 | 94,500 | 102,200 |  |  |  |  |
| **Number of safety boxes** | # | 10,175 | 8,425 | 8,975 | 9,725 |  |  |  |  |
| **Total value to be co-financed by GAVI** | $ | **301,000** | **259,000** | **277,000** | **299,500** |  |  |  |  |

# **6.3.7. New and Under-Used Vaccine Introduction Grant**

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).

**Calculation of lump-sum for the Measles, 10 doses/vial, Lyophilised**

If the total is lower than US$100,000, it is automatically rounded up to US$100,000

| **Year of New Vaccine Introduction** | **Births (from Table 1)** | **Share per Birth in US$** | **Total in US$** |
| --- | --- | --- | --- |
| 2012 | 689,367 | 0.30 | 207,000 |

**[1]** The Grant will be based on a maximum award of $0.30 per infant in the birth cohort with a minimum starting grant award of $100,000

**Cost (and finance) to introduce the Measles, 10 doses/vial, Lyophilised (US$)**

**Note:** To add new lines click on the ***New item*** icon in the ***Action*** column. Use the ***Delete item*** icon to delete a line.

| **Cost Category** | **Full needs for new vaccine introduction in US$** | **Funded with new vaccine introduction grant in US$** |
| --- | --- | --- |
| **Training** | 313,160 | 112,691 |
| **Social Mobilization, IEC and Advocacy** | 116,525 | 56,206 |
| **Cold Chain Equipment & Maintenance** | 304,389 |  |
| **Vehicles and Transportation** |  | 10,000 |
| **Programme Management** | 31,212 |  |
| **Surveillance and Monitoring** | 62,424 | 28,103 |
| **Human Resources** |  |  |
| **Waste Management** |  |  |
| **Technical assistance** |  |  |
|  |  |  |  |
| **Totals** | 827,710 | 207,000 |

# **6.4.1. Requested vaccine ( Pneumococcal (PCV10), 2 doses/vial, Liquid )**

As reported in the cMYP, the country plans to introduce Pneumococcal (PCV10), 2 doses/vial, Liquid vaccine.

# **6.4.2. Co-financing information**

If you would like to co-finance higher amount than minimum, please overwrite information in the “*Your co-financing*” row.

**Note:** Selection of this field has direct impact on automatic calculations of support you are requesting and should not be left empty.

|  |  |
| --- | --- |
| **Country group** | Low |

|  | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** | **Year 7** | **Year 8** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2012 | 2013 | 2014 | 2015 |  |  |  |  |
| **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 |  |  |  |  |

# **6.4.3. Wastage factor**

Please indicate wastage rate:

Countries are expected to plan for a maximal wastage rate of:

* 50% - for a lyophilised vaccine in 10 or 20-dose vial,
* 25% - for a liquid vaccine in 10 or 20-dose vial or a lyophilised vaccine in 5-dose vial,
* 10% - for a lyophilised/liquid vaccine in 2-dose vial, and
* 5% - for a liquid vaccine in 1-dose vial

**Note:** Selection of this field has direct impact on automatic calculations of support you are requesting and should not be left empty.

|  | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** | **Year 7** | **Year 8** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2012 | 2013 | 2014 | 2015 |  |  |  |  |
| **Vaccine wastage rate in %** | 5% | 5% | 5% | 5% |  |  |  |  |
| **Equivalent wastage factor** | 1.05 | 1.05 | 1.05 | 1.05 |  |  |  |  |

# **6.4.4. Specifications of vaccinations with new vaccine**

|  | **Data from** |  | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** | **Year 7** | **Year 8** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2012** | **2013** | **2014** | **2015** |  |  |  |  |
| **Number of children to be vaccinated with the first dose** | Table 1 | # | 421,203 | 502,270 | 671,323 | 700,905 |  |  |  |  |
| **Number of children to be vaccinated with the third dose[1]** | Table 1 | # | 388,803 | 468,785 | 664,403 | 693,753 |  |  |  |  |
| **Immunisation coverage with the third dose** | Table 1 | # | 60.00% | 70.00% | 96.00% | 97.00% |  |  |  |  |
| **Estimated vaccine wastage factor** | Table 6.(n).3**[3]** | # | 1.05 | 1.05 | 1.05 | 1.05 |  |  |  |  |
| **Country co-financing per dose[2]** | Table 6.(n).2**[3]** | $ | 0.20 | 0.20 | 0.20 | 0.20 |  |  |  |  |

**[1]** 2nd dose if Measles vaccine or Rotavirus 2-dose schedule

**[2]** Total price per-dose includes vaccine cost, plus freight, supplies, insurance, visa costs etc.

**[3]** Where (n) depends on the vaccine

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

|  |  | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** | **Year 7** | **Year 8** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2012** | **2013** | **2014** | **2015** |  |  |  |  |
| **Number of vaccine doses** | # | 88,600 | 88,000 | 120,100 | 119,200 |  |  |  |  |
| **Number of AD syringes** | # | 94,600 | 93,200 | 127,300 | 126,100 |  |  |  |  |
| **Number of re-constitution syringes** | # |  |  |  |  |  |  |  |  |
| **Number of safety boxes** | # | 1,050 | 1,050 | 1,425 | 1,400 |  |  |  |  |
| **Total value to be co-financed by country** | $ | **332,000** | **329,500** | **450,000** | **446,500** |  |  |  |  |

# **6.4.6. Portion of supply to be procured by the GAVI Alliance (and cost estimate, US$)**

|  |  | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** | **Year 7** | **Year 8** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2012** | **2013** | **2014** | **2015** |  |  |  |  |
| **Number of vaccine doses** | # | 1,570,000 | 1,558,100 | 2,127,800 | 2,112,000 |  |  |  |  |
| **Number of AD syringes** | # | 1,676,300 | 1,650,400 | 2,256,100 | 2,233,900 |  |  |  |  |
| **Number of re-constitution syringes** | # |  |  |  |  |  |  |  |  |
| **Number of safety boxes** | # | 18,625 | 18,325 | 25,050 | 24,800 |  |  |  |  |
| **Total value to be co-financed by GAVI** | $ | **5,880,500** | **5,835,500** | **7,969,000** | **7,909,500** |  |  |  |  |

# **6.4.7. New and Under-Used Vaccine Introduction Grant**

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).

**Calculation of lump-sum for the Pneumococcal (PCV10), 2 doses/vial, Liquid**

If the total is lower than US$100,000, it is automatically rounded up to US$100,000

| **Year of New Vaccine Introduction** | **Births (from Table 1)** | **Share per Birth in US$** | **Total in US$** |
| --- | --- | --- | --- |
| 2012 | 689,367 | 0.30 | 207,000 |

**[1]** The Grant will be based on a maximum award of $0.30 per infant in the birth cohort with a minimum starting grant award of $100,000

**Cost (and finance) to introduce the Pneumococcal (PCV10), 2 doses/vial, Liquid (US$)**

**Note:** To add new lines click on the ***New item*** icon in the ***Action*** column. Use the ***Delete item*** icon to delete a line.

| **Cost Category** | **Full needs for new vaccine introduction in US$** | **Funded with new vaccine introduction grant in US$** |
| --- | --- | --- |
| **Training** |  | 200,430 |
| **Social Mobilization, IEC and Advocacy** | 166,573 |  |
| **Cold Chain Equipment & Maintenance** | 1,126,000 |  |
| **Vehicles and Transportation** |  | 6,123 |
| **Programme Management** |  | 447 |
| **Surveillance and Monitoring** |  |  |
| **Human Resources** | 24,510 |  |
| **Waste Management** |  |  |
| **Technical assistance** |  |  |
| **Under five cards, guidelines and monitoring tools** | 656250 |  |  |
| **Totals** | 1,973,333 | 207,000 |

# **6.5.1. Requested vaccine ( Rotavirus 2-dose schedule )**

As reported in the cMYP, the country plans to introduce Rotavirus 2-dose schedule vaccine.

# **6.5.2. Co-financing information**

If you would like to co-finance higher amount than minimum, please overwrite information in the “*Your co-financing*” row.

**Note:** Selection of this field has direct impact on automatic calculations of support you are requesting and should not be left empty.

|  |  |
| --- | --- |
| **Country group** | Low |

|  | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** | **Year 7** | **Year 8** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2013 | 2014 | 2015 |  |  |  |  |  |
| **Minimum co-financing** | 0.20 | 0.20 | 0.20 |  |  |  |  |  |
| **Your co-financing (please change if higher)** | 0.20 | 0.20 | 0.20 |  |  |  |  |  |

# **6.5.3. Wastage factor**

Please indicate wastage rate:

Countries are expected to plan for a maximal wastage rate of:

* 50% - for a lyophilised vaccine in 10 or 20-dose vial,
* 25% - for a liquid vaccine in 10 or 20-dose vial or a lyophilised vaccine in 5-dose vial,
* 10% - for a lyophilised/liquid vaccine in 2-dose vial, and
* 5% - for a liquid vaccine in 1-dose vial

**Note:** Selection of this field has direct impact on automatic calculations of support you are requesting and should not be left empty.

|  | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** | **Year 7** | **Year 8** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 |  |  |  |  |  |
| **Vaccine wastage rate in %** | 5% | 5% | 5% |  |  |  |  |  |
| **Equivalent wastage factor** | 1.05 | 1.05 | 1.05 |  |  |  |  |  |

# **6.5.4. Specifications of vaccinations with new vaccine**

|  | **Data from** |  | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** | **Year 7** | **Year 8** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2013** | **2014** | **2015** |  |  |  |  |  |
| **Number of children to be vaccinated with the first dose** | Table 1 | # | 435,300 | 588,273 | 686,601 |  |  |  |  |  |
| **Number of children to be vaccinated with the third dose[1]** | Table 1 | # | 401,816 | 484,460 | 679,449 |  |  |  |  |  |
| **Immunisation coverage with the third dose** | Table 1 | # | 60.00% | 70.00% | 95.00% |  |  |  |  |  |
| **Estimated vaccine wastage factor** | Table 6.(n).3**[3]** | # | 1.05 | 1.05 | 1.05 |  |  |  |  |  |
| **Country co-financing per dose[2]** | Table 6.(n).2**[3]** | $ | 0.20 | 0.20 | 0.20 |  |  |  |  |  |

**[1]** 2nd dose if Measles vaccine or Rotavirus 2-dose schedule

**[2]** Total price per-dose includes vaccine cost, plus freight, supplies, insurance, visa costs etc.

**[3]** Where (n) depends on the vaccine

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

|  |  | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** | **Year 7** | **Year 8** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2013** | **2014** | **2015** |  |  |  |  |  |
| **Number of vaccine doses** | # | 43,500 | 62,600 | 78,900 |  |  |  |  |  |
| **Number of AD syringes** | # |  |  |  |  |  |  |  |  |
| **Number of re-constitution syringes** | # |  |  |  |  |  |  |  |  |
| **Number of safety boxes** | # | 500 | 700 | 900 |  |  |  |  |  |
| **Total value to be co-financed by country** | $ | **229,000** | **263,500** | **299,000** |  |  |  |  |  |

# **6.5.6. Portion of supply to be procured by the GAVI Alliance (and cost estimate, US$)**

|  |  | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** | **Year 7** | **Year 8** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2013** | **2014** | **2015** |  |  |  |  |  |
| **Number of vaccine doses** | # | 1,099,200 | 1,253,200 | 1,414,700 |  |  |  |  |  |
| **Number of AD syringes** | # |  |  |  |  |  |  |  |  |
| **Number of re-constitution syringes** | # |  |  |  |  |  |  |  |  |
| **Number of safety boxes** | # | 12,225 | 13,925 | 15,725 |  |  |  |  |  |
| **Total value to be co-financed by GAVI** | $ | **5,779,500** | **5,273,500** | **5,358,500** |  |  |  |  |  |

# **6.5.7. New and Under-Used Vaccine Introduction Grant**

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).

**Calculation of lump-sum for the Rotavirus 2-dose schedule**

If the total is lower than US$100,000, it is automatically rounded up to US$100,000

| **Year of New Vaccine Introduction** | **Births (from Table 1)** | **Share per Birth in US$** | **Total in US$** |
| --- | --- | --- | --- |
| 2013 | 708,669 | 0.30 | 213,000 |

**[1]** The Grant will be based on a maximum award of $0.30 per infant in the birth cohort with a minimum starting grant award of $100,000

**Cost (and finance) to introduce the Rotavirus 2-dose schedule (US$)**

**Note:** To add new lines click on the ***New item*** icon in the ***Action*** column. Use the ***Delete item*** icon to delete a line.

| **Cost Category** | **Full needs for new vaccine introduction in US$** | **Funded with new vaccine introduction grant in US$** |
| --- | --- | --- |
| **Training** | 169,534 | 169,534 |
| **Social Mobilization, IEC and Advocacy** | 121,742 | 37,421 |
| **Cold Chain Equipment & Maintenance** |  |  |
| **Vehicles and Transportation** | 6,046 | 6,046 |
| **Programme Management** | 15,708 |  |
| **Surveillance and Monitoring** |  |  |
| **Human Resources** |  |  |
| **Waste Management** |  |  |
| **Technical assistance** |  |  |
| **Printing** | 25656 |  |  |
| **Totals** | 338,686 | 213,001 |

# **Procurement and Management of New and Under-Used Vaccines**

**Note:** The PCV vaccine must be procured through UNICEF

1. 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)

|  |
| --- |
| The procurement of vaccines under GAVI support will be through UNICEF Supply Division. Shipments will be delivered to the national store and further distributed to provincial stores, districts and finally service delivery points. It is anticipated that the national store will receive quarterly shipments and will in turn distribute on a quarterly basis to the provinces. |

1. If an alternative mechanism for procurement and delivery of supply (financed by the country or the GAVI Alliance) is requested, please document

* Other vaccines or immunisation commodities procured by the country and descriptions of the mechanism used.
* The functions of the National Regulatory Authority (as evaluated by WHO) to show they comply with WHO requirements for procurement of vaccines and supply of assured quality.

|  |
| --- |
| NA |

1. Please describe the introduction of the vaccines (refer to cMYP)

|  |
| --- |
| The introduction of the new vaccines will require a number of activities to be undertaken by the country in order to ensure readiness for provision of quality vaccine and creation of demand for the same. These activities will include the following, some of which have already been addressed or on going and others yet to be addressed:  1.Meetings for Adaptation and Updating of Guidelines and Tools 2.Request for vaccine  2.Training of trainers and orientation of Health Workers  3.Update and print Under Five Cards, guidelines and monitoring tools,production of DVD Training Materials  4.Social Mobilization at all Level  5.Logistics Distribution to Provinces 6. Introduce new vaccine  7.Support supervision pre and intra introduction   Introduction plans for rotavirus, pneumococcal and measles second dose are attached for reference. |

1. Please indicate how funds should be transferred by the GAVI Alliance (if applicable)

|  |
| --- |
| The Ministry of Health is requesting that the funds be channelled and administered by UNICEF. |

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

|  |
| --- |
| Co-financing will be paid by June of each year through UNICEF by the Ministry of Health. The Ministry of Health will be responsible for mobilizing resources. |

1. Please outline how coverage of the new vaccine will be monitored and reported (refer to cMYP)

|  |
| --- |
| In order to monitor the introduction of the new vaccines, we intend to provide close supportive supervision during the first year of introduction to ensure that staff are collecting data accurately and following standard practices for the immunisation activities. Furthermore, we will monitor programme process indicators and strengthen disease surveillance. At the end of the first year of introduction, we intend to conduct the post introduction evaluation survey. |

# **Vaccine Management (EVSM/EVM/VMA)**

When was the last Effective Vaccine Store Management (EVSM) conducted? -

When was the last Effective Vaccine Management (EVM) or Vaccine Management Assessment (VMA) conducted?December - 2009

If your country conducted either EVSM, EVM, or VMA in the past three years, please attach relevant reports. (Document N°6)

A VMA report must be attached from those countries which have introduced a New and Underused Vaccine with GAVI support before 2008.

Please note that EVSM and VMA tools have been replaced by an integrated Effective Vaccine Management (EVM) tool. The information on EVM tool can be found at <http://www.who.int/immunization_delivery/systems_policy/logistics/en/index6.html>

For countries which conducted EVSM, VMA or EVM in the past, please report on activities carried out as part of either action plan or improvement plan prepared after the EVSM/VMA/EVM.

|  |
| --- |
| Recommendation 1 VAR: there is need to install a cold room with the appropriate range of temperatures for the purpose of receiving vaccines at the airport. (Central level)  Action taken to date The Ministry has made arrangements for vaccines to be immediately cleared by a contracted clearing agent on arrival to the central store. The Ministry of Health is given prior notification of any shipments arriving. For any shipment that may arrive on weekends and public holidays special arrangements are made to receive them at the central cold store during that period.   Recommendation 2 Vaccines storage Temperatures: Temperatures recording to be made 7days a week and at least twice/24 hours. All levels to prepare an elaborate contingency plan and display it at the appropriate place within the vaccine store. Conduct training and support supervision for new MCH staff at the provincial and district levels  Action taken to date 1. Temperature monitoring is conducted twice daily including weekends and public holidays and documented on standardized temperature monitoring charts. 2. For the newly installed cold room in one of the regions an automatic and manual temperature monitoring system is in place. 3. MLM trainings conducted targeting all provincial MCH and Cold Chain Officers as well as MCH and Cold Chain Technicians from selected districts whose first module is cold chain and vaccine management. 4. Supportive supervision and mentorship for cold chain management has been conducted for selected district.  Future actions 1. EVM assessment and training will be conducted in 2011 for MCH staff and logisticians/cold chain technicians.  2. MLM trainings for in-service and tutors in pre-service Nursing training institutions  Recommendation 3 Cold store capacity: Install two additional cold rooms at national level; establish a zonal cold store to cater for three provinces.  Building, cold chain equipment and transport: Procure and install standby generators in all provincial and district cold stores. Update the cold inventory status for all levels in line with the Ministry of Health phased replacement plan.   Action taken to date 1. With a view to address additional cold chain requirements for new vaccine introduction a vaccine cold chain expansion strategy has been developed to address cold chain needs and used to mobilize resources. To date funding has been to secured to procure 5 cold rooms (40m3 each) for central level as well as 4 additional cold rooms (30m3 each) for the provincial level along with standby generators. Orders have been placed. The shelters for these equipment shall also be constructed or rehabilitated. The installation of cold rooms at both the national and provincial levels will be completed by end of first quarter 2012.  2. A Zonal cold room with backup generator (30,000 litres) has been installed and is operational. This zonal store will cater for three of the nine provinces.  3. Cold chain inventory is collected and updated on a quarterly basis using both manual and an electronic tool at central level while at the lower levels the manual tool is in use. On site mentorship and supervision has been conducted for Cold Chain Technicians to strengthen updating of the inventory.  Future actions  1. EVM assessment and training will be conducted in 2011 for MCH staff and logisticians/cold chain technicians.  2. Receiving, distribution and installation of nine cold rooms for the central and provincial levels.  3. Continued resource mobilization for cold chain expansion for district and health centre levels including training of cold chain technicians.   Recommendation 4. Maintenance of cold chain equipment and transport: Provide reliable transport for cold chain technician to enable them carry out regular maintenance and repair works (Provincial and district levels). Provinces and districts should prioritize the purchase of adequate stocks of spare parts  Action taken to date  1. Through the GAVI Health Systems support window 200 motor bikes were procured. This is in addition to similar efforts by other programmes such as malaria, TB, HIV and Nutrition resulting in all districts being adequately serviced with motor bikes for Cold Chain Technicians. 2. Repair and maintenance of the existing transport fleet is planned for and undertaken by the respective districts.    Future actions  Plans to replace part of this fleet is indicated in the cMYP.  Recommendation 5.  Stock management: Provinces should procure computers and to facilitate computerisation of the stock management system, and train staff accordingly. Management at provincial, district and health facility levels to ensure that standardised stock cards are consistently used.  Action taken   1. MCH and Cold Chain staff at provincial and district levels have access to shared computers provided through shared programmes.   2. Standardized stock registers have been introduced countrywide.  Future actions  1. EVM assessment and training will be conducted in 2011 for MCH staff and logisticians/cold chain technicians. 2. Through the planned vaccine cold chain expansion at provincial levels computer shall be procured.   Recommendation 6  Effective vaccine delivery: Strengthen stock management and carrying out monthly physical stock counts for vaccines, injection materials and diluents.  1. Vaccine Management training through MLM trainings targeting all provincial MCH and Cold Chain Officers as well as MCH and Cold Chain Technicians from selected districts.  2. Two 10 ton trucks have been procured using GAVI funds for the purpose of distributing vaccines and devices to the provincial centres on a quarterly basis, using a mix of the pull and push distribution system.  Future actions  1. Introduction of an electronic monitoring system to manage vaccine stocks.  2. MLM trainings for in-service and tutors in pre-service Nursing training institutions   Recommendation 7  Correct use of diluents for freeze-dried vaccines: Monitoring of stock movements should include the diluents and injection materials at all levels.  Actions taken Vaccine Management training through MLM trainings targeting all provincial MCH and Cold Chain Officers as well as MCH and Cold Chain Technicians from selected districts have been conducted.  Future actions EVM assessment and training will be conducted in 2011 for MCH staff and logisticians/cold chain technicians.  Recommendation 8 MDVP: provide more support by way of job aids, technical guidelines and training staff at all sub national levels and facility in the application and importance of MDVP and vaccine management. Vaccine Management training through MLM trainings targeting all provincial MCH and Cold Chain Officers as well as MCH and Cold Chain Technicians from selected districts have been conducted.  Actions taken  Developing Job Aids for Health Workers for use at all levels particularly at the service delivery level ongoing.   Future actions  EVM assessment and training will be conducted in 2011 for MCH staff and logisticians/cold chain technicians.  Printing and distribution of Job Aids for use at all levels particularly at the service delivery level.  Recommendation 9 VVM: Prepare and print and display posters and stickers at appropriate places. Train staff on the reading and interpretation and use of VVM for management purposes.   Action taken  1. Vaccine Management training through MLM trainings targeting all provincial MCH and Cold Chain Officers as well as MCH and Cold Chain Technicians from selected districts have been conducted.   2. Developing Job Aids for Health Workers for use at all levels particularly at the service delivery level.  Future actions EVM assessment and training will be conducted in 2011 for MCH staff and logisticians/cold chain technicians.  Printing and distribution of Job Aids for use at all levels particularly at the service delivery level.   Recommendation 10 Vaccine wastage control: The wastage monitoring to be activated at all levels of the EPI system in the country, with subsequent relevant training of staff.   Action taken 1. Vaccine Management training through MLM trainings targeting all provincial MCH and Cold Chain Officers as well as MCH and Cold Chain Technicians from selected districts have been conducted.   2. Developing Job Aids for Health Workers for use at all levels particularly at the service delivery level.   Future actions EVM assessment and training will be conducted in 2011 for MCH staff and logisticians/cold chain technicians.  Printing and distribution of Job Aids for use at all levels particularly at the service delivery level. |

When is the next Effective Vaccine Management (EVM) Assessment planned? - 2011

*Under new guidelines, it will be mandatory for the countries to conduct an EVM prior to an application for introduction of new vaccine.*

# **Additional Comments and Recommendations**

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

|  |
| --- |
| The cMYP for the immunisation programme, in the last revision, has been aligned in content and timeframe to the National Health Strategic Plan (NHSP) which will run from 2011 – 2015. This is also in alignment with the Sixth National Development Plan (SNDP). The ICC requests approval of the extension of Zambia’s cMYP by one year.   The ICC in this application notes that there is a requirement to provide second preference of the vaccine presentation. Considering the difference in cold chain requirements of the available presentations of the Rotavirus vaccine the country makes a second under great duress considering the cold chain implications associated with the second preference. |

# **Annexes**

# **Annex 1**

# **Annex 1.1 – Measles, 10 doses/vial, Lyophilised**

**Table 1.1 A** - Rounded up portion of supply that is procured by the country and estimate of related cost in US$

| **Required supply item** |  | **2012** | **2013** | **2014** | **2015** |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Number of vaccine doses** | *#* | 0 | 0 | 0 | 0 |  |  |  |  |
| **Number of AD syringes** | *#* | 0 | 0 | 0 | 0 |  |  |  |  |
| **Number of re-constitution syringes** | *#* | 0 | 0 | 0 | 0 |  |  |  |  |
| **Number of safety boxes** | *#* | 0 | 0 | 0 | 0 |  |  |  |  |
| **Total value to be co-financed by the country** | *$* | 0 | 0 | 0 | 0 |  |  |  |  |

**Table 1.1 B** - Rounded up portion of supply that is procured by GAVI and estimate of related cost in US$.

| **Required supply item** |  | **2012** | **2013** | **2014** | **2015** |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Number of vaccine doses** | *#* | 915,800 | 796,700 | 851,100 | 920,200 |  |  |  |  |
| **Number of AD syringes** | *#* | 814,700 | 668,400 | 714,000 | 772,600 |  |  |  |  |
| **Number of re-constitution syringes** | *#* | 101,700 | 88,500 | 94,500 | 102,200 |  |  |  |  |
| **Number of safety boxes** | *#* | 10,175 | 8,425 | 8,975 | 9,725 |  |  |  |  |
| **Total value to be co-financed by the country** | ***$*** | **301,000** | **259,000** | **277,000** | **299,500** |  |  |  |  |

**Table 1.1 C** - Summary table for Measles, 10 doses/vial, Lyophilised

|  | **Data from** |  | **2012** | **2013** | **2014** | **2015** |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Number of Surviving infants** | *Table 1* | # | 648,005 | 669,692 | 692,086 | 715,209 |  |  |  |  |
| **Number of children to be vaccinated with the third dose[1]** | *Table 1* | # | 550,804 | 589,329 | 629,782 | 679,449 |  |  |  |  |
| **Immunisation coverage with the last dose** | *Table 1* | # | 96.00% | 97.00% | 97.00% | 97.00% |  |  |  |  |
| **Number of children to be vaccinated with the first dose** | *Table 1* | # | 622,085 | 649,602 | 671,323 | 693,753 |  |  |  |  |
| **Number of doses per child** |  | # | 1 | 1 | 1 | 1 |  |  |  |  |
| **Estimated vaccine wastage factor** | *Table 6.(n).3***[2]** | # | 1.33 | 1.33 | 1.33 | 1.33 |  |  |  |  |
| **Number of doses per vial** |  | # | 10 | 10 | 10 | 10 |  |  |  |  |
| **AD syringes required** |  | # | Yes | Yes | Yes | Yes |  |  |  |  |
| **Reconstitution syringes required** |  | # | Yes | Yes | Yes | Yes |  |  |  |  |
| **Safety boxes required** |  | # | Yes | Yes | Yes | Yes |  |  |  |  |
| **Vaccine price per dose** |  | $ | 0.240 | 0.240 | 0.240 | 0.240 |  |  |  |  |
| **Country co-financing per dose** | *Table 6.(n).2***[2]** | $ | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |
| **AD syringe price per unit** |  | $ | 0.053 | 0.053 | 0.053 | 0.053 |  |  |  |  |
| **Reconstitution syringe price per unit** |  | $ | 0.038 | 0.038 | 0.038 | 0.038 |  |  |  |  |
| **Safety box price per unit** |  | $ | 0.640 | 0.640 | 0.640 | 0.640 |  |  |  |  |
| **Freight cost as % of vaccines value** |  | % | 10.00 | 10.00 | 10.00 | 10.00 |  |  |  |  |
| **Freight cost as % of devices value** |  | % | 10.00 | 10.00 | 10.00 | 10.00 |  |  |  |  |

**[1]** 2nd dose if Measles vaccine or Rotavirus 2-dose schedule

**[2]** Where (n) depends on the vaccine

# **Table 1.1 D** - Estimated number of doses for Measles, 10 doses/vial, Lyophilised associated injection safety material and related co-financing budget (page 1)

|  |  | **Formula** | **2012** | | | **2013** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Total** | **Government** | **GAVI** | **Total** | **Government** | **GAVI** |
| A | **Country Co-finance** |  | 0.00% |  |  | 0.00% |  |  |
| B | **Number of children to be vaccinated with the first dose[1]** | Table 1 (baseline & annual targets) | 550,804 | 0 | 550,804 | 589,329 | 0 | 589,329 |
| C | **Number of doses per child** | Vaccine parameter | 1 | 1 | 1 | 1 | 1 | 1 |
| D | **Number of doses needed** | B \* C | 550,804 | 0 | 550,804 | 589,329 | 0 | 589,329 |
| E | **Estimated vaccine wastage factor** | Table 6.(n).3. in NVS section**[2]** | 1.33 | 1.33 | 1.33 | 1.33 | 1.33 | 1.33 |
| F | **Number of doses needed including wastage** | D \* E | 732,570 | 0 | 732,570 | 783,808 | 0 | 783,808 |
| G | **Vaccines buffer stock** | (F - F of previous year) \* 0.25 | 183,143 | 0 | 183,143 | 12,810 | 0 | 12,810 |
| I | **Total vaccine doses needed** | F + G | 915,713 | 0 | 915,713 | 796,618 | 0 | 796,618 |
| J | **Number of doses per vial** | Vaccine parameter | 10 | 10 | 10 | 10 | 10 | 10 |
| K | **Number of AD syringes (+ 10% wastage) needed** | (D + G) \* 1.11 | 814,682 | 0 | 814,682 | 668,375 | 0 | 668,375 |
| L | **Reconstitution syringes (+ 10% wastage) needed** | I / J \* 1.11 | 101,645 | 0 | 101,645 | 88,425 | 0 | 88,425 |
| M | **Total of safety boxes (+ 10% of extra need) needed** | (K + L) / 100 x 1.11 | 10,172 | 0 | 10,172 | 8,401 | 0 | 8,401 |
| N | **Cost of vaccines needed** | I \* vaccine price per dose | 219,772 | 0 | 219,772 | 191,189 | 0 | 191,189 |
| O | **Cost of AD syringes needed** | K \* AD syringe price per unit | 43,179 | 0 | 43,179 | 35,424 | 0 | 35,424 |
| P | **Cost of reconstitution syringes needed** | L \* reconstitution price per unit | 3,863 | 0 | 3,863 | 3,361 | 0 | 3,361 |
| Q | **Cost of safety boxes needed** | M \* safety box price per unit | 6,511 | 0 | 6,511 | 5,377 | 0 | 5,377 |
| R | **Freight cost for vaccines needed** | N \* freight cost as % of vaccines value | 21,978 | 0 | 21,978 | 19,119 | 0 | 19,119 |
| S | **Freight cost for devices needed** | (O + P + Q) \* freight cost as % of devices value | 5,356 | 0 | 5,356 | 4,417 | 0 | 4,417 |
| T | **Total fund needed** | (N + O + P + Q + R + S) | 300,659 | 0 | 300,659 | 258,887 | 0 | 258,887 |
| U | **Total country co-financing** | I \* country co-financing per dose | 0 |  |  | 0 |  |  |
| V | **Country co-financing % of GAVI supported proportion** | U / T | 0.00% |  |  | 0.00% |  |  |

**[1]** 2nd dose if Measles vaccine or Rotavirus 2-dose schedule

**[2]** Where (n) depends on the vaccine

# **Table 1.1 D -** Estimated number of doses for Measles, 10 doses/vial, Lyophilised associated injection safety material and related co-financing budget (page 2)

|  |  | **Formula** | **2014** | | | **2015** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Total** | **Government** | **GAVI** | **Total** | **Government** | **GAVI** |
| A | **Country Co-finance** |  | 0.00% |  |  | 0.00% |  |  |
| B | **Number of children to be vaccinated with the first dose[1]** | Table 1 (baseline & annual targets) | 629,782 | 0 | 629,782 | 679,449 | 0 | 679,449 |
| C | **Number of doses per child** | Vaccine parameter (schedule) | 1 | 1 | 1 | 1 | 1 | 1 |
| D | **Number of doses needed** | B \* C | 629,782 | 0 | 629,782 | 679,449 | 0 | 679,449 |
| E | **Estimated vaccine wastage factor** | Table 6.(n).3. in NVS section**[2]** | 1.33 | 1.33 | 1.33 | 1.33 | 1.33 | 1.33 |
| F | **Number of doses needed including wastage** | D \* E | 837,611 | 0 | 837,611 | 903,668 | 0 | 903,668 |
| G | **Vaccines buffer stock** | (F - F of previous year) \* 0.25 | 13,451 | 0 | 13,451 | 16,515 | 0 | 16,515 |
| I | **Total vaccine doses needed** | F + G | 851,062 | 0 | 851,062 | 920,183 | 0 | 920,183 |
| J | **Number of doses per vial** | Vaccine parameter | 10 | 10 | 10 | 10 | 10 | 10 |
| K | **Number of AD syringes (+ 10% wastage) needed** | (D + G) \* 1.11 | 713,989 | 0 | 713,989 | 772,521 | 0 | 772,521 |
| L | **Reconstitution syringes (+ 10% wastage) needed** | I / J \* 1.11 | 94,468 | 0 | 94,468 | 102,141 | 0 | 102,141 |
| M | **Total of safety boxes (+ 10% of extra need) needed** | (K + L) / 100 x 1.11 | 8,974 | 0 | 8,974 | 9,709 | 0 | 9,709 |
| N | **Cost of vaccines needed** | I \* vaccine price per dose | 204,255 | 0 | 204,255 | 220,844 | 0 | 220,844 |
| O | **Cost of AD syringes needed** | K \* AD syringe price per unit | 37,842 | 0 | 37,842 | 40,944 | 0 | 40,944 |
| P | **Cost of reconstitution syringes needed** | L \* reconstitution price per unit | 3,590 | 0 | 3,590 | 3,882 | 0 | 3,882 |
| Q | **Cost of safety boxes needed** | M \* safety box price per unit | 5,744 | 0 | 5,744 | 6,214 | 0 | 6,214 |
| R | **Freight cost for vaccines needed** | N \* freight cost as % of vaccines value | 20,426 | 0 | 20,426 | 22,085 | 0 | 22,085 |
| S | **Freight cost for devices needed** | (O + P + Q) \* freight cost as % of devices value | 4,718 | 0 | 4,718 | 5,104 | 0 | 5,104 |
| T | **Total fund needed** | (N + O + P + Q + R + S) | 276,575 | 0 | 276,575 | 299,073 | 0 | 299,073 |
| U | **Total country co-financing** | I \* country co-financing per dose | 0 |  |  | 0 |  |  |
| V | **Country co-financing % of GAVI supported proportion** | U / T | 0.00% |  |  | 0.00% |  |  |

**[1]** 2nd dose if Measles vaccine or Rotavirus 2-dose schedule

**[2]** Where (n) depends on the vaccine

# **Annex 1.2 – Pneumococcal (PCV10), 2 doses/vial, Liquid**

**Table 1.2 A** - Rounded up portion of supply that is procured by the country and estimate of related cost in US$

| **Required supply item** |  | **2012** | **2013** | **2014** | **2015** |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Number of vaccine doses** | *#* | 88,600 | 88,000 | 120,100 | 119,200 |  |  |  |  |
| **Number of AD syringes** | *#* | 94,600 | 93,200 | 127,300 | 126,100 |  |  |  |  |
| **Number of re-constitution syringes** | *#* |  |  |  |  |  |  |  |  |
| **Number of safety boxes** | *#* | 1,050 | 1,050 | 1,425 | 1,400 |  |  |  |  |
| **Total value to be co-financed by the country** | *$* | 332,000 | 329,500 | 450,000 | 446,500 |  |  |  |  |

**Table 1.2 B** - Rounded up portion of supply that is procured by GAVI and estimate of related cost in US$.

| **Required supply item** |  | **2012** | **2013** | **2014** | **2015** |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Number of vaccine doses** | *#* | 1,570,000 | 1,558,100 | 2,127,800 | 2,112,000 |  |  |  |  |
| **Number of AD syringes** | *#* | 1,676,300 | 1,650,400 | 2,256,100 | 2,233,900 |  |  |  |  |
| **Number of re-constitution syringes** | *#* |  |  |  |  |  |  |  |  |
| **Number of safety boxes** | *#* | 18,625 | 18,325 | 25,050 | 24,800 |  |  |  |  |
| **Total value to be co-financed by the country** | ***$*** | **5,880,500** | **5,835,500** | **7,969,000** | **7,909,500** |  |  |  |  |

**Table 1.2 C** - Summary table for Pneumococcal (PCV10), 2 doses/vial, Liquid

|  | **Data from** |  | **2012** | **2013** | **2014** | **2015** |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Number of Surviving infants** | *Table 1* | # | 648,005 | 669,692 | 692,086 | 715,209 |  |  |  |  |
| **Number of children to be vaccinated with the third dose[1]** | *Table 1* | # | 388,803 | 468,785 | 664,403 | 693,753 |  |  |  |  |
| **Immunisation coverage with the last dose** | *Table 1* | # | 60.00% | 70.00% | 96.00% | 97.00% |  |  |  |  |
| **Number of children to be vaccinated with the first dose** | *Table 1* | # | 421,203 | 502,270 | 671,323 | 700,905 |  |  |  |  |
| **Number of doses per child** |  | # | 3 | 3 | 3 | 3 |  |  |  |  |
| **Estimated vaccine wastage factor** | *Table 6.(n).3***[2]** | # | 1.05 | 1.05 | 1.05 | 1.05 |  |  |  |  |
| **Number of doses per vial** |  | # | 2 | 2 | 2 | 2 |  |  |  |  |
| **AD syringes required** |  | # | Yes | Yes | Yes | Yes |  |  |  |  |
| **Reconstitution syringes required** |  | # | No | No | No | No |  |  |  |  |
| **Safety boxes required** |  | # | Yes | Yes | Yes | Yes |  |  |  |  |
| **Vaccine price per dose** |  | $ | 3.500 | 3.500 | 3.500 | 3.500 |  |  |  |  |
| **Country co-financing per dose** | *Table 6.(n).2***[2]** | $ | 0.20 | 0.20 | 0.20 | 0.20 |  |  |  |  |
| **AD syringe price per unit** |  | $ | 0.053 | 0.053 | 0.053 | 0.053 |  |  |  |  |
| **Reconstitution syringe price per unit** |  | $ |  |  |  |  |  |  |  |  |
| **Safety box price per unit** |  | $ | 0.640 | 0.640 | 0.640 | 0.640 |  |  |  |  |
| **Freight cost as % of vaccines value** |  | % | 5.00 | 5.00 | 5.00 | 5.00 |  |  |  |  |
| **Freight cost as % of devices value** |  | % | 10.00 | 10.00 | 10.00 | 10.00 |  |  |  |  |

**[1]** 2nd dose if Measles vaccine or Rotavirus 2-dose schedule

**[2]** Where (n) depends on the vaccine

# **Table 1.2 D** - Estimated number of doses for Pneumococcal (PCV10), 2 doses/vial, Liquid associated injection safety material and related co-financing budget (page 1)

|  |  | **Formula** | **2012** | | | **2013** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Total** | **Government** | **GAVI** | **Total** | **Government** | **GAVI** |
| A | **Country Co-finance** |  | 5.34% |  |  | 5.34% |  |  |
| B | **Number of children to be vaccinated with the first dose[1]** | Table 1 (baseline & annual targets) | 421,203 | 22,491 | 398,712 | 502,270 | 26,824 | 475,446 |
| C | **Number of doses per child** | Vaccine parameter | 3 | 3 | 3 | 3 | 3 | 3 |
| D | **Number of doses needed** | B \* C | 1,263,609 | 67,472 | 1,196,137 | 1,506,810 | 80,471 | 1,426,339 |
| E | **Estimated vaccine wastage factor** | Table 6.(n).3. in NVS section**[2]** | 1.05 | 1.05 | 1.05 | 1.05 | 1.05 | 1.05 |
| F | **Number of doses needed including wastage** | D \* E | 1,326,790 | 70,846 | 1,255,944 | 1,582,151 | 84,494 | 1,497,657 |
| G | **Vaccines buffer stock** | (F - F of previous year) \* 0.25 | 331,698 | 17,712 | 313,986 | 63,841 | 3,410 | 60,431 |
| I | **Total vaccine doses needed** | F + G | 1,658,488 | 88,557 | 1,569,931 | 1,645,992 | 87,903 | 1,558,089 |
| J | **Number of doses per vial** | Vaccine parameter | 2 | 2 | 2 | 2 | 2 | 2 |
| K | **Number of AD syringes (+ 10% wastage) needed** | (D + G) \* 1.11 | 1,770,791 | 94,554 | 1,676,237 | 1,743,423 | 93,107 | 1,650,316 |
| L | **Reconstitution syringes (+ 10% wastage) needed** | I / J \* 1.11 |  |  |  |  |  |  |
| M | **Total of safety boxes (+ 10% of extra need) needed** | (K + L) / 100 x 1.11 | 19,656 | 1,050 | 18,606 | 19,352 | 1,034 | 18,318 |
| N | **Cost of vaccines needed** | I \* vaccine price per dose | 5,804,708 | 309,950 | 5,494,758 | 5,760,972 | 307,661 | 5,453,311 |
| O | **Cost of AD syringes needed** | K \* AD syringe price per unit | 93,852 | 5,012 | 88,840 | 92,402 | 4,935 | 87,467 |
| P | **Cost of reconstitution syringes needed** | L \* reconstitution price per unit |  |  |  |  |  |  |
| Q | **Cost of safety boxes needed** | M \* safety box price per unit | 12,580 | 672 | 11,908 | 12,386 | 662 | 11,724 |
| R | **Freight cost for vaccines needed** | N \* freight cost as % of vaccines value | 290,236 | 15,498 | 274,738 | 288,049 | 15,384 | 272,665 |
| S | **Freight cost for devices needed** | (O + P + Q) \* freight cost as % of devices value | 10,644 | 569 | 10,075 | 10,479 | 560 | 9,919 |
| T | **Total fund needed** | (N + O + P + Q + R + S) | 6,212,020 | 331,698 | 5,880,322 | 6,164,288 | 329,199 | 5,835,089 |
| U | **Total country co-financing** | I \* country co-financing per dose | 331,698 |  |  | 329,199 |  |  |
| V | **Country co-financing % of GAVI supported proportion** | U / T | 5.34% |  |  | 5.34% |  |  |

**[1]** 2nd dose if Measles vaccine or Rotavirus 2-dose schedule

**[2]** Where (n) depends on the vaccine

# **Table 1.2 D -** Estimated number of doses for Pneumococcal (PCV10), 2 doses/vial, Liquid associated injection safety material and related co-financing budget (page 2)

|  |  | **Formula** | **2014** | | | **2015** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Total** | **Government** | **GAVI** | **Total** | **Government** | **GAVI** |
| A | **Country Co-finance** |  | 5.34% |  |  | 5.34% |  |  |
| B | **Number of children to be vaccinated with the first dose[1]** | Table 1 (baseline & annual targets) | 671,323 | 35,851 | 635,472 | 700,905 | 37,433 | 663,472 |
| C | **Number of doses per child** | Vaccine parameter (schedule) | 3 | 3 | 3 | 3 | 3 | 3 |
| D | **Number of doses needed** | B \* C | 2,013,969 | 107,553 | 1,906,416 | 2,102,715 | 112,297 | 1,990,418 |
| E | **Estimated vaccine wastage factor** | Table 6.(n).3. in NVS section**[2]** | 1.05 | 1.05 | 1.05 | 1.05 | 1.05 | 1.05 |
| F | **Number of doses needed including wastage** | D \* E | 2,114,668 | 112,930 | 2,001,738 | 2,207,851 | 117,912 | 2,089,939 |
| G | **Vaccines buffer stock** | (F - F of previous year) \* 0.25 | 133,130 | 7,110 | 126,020 | 23,296 | 1,245 | 22,051 |
| I | **Total vaccine doses needed** | F + G | 2,247,798 | 120,040 | 2,127,758 | 2,231,147 | 119,156 | 2,111,991 |
| J | **Number of doses per vial** | Vaccine parameter | 2 | 2 | 2 | 2 | 2 | 2 |
| K | **Number of AD syringes (+ 10% wastage) needed** | (D + G) \* 1.11 | 2,383,280 | 127,275 | 2,256,005 | 2,359,873 | 126,031 | 2,233,842 |
| L | **Reconstitution syringes (+ 10% wastage) needed** | I / J \* 1.11 |  |  |  |  |  |  |
| M | **Total of safety boxes (+ 10% of extra need) needed** | (K + L) / 100 x 1.11 | 26,455 | 1,413 | 25,042 | 26,195 | 1,399 | 24,796 |
| N | **Cost of vaccines needed** | I \* vaccine price per dose | 7,867,293 | 420,139 | 7,447,154 | 7,809,015 | 417,046 | 7,391,969 |
| O | **Cost of AD syringes needed** | K \* AD syringe price per unit | 126,314 | 6,746 | 119,568 | 125,074 | 6,680 | 118,394 |
| P | **Cost of reconstitution syringes needed** | L \* reconstitution price per unit |  |  |  |  |  |  |
| Q | **Cost of safety boxes needed** | M \* safety box price per unit | 16,932 | 905 | 16,027 | 16,765 | 896 | 15,869 |
| R | **Freight cost for vaccines needed** | N \* freight cost as % of vaccines value | 393,365 | 21,007 | 372,358 | 390,451 | 20,853 | 369,598 |
| S | **Freight cost for devices needed** | (O + P + Q) \* freight cost as % of devices value | 14,325 | 766 | 13,559 | 14,184 | 758 | 13,426 |
| T | **Total fund needed** | (N + O + P + Q + R + S) | 8,418,229 | 449,560 | 7,968,669 | 8,355,489 | 446,230 | 7,909,259 |
| U | **Total country co-financing** | I \* country co-financing per dose | 449,560 |  |  | 446,230 |  |  |
| V | **Country co-financing % of GAVI supported proportion** | U / T | 5.34% |  |  | 5.34% |  |  |

**[1]** 2nd dose if Measles vaccine or Rotavirus 2-dose schedule

**[2]** Where (n) depends on the vaccine

# **Annex 1.3 – Rotavirus 2-dose schedule**

**Table 1.3 A** - Rounded up portion of supply that is procured by the country and estimate of related cost in US$

| **Required supply item** |  | **2012** | **2013** | **2014** | **2015** |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Number of vaccine doses** | *#* |  | 43,500 | 62,600 | 78,900 |  |  |  |  |
| **Number of AD syringes** | *#* |  |  |  |  |  |  |  |  |
| **Number of re-constitution syringes** | *#* |  |  |  |  |  |  |  |  |
| **Number of safety boxes** | *#* |  | 500 | 700 | 900 |  |  |  |  |
| **Total value to be co-financed by the country** | *$* |  | 229,000 | 263,500 | 299,000 |  |  |  |  |

**Table 1.3 B** - Rounded up portion of supply that is procured by GAVI and estimate of related cost in US$.

| **Required supply item** |  | **2012** | **2013** | **2014** | **2015** |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Number of vaccine doses** | *#* |  | 1,099,200 | 1,253,200 | 1,414,700 |  |  |  |  |
| **Number of AD syringes** | *#* |  |  |  |  |  |  |  |  |
| **Number of re-constitution syringes** | *#* |  |  |  |  |  |  |  |  |
| **Number of safety boxes** | *#* |  | 12,225 | 13,925 | 15,725 |  |  |  |  |
| **Total value to be co-financed by the country** | ***$*** |  | **5,779,500** | **5,273,500** | **5,358,500** |  |  |  |  |

**Table 1.3 C** - Summary table for Rotavirus 2-dose schedule

|  | **Data from** |  | **2012** | **2013** | **2014** | **2015** |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Number of Surviving infants** | *Table 1* | # | 708,669 | 669,692 | 692,086 | 715,209 |  |  |  |  |
| **Number of children to be vaccinated with the third dose[1]** | *Table 1* | # | 535,754 | 401,816 | 484,460 | 679,449 |  |  |  |  |
| **Immunisation coverage with the last dose** | *Table 1* | # | 75.60% | 60.00% | 70.00% | 95.00% |  |  |  |  |
| **Number of children to be vaccinated with the first dose** | *Table 1* | # | 636,208 | 435,300 | 588,273 | 686,601 |  |  |  |  |
| **Number of doses per child** |  | # | 2 | 2 | 2 | 2 |  |  |  |  |
| **Estimated vaccine wastage factor** | *Table 6.(n).3***[2]** | # |  | 1.05 | 1.05 | 1.05 |  |  |  |  |
| **Number of doses per vial** |  | # | 1 | 1 | 1 | 1 |  |  |  |  |
| **AD syringes required** |  | # | No | No | No | No |  |  |  |  |
| **Reconstitution syringes required** |  | # | No | No | No | No |  |  |  |  |
| **Safety boxes required** |  | # | Yes | Yes | Yes | Yes |  |  |  |  |
| **Vaccine price per dose** |  | $ | 5.000 | 5.000 | 4.000 | 3.600 |  |  |  |  |
| **Country co-financing per dose** | *Table 6.(n).2***[2]** | $ | 0.20 | 0.20 | 0.20 | 0.20 |  |  |  |  |
| **AD syringe price per unit** |  | $ | 0.053 | 0.053 | 0.053 | 0.053 |  |  |  |  |
| **Reconstitution syringe price per unit** |  | $ |  |  |  |  |  |  |  |  |
| **Safety box price per unit** |  | $ | 0.550 | 0.640 | 0.640 | 0.640 |  |  |  |  |
| **Freight cost as % of vaccines value** |  | % |  | 5.00 | 5.00 | 5.00 |  |  |  |  |
| **Freight cost as % of devices value** |  | % | 10.00 | 10.00 | 10.00 | 10.00 |  |  |  |  |

**[1]** 2nd dose if Measles vaccine or Rotavirus 2-dose schedule

**[2]** Where (n) depends on the vaccine

# **Table 1.3 D** - Estimated number of doses for Rotavirus 2-dose schedule associated injection safety material and related co-financing budget (page 1)

|  |  | **Formula** | **2013** | | | **2014** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Total** | **Government** | **GAVI** | **Total** | **Government** | **GAVI** |
| A | **Country Co-finance** |  | 3.80% |  |  | 4.75% |  |  |
| B | **Number of children to be vaccinated with the first dose[1]** | Table 1 (baseline & annual targets) | 435,300 | 16,559 | 418,741 | 588,273 | 27,961 | 560,312 |
| C | **Number of doses per child** | Vaccine parameter | 2 | 2 | 2 | 2 | 2 | 2 |
| D | **Number of doses needed** | B \* C | 870,600 | 33,117 | 837,483 | 1,176,546 | 55,922 | 1,120,624 |
| E | **Estimated vaccine wastage factor** | Table 6.(n).3. in NVS section**[2]** | 1.05 | 1.05 | 1.05 | 1.05 | 1.05 | 1.05 |
| F | **Number of doses needed including wastage** | D \* E | 914,130 | 34,773 | 879,357 | 1,235,374 | 58,719 | 1,176,655 |
| G | **Vaccines buffer stock** | (F - F of previous year) \* 0.25 | 228,533 | 8,694 | 219,839 | 80,311 | 3,818 | 76,493 |
| I | **Total vaccine doses needed** | F + G | 1,142,663 | 43,466 | 1,099,197 | 1,315,685 | 62,536 | 1,253,149 |
| J | **Number of doses per vial** | Vaccine parameter | 1 | 1 | 1 | 1 | 1 | 1 |
| K | **Number of AD syringes (+ 10% wastage) needed** | (D + G) \* 1.11 |  |  |  |  |  |  |
| L | **Reconstitution syringes (+ 10% wastage) needed** | I / J \* 1.11 |  |  |  |  |  |  |
| M | **Total of safety boxes (+ 10% of extra need) needed** | I / 100 x 1.11 | 12,684 | 483 | 12,201 | 14,605 | 695 | 13,910 |
| N | **Cost of vaccines needed** | I \* vaccine price per dose | 5,713,315 | 217,327 | 5,495,988 | 5,262,740 | 250,142 | 5,012,598 |
| O | **Cost of AD syringes needed** | K \* AD syringe price per unit |  |  |  |  |  |  |
| P | **Cost of reconstitution syringes needed** | L \* reconstitution price per unit |  |  |  |  |  |  |
| Q | **Cost of safety boxes needed** | M \* safety box price per unit | 8,118 | 309 | 7,809 | 9,348 | 445 | 8,903 |
| R | **Freight cost for vaccines needed** | N \* freight cost as % of vaccines value | 285,666 | 10,867 | 274,799 | 263,137 | 12,508 | 250,629 |
| S | **Freight cost for devices needed** | (O + P + Q) \* freight cost as % of devices value | 812 | 31 | 781 | 935 | 45 | 890 |
| T | **Total fund needed** | (N + O + P + Q + R + S) | 6,007,911 | 228,533 | 5,779,378 | 5,536,160 | 263,137 | 5,273,023 |
| U | **Total country co-financing** | I \* country co-financing per dose | 228,533 |  |  | 263,137 |  |  |
| V | **Country co-financing % of GAVI supported proportion** | U / T | 3.80% |  |  | 4.75% |  |  |

**[1]** 2nd dose if Measles vaccine or Rotavirus 2-dose schedule

**[2]** Where (n) depends on the vaccine

# **Table 1.3 D -** Estimated number of doses for Rotavirus 2-dose schedule associated injection safety material and related co-financing budget (page 2)

|  |  | **Formula** | **2015** | | |  | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Total** | **Government** | **GAVI** | **Total** | **Government** | **GAVI** |
| A | **Country Co-finance** |  | 5.28% |  |  |  |  |  |
| B | **Number of children to be vaccinated with the first dose[1]** | Table 1 (baseline & annual targets) | 686,601 | 36,254 | 650,347 |  |  |  |
| C | **Number of doses per child** | Vaccine parameter (schedule) | 2 | 2 | 2 | 2 | 2 | 2 |
| D | **Number of doses needed** | B \* C | 1,373,202 | 72,507 | 1,300,695 |  |  |  |
| E | **Estimated vaccine wastage factor** | Table 6.(n).3. in NVS section**[2]** | 1.05 | 1.05 | 1.05 |  |  |  |
| F | **Number of doses needed including wastage** | D \* E | 1,441,863 | 76,132 | 1,365,731 |  |  |  |
| G | **Vaccines buffer stock** | (F - F of previous year) \* 0.25 | 51,623 | 2,726 | 48,897 |  |  |  |
| I | **Total vaccine doses needed** | F + G | 1,493,486 | 78,858 | 1,414,628 |  |  |  |
| J | **Number of doses per vial** | Vaccine parameter | 1 | 1 | 1 | 1 | 1 | 1 |
| K | **Number of AD syringes (+ 10% wastage) needed** | (D + G) \* 1.11 |  |  |  |  |  |  |
| L | **Reconstitution syringes (+ 10% wastage) needed** | I / J \* 1.11 |  |  |  |  |  |  |
| M | **Total of safety boxes (+ 10% of extra need) needed** | I / 100 x 1.11 | 16,578 | 876 | 15,702 |  |  |  |
| N | **Cost of vaccines needed** | I \* vaccine price per dose | 5,376,550 | 283,888 | 5,092,662 |  |  |  |
| O | **Cost of AD syringes needed** | K \* AD syringe price per unit |  |  |  |  |  |  |
| P | **Cost of reconstitution syringes needed** | L \* reconstitution price per unit |  |  |  |  |  |  |
| Q | **Cost of safety boxes needed** | M \* safety box price per unit | 10,610 | 561 | 10,049 |  |  |  |
| R | **Freight cost for vaccines needed** | N \* freight cost as % of vaccines value | 268,828 | 14,195 | 254,633 |  |  |  |
| S | **Freight cost for devices needed** | (O + P + Q) \* freight cost as % of devices value | 1,061 | 57 | 1,004 |  |  |  |
| T | **Total fund needed** | (N + O + P + Q + R + S) | 5,657,049 | 298,698 | 5,358,351 |  |  |  |
| U | **Total country co-financing** | I \* country co-financing per dose | 298,698 |  |  |  |  |  |
| V | **Country co-financing % of GAVI supported proportion** | U / T | 5.28% |  |  |  |  |  |

**[1]** 2nd dose if Measles vaccine or Rotavirus 2-dose schedule

**[2]** Where (n) depends on the vaccine

# **Annex 2**

Estimated prices of supply and related freight cost: 2011 from UNICEF Supply Division; 2012 onwards: GAVI Secretariat

**Table A -** Commodities Cost

| **Vaccine** | **Presentation** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| AD syringe | 0 | 0.053 | 0.053 | 0.053 | 0.053 | 0.053 | 0.053 | 0.053 |
| DTP-HepB | 2 | 1.600 |  |  |  |  |  |  |
| DTP-HepB | 10 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 |
| DTP-HepB-Hib | WAP | 2.580 | 2.470 | 2.320 | 2.030 | 1.850 | 1.850 | 1.850 |
| DTP-HepB-Hib | WAP | 2.580 | 2.470 | 2.320 | 2.030 | 1.850 | 1.850 | 1.850 |
| DTP-HepB-Hib | WAP | 2.580 | 2.470 | 2.320 | 2.030 | 1.850 | 1.850 | 1.850 |
| DTP-Hib | 10 | 3.400 | 3.400 | 3.400 | 3.400 | 3.400 | 3.200 | 3.200 |
| HepB monoval | 1 |  |  |  |  |  |  |  |
| HepB monoval | 2 |  |  |  |  |  |  |  |
| Hib monoval | 1 | 3.400 |  |  |  |  |  |  |
| Measles | 10 | 0.240 | 0.240 | 0.240 | 0.240 | 0.240 | 0.240 | 0.240 |
| Pneumococcal(PCV10) | 2 | 3.500 | 3.500 | 3.500 | 3.500 | 3.500 | 3.500 | 3.500 |
| Pneumococcal(PCV13) | 1 | 3.500 | 3.500 | 3.500 | 3.500 | 3.500 | 3.500 | 3.500 |
| Reconstit syringe for Pentaval (2ml) | 0 | 0.032 | 0.032 | 0.032 | 0.032 | 0.032 | 0.032 | 0.032 |
| Reconstit syringe for YF | 0 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 |
| Rotavirus 2-dose schedule | 1 | 7.500 | 6.000 | 5.000 | 4.000 | 3.600 | 3.600 | 3.600 |
| Rotavirus 3-dose schedule | 1 | 5.500 | 4.000 | 3.333 | 2.667 | 2.400 | 2.400 | 2.400 |
| Safety box | 0 | 0.640 | 0.640 | 0.640 | 0.640 | 0.640 | 0.640 | 0.640 |
| Yellow Fever | WAP | 0.856 | 0.856 | 0.856 | 0.856 | 0.856 | 0.856 | 0.856 |
| Yellow Fever | WAP | 0.856 | 0.856 | 0.856 | 0.856 | 0.856 | 0.856 | 0.856 |

**Note:** WAP - weighted average price (to be used for any presentation: For DTP-HepB-Hib, it applies to 1 dose liquid, 2 dose lyophilised and 10 dose liquid. For Yellow Fever, it applies to 5 dose lyophilised and 10 dose lyophilised)

**Table B -** Commodities Freight Cost

| **Vaccines** | **Group** | **No Threshold** | **200’000 $** | | **250’000 $** | | **2’000’000 $** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **<=** | **>** | **<=** | **>** | **<=** | **>** |
| Yellow Fever | Yellow Fever |  | 20% |  |  |  | 10% | 5% |
| DTP+HepB | HepB and or Hib | 2% |  |  |  |  |  |  |
| DTP-HepB-Hib | HepB and or Hib |  |  |  | 15% | 3,50% |  |  |
| Pneumococcal vaccine (PCV10) | Pneumococcal | 5% |  |  |  |  |  |  |
| Pneumococcal vaccine (PCV13) | Pneumococcal | 5% |  |  |  |  |  |  |
| Rotavirus | Rotavirus | 5% |  |  |  |  |  |  |
| Measles | Measles | 10% |  |  |  |  |  |  |

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

| **vaccine** | **2012** | **2013** | **2014** | **2015** |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Rotavirus 2-dose schedule** |  | 0.20 | 0.20 | 0.20 |  |  |  |
| **Pneumococcal(PCV10), 2 doses/vial, Liquid** | 0.20 | 0.20 | 0.20 | 0.20 |  |  |  |
| **Measles, 10 doses/vial, Lyophilised** | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |

**Table D -** Wastage rates and factors

Countries are expected to plan for a maximal wastage rate of:

* 50% - for a lyophilised vaccine in 10 or 20-dose vial,
* 25% - for a liquid vaccine in 10 or 20-dose vial or a lyophilised vaccine in 5-dose vial,
* 10% - for a lyophilised/liquid vaccine in 2-dose vial, and
* 5% - for a liquid vaccine in 1-dose vial

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Vaccine wastage rate | 5% | 10% | 15% | 20% | 25% | 30% | 35% | 40% | 45% | 50% | 55% | 60% |
| Equivalent wastage factor | 1.05 | 1.11 | 1.18 | 1.25 | 1.33 | 1.43 | 1.54 | 1.67 | 1.82 | 2 | 2.22 | 2.5 |

WHO International shipping guidelines: maximum packed volumes of vaccines

**Table E -** Vaccine maximum packed volumes

| **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-Pertussis | DTP | liquid | IM | 3 | 20 | 2.5 |  |
| Diphtheria-Tetanus-Pertussis | DTP | liquid | IM | 3 | 10 | 3.0 |  |
| Diphtheria-Tetanus | DT | liquid | IM | 3 | 10 | 3.0 |  |
| Tetanus-Diphtheria | Td | liquid | IM | 2 | 10 | 3.0 |  |
| Tetanus Toxoid | TT | liquid | IM | 2 | 10 | 3.0 |  |
| Tetanus Toxoid | TT | liquid | IM | 2 | 20 | 2.5 |  |
| Tetanus Toxoid UniJect | TT | liquid | IM | 2 | Uniject | 12.0 |  |
| Measles | Measles | lyophilized | SC | 1 | 1 | 26.1 | 20.0 |
| Measles | Measles | lyophilized | SC | 1 | 2 | 13.1 | 13.1 |
| Measles | Measles | lyophilized | SC | 1 | 5 | 5.2 | 7.0 |
| Measles | Measles | lyophilized | SC | 1 | 10 | 3.5 | 4.0 |
| 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 | 7.0 |
| Measles-Rubella freeze dried | MR | lyophilized | SC | 1 | 10 | 2.5 | 4.0 |
| 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 | 7.0 |
| Measles-Mumps-Rubella freeze dried | MMR | lyophilized | SC | 1 | 10 | 3.0 | 4.0 |
| Polio | OPV | liquid | Oral | 4 | 10 | 2.0 |  |
| Polio | OPV | liquid | Oral | 4 | 20 | 1.0 |  |
| Yellow fever | YF | lyophilized | SC | 1 | 5 | 6.5 | 7.0 |
| Yellow fever | YF | lyophilized | SC | 1 | 10 | 2.5 | 3.0 |
| Yellow fever | YF | lyophilized | SC | 1 | 20 | 1.5 | 2.0 |
| Yellow fever | YF | lyophilized | SC | 1 | 50 | 0.7 | 1.0 |
| DTP-HepB combined | DTP-HepB | liquid | IM | 3 | 1 | 9.7 |  |
| DTP-HepB combined | DTP-HepB | liquid | IM | 3 | 2 | 6.0 |  |
| DTP-HepB combined | DTP-HepB | liquid | IM | 3 | 10 | 3.0 |  |
| Hepatitis B | HepB | liquid | IM | 3 | 1 | 18.0 |  |
| Hepatitis B | HepB | liquid | IM | 3 | 2 | 13.0 |  |
| Hepatitis B | HepB | liquid | IM | 3 | 6 | 4.5 |  |
| Hepatitis B | HepB | liquid | IM | 3 | 10 | 4.0 |  |
| Hepatitis B UniJect | HepB | liquid | IM | 3 | Uniject | 12.0 |  |
| Hib liquid | Hib\_liq | liquid | IM | 3 | 1 | 15.0 |  |
| Hib liquid | Hib\_liq | liquid | IM | 3 | 10 | 2.5 |  |
| Hib freeze-dried | Hib\_lyo | lyophilized | IM | 3 | 1 | 13.0 | 35.0 |
| Hib freeze-dried | Hib\_lyo | lyophilized | IM | 3 | 2 | 6.0 |  |
| Hib freeze-dried | Hib\_lyo | lyophilized | IM | 3 | 10 | 2.5 | 3.0 |
| DTP liquid + Hib freeze-dried | DTP+Hib | liquid+lyop. | IM | 3 | 1 | 45.0 |  |
| DTP-Hib combined liquid | DTP+Hib | liquid+lyop. | IM | 3 | 10 | 12.0 |  |
| DTP-Hib combined liquid | DTP-Hib | liquid | IM | 3 | 1 | 32.3 |  |
| 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 | 22.0 |  |
| DTP-HepB-Hib liquid | DTP-HepB+Hib | liquid+lyop. | IM | 3 | 2 | 11.0 |  |
| 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 |  |
| Meningitis A/C | MV\_A/C | lyophilized | SC | 1 | 10 | 2.5 | 4.0 |
| Meningitis A/C | MV\_A/C | lyophilized | SC | 1 | 50 | 1.5 | 3.0 |
| Meningococcal A/C/W/ | MV\_A/C/W | lyophilized | SC | 1 | 50 | 1.5 | 3.0 |
| Meningococcal A/C/W/Y | MV\_A/C/W/Y | lyophilized | SC | 1 | 10 | 2.5 | 4.0 |
| Meningitis W135 | MV\_W135 | lyophilized | SC | 1 | 10 | 2.5 | 4.0 |
| Meningitis A conjugate | Men\_A | lyophilized | SC | 2 | 10 | 2.6 | 4.0 |
| Japanese Encephalitis | JE\_lyo | lyophilized | SC | 3 | 10 | 15.0 |  |
| Japanese Encephalitis | JE\_lyo | lyophilized | SC | 3 | 10 | 8.1 | 8.1 |
| Japanese Encephalitis | JE\_lyo | lyophilized | SC | 3 | 5 | 2.5 | 2.9 |
| Japanese Encephalitis | JE\_lyo | lyophilized | SC | 3 | 1 | 12.6 | 11.5 |
| Japanese Encephalitis | JE\_liq | liquid | SC | 3 | 10 | 3.4 |  |
| Rota vaccine | Rota\_lyo | lyophilized | Oral | 2 | 1 | 156.0 |  |
| Rota vaccine | Rota\_liq | liquid | Oral | 2 | 1 | 17.1 |  |
| Rota vaccine | Rota\_liq | liquid | Oral | 3 | 1 | 45.9 |  |
| Pneumo. conjugate vaccine 7-valent | PCV-7 | liquid | IM | 3 | PFS | 55.9 |  |
| Pneumo. conjugate vaccine 7-valent | PCV-7 | liquid | IM | 3 | 1 | 21.0 |  |
| 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 | 12.0 |  |
| 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 |  |
| Human Papilomavirus vaccine | HPV | liquid | IM | 3 | 1 | 15.0 |  |
| Human Papilomavirus vaccine | HPV | liquid | IM | 3 | 2 | 5.7 |  |
| Monovalent OPV-1 | mOPV1 | liquid | Oral |  | 20 | 1.5 |  |
| Monovalent OPV-3 | mOPV3 | liquid | Oral |  | 20 | 1.5 |  |

# **Attachments**

# **List of Supporting Documents Attached to this Proposal**

|  |  |  |  |
| --- | --- | --- | --- |
| **Document** | **Section** | **Document Number** | **Mandatory[1]** |
| **MoH Signature (or delegated authority) of Proposal** |  | **1** | **Yes** |
| **MoF Signature (or delegated authority) of Proposal** |  | **2(No file loaded)** | **Yes** |
| **Signatures of ICC or HSCC or equivalent in Proposal** |  | **3, 12** | **Yes** |
| **Minutes of ICC/HSCC meeting endorsing Proposal** |  | **13** | **Yes** |
| **comprehensive Multi Year Plan - cMYP** |  | **4** | **Yes** |
| **cMYP Costing tool for financial analysis** |  | **5** | **Yes** |
| **Minutes of last three ICC/HSCC meetings** |  | **10** | **Yes** |
| **Improvement plan based on EVM** |  | **Missing** | **Yes** |
| **WHO/UNICEF Joint Reporting Form (JRF)** |  |  |  |
| **ICC/HSCC workplan for forthcoming 12 months** |  |  |  |
| **National policy on injection safety** |  |  |  |
| **Action plans for improving injection safety** |  |  |  |
| **Plan for NVS introduction (if not part of cMYP)** |  | **7, 8, 9** |  |
| **Banking details** |  |  |  |

**[1]** Please indicate the duration of the plan / assessment / document where appropriate

# **Attachments**

List of all the mandatory and optional documents attached to this form

**Note:** Use the ***Upload file*** arrow icon to upload the document. Use the ***Delete item*** icon to delete a line. To add new lines click on the ***New item*** icon in the ***Action*** column.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ID** | **File type** | **File name** | | **New file** | **Actions** |
| **Description** | **Date and Time** | **Size** |
| 1 | **File Type:**  MoH Signature (or delegated authority) of Proposal \*  **File Desc:** | **File name:**  [C:\Users\penelope\Pictures\2011-05-11 Proposal Minister sign\Proposal Minister sign 001.jpg](/PDExtranet_Dev/ObjectEditor/OpenFileItem?editedObjectId=45136505&propertyName=FormAttachments%5b0%5d.FileData)  **Date/Time:**  11.05.2011 18:43:11  **Size:**  824 KB | |  |  |
| 2 | **File Type:**  MoF Signature (or delegated authority) of Proposal \*  **File Desc:** | **File name:**  **Date/Time:**  **Size:** | |  |  |
| 3 | **File Type:**  Signatures of ICC or HSCC or equivalent in Proposal \*  **File Desc:** | **File name:**  [C:\Users\penelope\Pictures\2011-05-11 Proposl ICC sign\Proposl ICC sign 001.jpg](/PDExtranet_Dev/ObjectEditor/OpenFileItem?editedObjectId=45136505&propertyName=FormAttachments%5b2%5d.FileData)  **Date/Time:**  11.05.2011 18:45:28  **Size:**  714 KB | |  |  |
| 4 | **File Type:**  comprehensive Multi Year Plan - cMYP \*  **File Desc:** | **File name:**  [C:\Users\penelope\Desktop\Zambia cMYP 2011-2015 Revised 9May11.doc](/PDExtranet_Dev/ObjectEditor/OpenFileItem?editedObjectId=45136505&propertyName=FormAttachments%5b3%5d.FileData)  **Date/Time:**  10.05.2011 19:46:14  **Size:**  1 MB | |  |  |
| 5 | **File Type:**  cMYP Costing tool for financial analysis \*  **File Desc:** | **File name:**  [C:\Users\user\Documents\cMYP 2011 Arusha Final Draft\_27.04.11\Working\_Documents\FINAL\ZAM\_cMYP\_Costing\_Tool\_Vs%202.5\_En(1)FINAL10.05.11.xls](/PDExtranet_Dev/ObjectEditor/OpenFileItem?editedObjectId=45136505&propertyName=FormAttachments%5b4%5d.FileData)  **Date/Time:**  11.05.2011 13:36:44  **Size:**  3 MB | |  |  |
| 6 | **File Type:**  other  **File Desc:** | **File name:**  [C:\Users\penelope\Desktop\VAccine\_Management\_Assessment\_2009.doc](/PDExtranet_Dev/ObjectEditor/OpenFileItem?editedObjectId=45136505&propertyName=FormAttachments%5b5%5d.FileData)  **Date/Time:**  10.05.2011 19:58:02  **Size:**  1 MB | |  |  |
| 7 | **File Type:**  Plan for NVS introduction (if not part of cMYP)  **File Desc:** | **File name:**  [C:\Users\user\Documents\cMYP 2011 Arusha Final Draft\_27.04.11\Working\_Documents\FINAL\Pneumo introduction plan Zambia 2012 Final.doc](/PDExtranet_Dev/ObjectEditor/OpenFileItem?editedObjectId=45136505&propertyName=FormAttachments%5b6%5d.FileData)  **Date/Time:**  11.05.2011 13:31:43  **Size:**  365 KB | |  |  |
| 8 | **File Type:**  Plan for NVS introduction (if not part of cMYP)  **File Desc:** | **File name:**  [C:\Users\user\Documents\cMYP 2011 Arusha Final Draft\_27.04.11\Working\_Documents\FINAL\Rota introduction plan Zambia 2013 Final.doc](/PDExtranet_Dev/ObjectEditor/OpenFileItem?editedObjectId=45136505&propertyName=FormAttachments%5b7%5d.FileData)  **Date/Time:**  11.05.2011 13:39:17  **Size:**  387 KB | |  |  |
| 9 | **File Type:**  Plan for NVS introduction (if not part of cMYP)  **File Desc:** | **File name:**  [C:\Users\user\Documents\cMYP 2011 Arusha Final Draft\_27.04.11\Working\_Documents\FINAL\Measles Second Dose Introduction plan Zambia - 2011 final.doc](/PDExtranet_Dev/ObjectEditor/OpenFileItem?editedObjectId=45136505&propertyName=FormAttachments%5b8%5d.FileData)  **Date/Time:**  11.05.2011 13:40:23  **Size:**  205 KB | |  |  |
| 10 | **File Type:**  Minutes of last three ICC/HSCC meetings \*  **File Desc:** | **File name:**  [C:\Users\penelope\Desktop\MINUTES OF ICC IN 2010 and 2011.doc](/PDExtranet_Dev/ObjectEditor/OpenFileItem?editedObjectId=45136505&propertyName=FormAttachments%5b9%5d.FileData)  **Date/Time:**  10.05.2011 20:40:59  **Size:**  398 KB | |  |  |
| 11 | **File Type:**  other  **File Desc:** | **File name:**  [C:\Users\user\Documents\cMYP 2011 Arusha Final Draft\_27.04.11\Working\_Documents\FINAL\Zambia Vaccine Cold Chain Scale-Up Strategy-Final.docx](/PDExtranet_Dev/ObjectEditor/OpenFileItem?editedObjectId=45136505&propertyName=FormAttachments%5b10%5d.FileData)  **Date/Time:**  11.05.2011 13:43:00  **Size:**  215 KB | |  |  |
| 12 | **File Type:**  Signatures of ICC or HSCC or equivalent in Proposal \*  **File Desc:** | **File name:**  [C:\Users\penelope\Pictures\2011-05-11 Proposal ICC sign2\Proposal ICC sign2 001.jpg](/PDExtranet_Dev/ObjectEditor/OpenFileItem?editedObjectId=45136505&propertyName=FormAttachments%5b11%5d.FileData)  **Date/Time:**  11.05.2011 18:48:48  **Size:**  738 KB | |  |  |
| 13 | **File Type:**  Minutes of ICC/HSCC meeting endorsing Proposal \*  **File Desc:** | **File name:**  [C:\Users\penelope\Desktop\ICC\_EXTRAORDINARY MEETING\_11\_MAY 2011 Finall.doc](/PDExtranet_Dev/ObjectEditor/OpenFileItem?editedObjectId=45136505&propertyName=FormAttachments%5b12%5d.FileData)  **Date/Time:**  11.05.2011 18:53:27  **Size:**  103 KB | |  |  |

Banking Form

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| In accordance with the decision on financial support made by the GAVI Alliance, 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

|  |  |  |
| --- | --- | --- |
| **Name:** |  | **Seal** |
|  |
| **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 (Institution name) at this banking institution.

|  |  |  |
| --- | --- | --- |
| The account is to be signed jointly by at least 0 (number of signatories) of the following authorized signatories: | | |
| **1** |  | |
| **Name:** |  |
| **Title:** |  |
| **2** |  | |
| **Name:** |  |
| **Title:** |  |
| **3** |  | |
| **Name:** |  |
| **Title:** |  |
| **4** |  | |
| **Name:** |  |
| **Title:** |  |

|  |
| --- |
| **Name of bank’s authorizing official** |
|  |
| **Signature:** |
|  |
| **Date:** |
|  |
| **Seal:** |
|  |