

*GAVI Alliance*

**Application Form for Country Proposals**

***Response to conditions***

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

Submitted by

The Government of

***Zambia***

**Deadline for submission: 15 November 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. |

# **Response to conditions**

**Vaccine: Rotavirus 2-dose schedule**

**Condition 1:**

Zambia is requested to provide evidence that the cold chain at all levels (National, Province, District, and Health facilities) will be in place at the time of introduction of rotavirus vaccine. Training of health workers and vaccinators should be completed, as recommended. The country must demonstrate that the US $6.1 million has been secured to expand the cold chain storage capacity at district and health care facility level.

**Addressing the 2011 GAVI conditionality for rotavirus vaccine introduction**

In May 2011 the country addressed the conditionality for pneumococcal and measles second dose and resubmitted for introduction of the rotavirus vaccine in the 2011 proposal to GAVI Alliance for support for new and under-used vaccines. In July 2011 the country was informed and recommended for approval for introduction of pneumoccoal and measles second does in 2012 and approval with conditions was recommended for rotavirus vaccine introduction.

The country has been requested to provide evidence that the cold chain (at all levels) will be in place at the time of introducing the rotavirus vaccine in 2013. Through strong partnerships and advocacy the country has mobilised and secured funds for the cold chain expansion for the National, Provincial and District levels, are in negotiations to secure funding for the remaining gaps down to the Health Facility level.

The gap identified in the proposal submitted to GAVI in May 2011 ($6.1m) was based on projections from the cold chain scale-up strategy from estimates and the WHO forecasting tool, with information available at the time. In July 2011, the country conducted a national Effective Vaccine Management (EVM) training and assessment, which has assisted the country to better identify the current state of the EPI and its ability to bring in new vaccines. The EVM report identified strengths and weaknesses, clarified current gaps in the cold chain, and recommended an improvement plan to address these issues, including cold chain at all levels.

With this updated information, the country has a clearer picture of actual needs for introducing new vaccines. Based on these findings, the current cold chain gap is estimated at $2,172,500. That said intense mobilisation efforts are underway for the remaining gap, with positive feedback received on the proposals submitted. Confirmation of this funding will be solidified over the next few months. In addition, a Child Health sub-Technical Working Group has been formed to address the EVM findings and improvement plan, which includes the scale-up and implementation of cold chain at all levels. This working group, compliments the current EPI TWG, and reports into the Child Health Technical Working group.

The following tables depict the cold chain situation at each level as it stands today based on the EVM improvement plan. We have described the equipment required at each level of the cold chain and the amount, as well as the source of funding and timing of delivery to meet these needs and GAVI’s conditionality.

**National Vaccine Storage**

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| --- | --- | --- |
| **Description** | **Budget $** | **Remarks** |
| 6 cold rooms (+2°C to + 8°C, gross volume 40m3 each). This cost includes procurement and installation of equipment, shipping, custom, as well as training, computers and spare parts. Costs also include continuous temperature monitoring devices for all cold rooms. | $613,500 | Funding in the amount of $635,000 has been secured from MOH through CIDA and CIDRZ/ARK. MOH funds are ZMK1,864,874,307 (~USD$388,500; exchange rate: 1USD=ZMK4800); CIDRZ/ARK funds are USD$225,000. All 6 cold rooms have been procured and will be delivered by the 30 November 2011. |
| Rehabilitation of vaccine storage facility | ~$210,000 | Funding in the amount of $210,000 from CIDRA funds through MOH has been secured. The contractor is on site. Rehabilitation is scheduled to be finished early in 2012. |
| Procurement of 80 cold boxes (20 litre) | $40,000 | Funding in the amount of $40,000 from CIDA through UNICEF is secured. Cold boxes have been procured and have started arriving in the country. All boxes will be delivered by 30 November 2011. |
| Procurement of 2 trucks for distribution of vaccines and supplies | **$120,000 gap** | On-going efforts to mobilise funds for these vehicles are taking place. In the meantime Provincial trucks will be used to supplement the existing 2 National trucks. |
| Procurement and installation of a stand–by generator | $45,000 | Funding in the amount of $45,000 from CIDRZ through ARK has been secured and installation is complete. |
| TOTAL | $1,028,500 |  |
| **FUNDING GAP** | **$120,000** | $1,028,500-$908,500 |

**Provincial Vaccine Storage**

|  |  |  |
| --- | --- | --- |
| **Description** | **Budget $** | **Remarks** |
| 1 cold room (+2°C to + 8°C, gross volume 30m3) for Copperbelt, including building rehabilitation, procurement, installation, and generator set-up. | $155,000 | Procurement and installation already completed as of October 2010. |
| 4 cold rooms (+2°C to + 8°C, gross volume 30m3 each) for Eastern, Southern, Central and Northern Province, including building rehabilitation, procurement, installation, and generator set-up. | $110,000 | Funding in the amount of $110,000 is secured from CIDA through UNICEF. Cold rooms have been procured and will be delivered by 30 November 2011. |
| Cold Room Installation | $100,000 | Funding in the amount of $100,000 is secured through UNICEF. |
| Refrigerators for positive storage capacity at Lusaka, Laupula and Northwest Provinces | $25,000 | Funding in the amount of $25,000 is secured from CIDA through UNICEF. Refrigerators have been procured and will be delivered on 15 November 2011. |
| Positive storage capacity for Western Province | **$30,000 gap** | On-going efforts to mobilise funds for US $30,000 are taking place. Funding in the amount of $30,000 could be secured from UNICEF reprogrammed funds. |
| 2 negative storage freezers at Laupula and Copperbelt Provinces | **$5,000 gap** | On-going efforts to mobilise funds for US $5,000 are taking place. Funding in the amount of $30,000 could be secured from UNICEF reprogrammed funds. |
| 12 freezers for all provinces; Copperbelt, Eastern and Western require 2 units and the rest 1 unit. | **$30,000 gap** | On-going efforts to mobilise funds for US $30,000 are taking place. Funding in the amount of $30,000 could be secured from UNICEF reprogrammed funds. |
| Generators for Eastern, Central, Northern, Southern, North West, and Western. | $45,000 secured/  **$30,000 gap** | Funding in the amount of $45,000 for generators for Eastern, Central, Northern and Southern Province are secured from CIDA through UNICEF, and will be delivered by 30 November 2011.  On-going efforts to mobilise funds for North West and Western Provinces generators ($30,000) are taking place; funding in the amount of $30,000 could be secured from UNICEF reprogrammed funds. |
| Computers and office furniture (for the four sites where cold rooms will be installed) with printer to be used for EVM including computer-based stock control system. | $15,000 | Funding in the amount of $15,000 from UNICEF is secured. Procurement has taken place and they will be delivered by 30 November 2011. |
| TOTAL | $545,000 |  |
| **FUNDING GAP** | **$95,000** | $545,000-$450,000 |

**District Vaccine Storage**

|  |  |  |
| --- | --- | --- |
| **Description** | **Budget $** | **Remarks** |
| 60 refrigerators(MK 304) for positive storage capacity | $62,000 | Funding in the amount of $62,000 secured from CIDA through UNICEF. Refrigerators have been procured and are to be delivered by 30 November 2011. |
| 3 freezers for ice-pack freezing | **$7,500 gap** | On-going efforts to mobilise funds for US $7,500 are taking place. Funding in the amount of $7,500 could be secured from UNICEF reprogrammed funds. |
| 170 cold boxes ( 25 litre) | $86,000 | Funding in the amount of $45,000 from CIDA through UNICEF is secured. Procurement has taken place and the cold boxes have been received in Zambia. |
| TOTAL | $155,500 |  |
| **FUNDING GAP** | **$7,500** | $155,500-$148,000 |

**Health Facility Vaccine Storage**

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| --- | --- | --- |
| **Description** | **Budget $** | **Remarks** |
| 250 refrigerators with 24 litre net capacity depending energy source availability average cost considered $2,500 | **625,000 gap** | Funding in the amount of $625,000 is required; efforts to mobilise funds are underway. |
| 5 Refrigerators (EK60) | $14,000 | Funding in the amount of $14,000 secured from CIDA through UNICEF. Refrigerators have been procured and are to be delivered by 30 November 2011. |
| 7 Refrigerators (RCW 50 EG) | $17,000 | Funding in the amount of $17,000 secured from CIDA through UNICEF. Refrigerators have been procured and are to be delivered by 30 November 2011 |
| 5 refrigerators (solar) | $30,000 | Funding in the amount of $30,000 secured from CIDA through UNICEF. Refrigerators have been procured and are to be delivered by 30 November 2011 |
| Replacement of 400 units of cold chain equipment for being obsolete | **1,000,000 gap** | Funding in the amount of $1,000,000 is required; efforts to mobilise funds are underway. |
| 250 Cold Boxes (5 litre and less) | **50,000 gap** | Funding in the amount of $50,000 is required; efforts to mobilise funds are underway. |
| 250 Cold Boxes ( 5-10 litre) | **75,000 gap** | Funding in the amount of $75,000 is required; efforts to mobilise funds are underway. |
| 250 Cold Boxes (10-20 litre) | **200,000 gap** | Funding in the amount of $200,000 is required; efforts to mobilise funds are underway. |
| TOTAL | $2,011,000 |  |
| **FUNDING GAP** | **$1,950,000** | $2,011,000-61,000 |

**Needs and Mobilisation**

The current status (based on mobilisation and the EVM report) highlighted in the above tables depict the cold chain equipment needs at each level of the cold chain; Table 5 depicts a summary of this gap. The Interagency Coordinating Committee (ICC), the Ministry of Health and partners have been working to mobilise resources for cold chain expansion and strengthen EPI and will continue to do so. Proposals have been submitted to key interested partners, which have received high priority and we are awaiting final confirmation of acceptance. We are highly confident in our ability to mobilise the remaining gap.

**Table 5 Summary of Cold Chain Expansion Gaps**

|  |  |  |  |
| --- | --- | --- | --- |
| Level | **Description** | **Total Budget (USD)** | **GAP** |
| National | Expansion of infrastructure capacity | $1,028,500 | **$120,0000** |
| Provincial | Expansion of infrastructure capacity | $545,000 | **$95,000** |
| District | Expansion of infrastructure capacity | $155,500 | **$7,500** |
| Health Facilities | Expansion of infrastructure capacity | $2,011,000 | **$1,950,000** |
| Total | | **$3,740,000** | **$2,172,500** |

**Zambia’s Commitment to Co-Finance New Vaccines**

Zambia reaffirms its commitment to improved child health through the introducton of new life saving vaccines within the standard EPI. To this end, it is within the national health plan to expand EPI and the government is committed to meet its contribution to support all new vaccines in EPI including pneumococcal and rotavirus vaccines when approved by GAVI.

**Coordinated Approach**

The MOH, in partnership with key stakeholders, and through coordination of the ICC and technical working groups have mobilised and secured funds for cold chain at the National, Provincial and District Levels. In addition, the national EVM training and assessment, and other EPI strengthening activities have been conducted. The MOH with partners are in efforts to tackle under five mortality through integrated approaches to combat pneumonia and diarrhoea, such as strengthening IMCI and encouraging new ways to the approach of prevention and treatment of these diseases.

Key stakeholders, such as ZAC, JICA, CIDRZ and CIDA, to mention a few, have expressed their interest in strengtheing Zambia’s EPI through support of the remaining cold chain gap and other EPI activities to prepare the country for the introduction of not only rotavirus vaccine in 2013, but also pneumococcal and measles second dose, and other potential vaccines that may be introduced in the coming years.

Through the conduction of the Effective Vaccine Management training, assessment and report writing, the country gained a clearer picture of cold chain and EPI gaps for introduction of new vaccines. Through recent mobilisation efforts, updated cold chain inventories and EVM results, the remaining gap (at all levels) is estimated at $2.17 million USD. The majority of this need is at the health facility level, as funds have been secured and procurement or installation for national, provincial and district levels are in works. The MOH is a long time partner with the Japan International Cooperation Agency (JICA) who have expressed interest in funding the cold chain (as they have done in the past in 2004 and 2007). JICA is currently in the advanced stages of approving this support for the majority of the remaining cold chain gap and the country is waiting final confirmation of this ($1.865m). There are also other key stakeholders who have expressed their interest in strengtheing Zambia’s EPI through cold chain investments and other EPI activities and the MOH will work with partners .

Zambia is committed to improve child health through the introducton of new life saving vaccines with the standard EPI and is within the national health plan to expand EPI and the government is committed to meet its contricution to support all new vaccines in EPI including pneumococcal and rotaviurs vaccines when approved by GAVI. The government already has a specific budget line for the procurement of vaccines and this allocation has been increased to cater for the pneumococcal vaccine in 2012. The Ministry of Health initiated co-financing for pentavalent vaccine on a voluntary basis and has sustained payments with no default through this specific budget line. The EVM was conducted in July 2011 and highlighted findings, conclusions and recommendations are as follows:

**Strengths:**

* ***Generally:***There are examples of excellent practice at all levels in the supply chain and against most major EVM indicators. These strengths can be built upon.
* ***Cold chain capacity:***If the on-going efforts implemented as planned, cold chain capacity at national level will be adequate and seven out of nine PVS will have adequate capacity to meet current and future programme need.

**Weaknesses:**

* ***Temperature monitoring****:* Temperature monitoring practices appear to be not so good in ensuring the vaccine storage conditions. Continuous temperature recorders are missing at NVS.

Actions: As part of the cold chain equipment being procured, automated/computerized temperature monitoring devices are also being installed.

* ***Cold chain capacity:*** There are considerable amount of gap that is expected to be addressed through on-going efforts and additional efforts to expand the capacity.

Actions: Intense mobilisation efforts have been conducted and the remaining cold chain gap has been identified and a proposal developed and submitted to JICA. Approval for this proposal has been granted by the local JICA office and was highly ranked. The proposal has been recommended by the Ministry of Finance and National Planning, and is currently in the final approval processes in JICA’s headquarters in Tokyo. There are other partners who have showed interest in strengthening health facility cold chain as well.

* ***Stock management****:* During the review period, stock-outs occurred at some points in time and at some locations in the supply chain. There is a need for improved computerized stock management system at NVS and PVS in order to ensure that stock related information are easily processed and communicated to avoid stock-outs and overstocking.

Actions: As part of the EVM training, the cold chain technicians were also taught stock management using the WHO stock management tool. As part of the resource mobilisation efforts, funding for additional trainings is being sought.

* ***Distribution management:*** The use of annual plan and monitoring and the systematic use of standardized vaccine issue and arrival vouchers need to be rolled out to all stores

Actions: As part of the current resource mobilisation efforts, funding for additional trainings is being sought.

* ***Vaccine management:***Training and supportive supervision are found to be weak.

Actions: As part of the current resource mobilisation efforts, funding for additional trainings is being sought.

The ICC endorses this proposal and the response to GAVI to meeting their conditions for rotavirus vaccination.

# **Signatures of the Government**

Enter the family name in capital letters.

| **Minister of Health (or delegated authority)** | | **Minister of Finance (or delegated authority)** | |
| --- | --- | --- | --- |
| **Name** | Honorable Dr Joseph Kasonde | **Name** | Honorable Alexander Chikwanda |
| **Date** |  | **Date** |  |
| **Signature** |  | **Signature** |  |

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

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