



*GAVI Alliance*

# Application Form for Country Proposals

*For Support to:*

*Routine New Vaccines Support*

Submitted by

The Government of

***Eritrea***

Date of submission: **8/31/2012**

**Deadline for submission: 8/31/2012**

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

Start Year

2012

End Year

2016

Form revised in 2012

(To be used with Guidelines of September 2012)

**Please submit the Proposal using the online platform**

<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.

**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 languages of the arbitration will be English or French.

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

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

## 1. Application Specification

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

Type of Support	Vaccine	Start Year	End Year	Preferred second presentation[1]
Routine New Vaccines Support	Rotavirus, 2 -dose schedule	2013	2016	

[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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### 3. Executive Summary

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

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

Eritrea places a high priority on childhood immunization and is committed in achieving the Millennium Development Goals (MDG4). Coverage for fully immunized infants for 2010 was 95% and 99% based on the Eritrea Population Health Survey (EDHS) and WHO & UNICEF joint estimate coverage respectively. Referring to EPHS 2010, infant and child mortality rate were decreased to 63/1000 and 42/1000 live births respectively from that of 1995, 72/1000 and 136/1000 live births.

Rota virus is a major cause of acute diarrhea in children in Eritrea and is a leading cause of diarrhea deaths in early childhood. While specific burden studies have only started to be conducted in Eritrea, the burden of Rota Virus Gastroenteritis (RVG) in the Eritrean context should not differ from countries and regions at similar socio economic stage. In order to estimate RVG burden, a hospital based sentinel surveillance site has been established at National Pediatrics' Referral Hospital and it is at its initial stage started in 2011. From the data collected and total specimen taken, 42% were lab confirmed positive for Rota virus, and diarrhea diseases is among one of the top 5 child morbidity and mortality diseases in our country (HMIS 2011). The Introduction of rotavirus vaccine into routine immunization program is considered to be the intervention to prevent the disease from spreading. The introduction of Rota Vaccine in 2013 will help the country to sustain on being on track on the achievement of the MDG4 and achieving the child survival goals which is part of its multi-year plan (2012-2016) for immunization system strengthening.

This proposal describes the specific technical and operational plans for the introduction of Rota Vaccine into routine immunization program in 2013. Eritrea is being supported for new vaccine introduction since 2002. The Government of Eritrea (GoE) has received support from the GAVI Alliance on introduction of Hepatitis B (2002), Pentavalent (2008), Measles second dose (2012) vaccines and grant fund for Immunization Service Support (ISS). Funding is now being requested to support the introduction of one dose vial for two immunization schedule of Rota Vaccine in 2013, and the support is going to continue for five years. Referring to the population growth projection of 2013, birth is estimated to be 114, 395 and surviving infants that are eligible for Rota vaccine will be 109, 819 with 81% routine immunization coverage for the second dose. The total amount of budget for the first introduction is expected to be \$ 757,500 including the grant budget for the introduction of the rotavirus vaccine. From the total vaccine cost \$ 49,500 will be co-financed by the GoE.

WHO recommends that Rota virus vaccine now be included in routine infant immunization program for all children, as appropriate to national capacities and priorities. Five years ago GoE successfully introduced Pentavalent vaccine (DTP-HepB-Hib) and has seen good acceptance by parents and health care workers. The GoE has assessed its capacities on human resources, logistics and priorities and has decided that now is the appropriate time to provide this vaccine to Eritrean infants.

Key issues for preparation for the introduction of rotavirus vaccine have been discussed and addressed both within the MOH & our Partners. These issues include the implications for financing, Cold Chain (CC) storage capacity status, the need for additional capacity building for the immunization providers, and community awareness raising and social mobilization activities. Based on the Vaccine Management Assessment (VMA) outcome recommendation provided during 2009, an improvement plan has developed and most of the recommended activities are addressed by the program (attached). Cold chain assessment and inventory were carried out in 2011 using an external consultant. None functional and absolute cold chain equipments are identified available and required storage capacity of vaccines for five year's calculated and addressed. Net storage capacity for vaccines Required and Available including the introduction of new vaccine of measles second dose (MSD) and Rota vaccine for the next five years at National and Zoba level is already secured (CC Assessment 2011 attached). Replacement plan for the absolute, none standard and installation of new cold rooms and refrigerators had developed jointly with JICA. Procurement and delivery of CC equipment is expected to start in the 4th quarter of 2012 as planned and agreed. <?xml:namespace prefix = o ns = "urn:schemas-microsoft-com:office:office" />

The recently submitted financial sustainability plan (FSP) addresses the need to increase the contribution of government financing for immunization. The clarifications to the FSP requested by GAVI as well as the implications of the introduction of rotavirus vaccine, has been addressed in the attached cMYP (2012-2016). The program delivers immunization for children against eight vaccine preventable diseases. The GoE has also introduced checking children vaccination status (child health card) as one of the school entry requirement policy since 1995.

### **Decision making on Introduction**

Consultation and discussion were made by Ministry of Health, with Pediatricians at National Referral Hospital and cooperating partners to develop a proposal for introduction of Rota vaccine in 2012. The introduction of the Rota vaccine was presented to the Inter-Agency Coordinating Committee (ICC) in 2011 for discussions. The decision to introduce vaccine was informed by consensus with stakeholders on burden of disease using WHO estimates and actual finding in the referral hospitals in which the ICC members agreed. A proposal was submitted in 2011 to the Global Alliance for Vaccines and Immunizations support for the introduction of the vaccine in 2011, but GAVI IRC decided resubmission of the proposal in order to fill up the gaps relation to inadequate cold chain capacity, completing the cMYP, clarity in the introduction plan.....in which at this time, all this issues are addressed by the program and attachments are made to the main document in section 10.

## 4. Signatures

### 4.1. Signatures of the Government and National Coordinating Bodies

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

The Government of Eritrea 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, 1 dose(s) per vial, ORAL routine introduction

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

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

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

The payment for the first year of co-financed support will be around **January 2013** for Rotavirus, 1 dose(s) per vial, ORAL.

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 and Minister of Finance or their delegated authority.

Minister of Health (or delegated authority)		Minister of Finance (or delegated authority)	
Name	H.E. AMINA NURHUSSIEN	Name	H.E. BERHANE HABTEMARIAM
Date		Date	
Signature		Signature	

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

Full name	Position	Telephone	Email
Mr. EMBAYE ASFAHA	WHO Surveillance Officer	+291-1-114167	AsfahaE@er.afro.who.int
Mr. TEDROS YEHDEGO MESGHNA	EPI Manager	+291-1-201693	tedrosye@yahoo.com

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

We the members of the ICC, HSCC, or equivalent committee [1] met on the **24/08/2012** 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 4.

Name/Title*	Agency/Organisation*	Signature
Dr. Berhana HAILE Director Family and Community Health	Ministry of Health	
Dr. Zighe ICUNOAMLAK Child Health Specialist	UNICEF	



Mr. Berhane GEBRETESAE Director General	Ministry of Health	
Mr. Tsuneo TSURUSAKI Resident Officer of JICA	JICA Office Asmara	
Mr. Tumezghi SENGAL	Mesterhot PLC Consultancy	
Mr. Embaye ASFAHA WHO Surveillance officer	WHO	
Mr. Tedros YEHDEGO EPI Manager	Ministry of Health	
Ms. Abeba HABTOM	Ministry of Education	
Ms. Yehdega GEBREMESKEL	National Union of Eritrean Women (NUEW)	

### 4.1.3. The Inter-Agency Coordinating Committee for Immunisation

Agencies and partners (including development partners and NGOs) supporting immunisation services are coordinated 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 routine support and/or campaign support. Please provide information about the ICC, HSCC, or equivalent committee in your country in the table below.

#### Profile of the ICC, HSCC, or equivalent committee

<b>Name of the committee</b>	Inter-Agency Coordinating Committee for Immunisation (ICC)
<b>Year of constitution of the current committee</b>	2002
<b>Organisational structure (e.g., sub-committee, stand-alone)</b>	EPI Technical Committee, Social Mobilization Committee, Epidemic Preparedness & Response Committee
<b>Frequency of meetings</b>	Quarterly (ICC) & Monthly (EPI Technical Committee)

#### Composition

Function	Title / Organisation	Name
<b>Chair</b>	Director General of Health Services, MoH	Mr. Berhane GEBRETESAE
<b>Secretary</b>	EPI Manager, MoH	Mr. Tedros YEHDEGO
<b>Members</b>	Director of Family & Community Health, MoH	Dr. Berhana HAILE
	WHO Surveillance Officer	Mr. Embaye ASFAHA
	UNICEF Child Health Specialist	DR Zighe ICUNOAMLAK
	Head of Basic Education Dept., MoE	Ms. Abeba HABTOM
	Mesterhot PLC Consultancy	Mr. Tumezghi SENGAL
	National Union of Eritrean Women (NUEW)	Ms. Yehdega GEBREMESKEL
	JICA Office Asmara Representative	Mr. Tsuneo TSURUSAKI Resident Officer of JICA

#### Major functions and responsibilities of the ICC/HSCC:

Oversees implementation of the planned activities of EPI. Introduces country coordination mechanisms in the program. Provides constructive ideas and comments during the regular quarterly meeting. Endorses the introduction of new vaccines and SIAs. Endorses the GAVI Annual Progress Report (APR) and Joint Format Report (JRF). Advocate for resources mobilization for routine activities and campaigns.

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

1.	Arrange and conduct regular collaborative and coordinating meetings of the ICC members and have annual plan on EPI to be implemented. Involvement of ICC members in monitoring and evaluation of the planned activities.
2.	Restructuring of the existing ICC members to include multisectoral stakeholders and strengthen the committee members with more of technical experts with higher influential organizational status.
3.	Build capacity of ICC members by participating on National and International EPI related meetings and conferences.

### 4.2. 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 4.

## 4.2.1. The NITAG Group for Immunisation

### Profile of the NITAG

Name of the NITAG	National Immunisation Technical Advisory Group (NITAG) has not been yet established.
Year of constitution of the current NITAG	
Organisational structure (e.g., sub-committee, stand-alone)	
Frequency of meetings	

### Composition

Function	Title / Organisation	Name
Chair		
Secretary		
Members		

Major functions and responsibilities of the NITAG

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

1.	
2.	
3.	

## 5. Immunisation Programme Data

### 5.1. Basic facts

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 : 6
- Please attach relevant Vaccine Introduction Plans as DOCUMENT NUMBER : 7
- 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.

For the year **2012** (most recent; specify dates of data provided)

	Figure	Year	Source
Total population	3,715,618	2012	HMIS
Infant mortality rate (per 1000)	42	2010	EPHS
Surviving infants[1]	106,452	2012	IHMIS
GNI per capita (US\$)	676	2007	IMF
Total Health Expenditure (THE) as a percentage of GDP	13 %	2007	IMF
General government expenditure on health (GGHE) as % of General government expenditure	15 %	2007	IMF

[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

Budget call is prepared and disseminated by the Ministry of Finance by sending circulars to the respective Ministries. Ministries prepare their respective budgets according to the annual work plan based on the ministry Multi Sector Strategic Plan and submitted to the Ministry of Finance. Budget hearing date is arranged by the MoF and Ministries defend their budget proposal with the ministry of Finance officials. The MoF submits the recommended budget to the Cabinet of Ministers for approval and after it is endorsed by the parliament, it is disseminated to the Ministries and Regional/Zobas for implementation.

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

Health Sector Strategic Development Plan (HSSDP) 2012-2016

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

Yes, a new cMYP 2012-2016 is aligned with the document.

Please indicate the national planning budgeting cycle for health

The Annual Budgeting cycle, begins with the budget call from Ministry of Finance (MoF) on the 1st of May every year by forming Budget committees. Ministry of Health (MoH) disseminates the call to regions and referral hospitals requesting them to develop the fiscal budget proposal. On the month of July of the same year the finalized proposal is submitted to the Budget committee which is chaired by the Director General of Policy, Planning and HRD department of MoH. By mid-August it in turn is submitted to the Department of Budget and Fiscal Policy of MoF. The defending procedures are finalized on October and after a month a budget hearing is conducted with the MoF. On January of the preceding year the MoF submits the recommended budget to the cabinet of ministers for approval and after it is endorsed by the parliament it is disseminated to MoH and Regional/Zobas for implementation. Finally, on December of that year audit exercise of the expenditure is conducted.

Please indicate the national planning cycle for immunisation

In the 4th Quarter of the year, Annual work plan of the EPI program is prepared jointly with our partners and Zoba Management Team(ZMT) members. By setting priorities for the next coming year, work plan is developed. work plan of the EPI program is always developed based on Comprehensive Multi Year Plan (cMYP) of the immunization program . Budget is allocated on the agreed activities and indicators are developed for monitoring each activity . The allocated budget is officially requested from the Ministry of Finance and our partners under the signature of the Minister of Health. Budget is transferred to the zoba and sub zoba to be implemented on the agreed activities and budget break down. After the implementation of the activities, activity report is prepared and submitted to the program and in turn to our partners and at the same time liquidation of the transferred budget is made.

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

There is no sex disaggregated data for immunisation in routine reporting system.

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

There is no gender related immunization problems in our situation. Vaccination is provided equally to children Female or Male, over all the community is well oriented and very cooperative in promoting vaccination activities irrespective of gender.

Please describe any recent evidence of socio-economic and/or gender barriers to the immunisation programme through studies or surveys?

There is no gender barrier to immunization program which is evidenced on EPI coverage survey 2009. However the eight sub zobas which showed less than 50% coverage have population segment with nomadic life style and populations living in less accessible areas to immunization program, this is based on the regular feedback of routine immunization coverage.

Country should provide an outline of all **preparatory** activities for vaccine(s) introduction

1. Capacity building of health workers on immunization and introduction of new vaccine using standard guideline of WHO IIP Modules.
2. Vaccine Management Assessment (VMA) conducted. Improvement plan developed and follow up of implementation of the recommended activities..<?xml:namespace prefix = o ns = "urn:schemas-microsoft-com:office:office" />
3. The **Required and Available Net storage capacity** for vaccines for five years is calculated. Replacement plan of the absolute and none standard cold chain equipments identified and five years replacement plan developed and follow up of the implementation is on going.
4. Conduct advocacy and social mobilization prior three months on the introduction of Rota vaccine following the developed EPI communication strategy.
5. Updating Child Health Cards, guideline and EPI reporting tools to include Rota vaccine.



## 5.2. Baseline and Annual Targets (NVS Routine Support)

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

Number	Base Year	Baseline and Targets	Baseline and Targets	Baseline and Targets	Baseline and Targets
	2011	2013	2014	2015	2016
Total births	108,459	114,395	117,483	120,655	123,913
Total infants' deaths	4,881	4,576	4,699	4,826	5,580
Total surviving infants	103,578	109,819	112,784	115,829	118,333
Total pregnant women	108,459	114,395	117,483	120,655	123,913
Target population vaccinated with BCG	85,460	90,665	93,385	96,187	99,073
BCG coverage	79 %	79 %	79 %	80 %	80 %
Target population vaccinated with OPV3					
OPV3 coverage	81 %	81 %	81 %	81 %	82 %
Number of infants vaccinated (to be vaccinated) with DTP1	88,096	93,462	96,266	99,154	102,129
Number of infants vaccinated (to be vaccinated) with DTP3	83,537	88,625	91,284	94,023	96,843
DTP3 coverage	81 %	81 %	81 %	81 %	82 %
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 Rotavirus	0	93,462	96,266	99,154	102,129
Target population vaccinated with 2nd dose of Rotavirus	0	88,625	91,284	94,023	96,843
Rotavirus coverage	0 %	81 %	81 %	81 %	82 %
<b>First Presentation: Rotavirus, 2-dose schedule</b>					
Wastage[1] rate in base-year and planned thereafter (%)	5	5	5	5	5
Wastage[1] factor in base-year and planned thereafter (%)	1.05	1.05	1.05	1.05	1.05
Maximum wastage rate value for Rotavirus, 2-dose schedule	5 %	5 %	5 %	5 %	5 %
Target population vaccinated with 1st dose of Measles	75,178	79,756	82,147	84,615	87,153
Measles coverage	73 %	73 %	73 %	73 %	74 %
Number of infants vaccinated (to be vaccinated) with 1st dose of TT+	31,442	33,357	34,358	35,420	36,483
TT+ coverage	29 %	29 %	29 %	29 %	29 %
Annual DTP Drop out rate [ ( DTP1 – DTP3 ) / DTP1 ] x 100	5 %	5 %	5 %	5 %	5 %

[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):  $[(A - B) / A] \times 100$ . Whereby: A = the number of doses distributed for use according to the supply records with correction for stock balance at the end of the supply period; B = the number of vaccinations with the same vaccine in the same period.





### 5.3. Baseline and Annual Targets for Preventive Campaign(s)

No NVS Prevention Campaign Support this year

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

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

Disease	Title of the assessment	Date	Results
Rota Virus	National Referral Hospital Rota Virus Surveillance Sentinel Site	2011	Out of all specimen collected in 2011, 42% of the specimen were positive of rota virus
PBM	National Referral Hospital Paeditric Bacterial Meningitis Surveillance Sentinel Site	2005	Out of all specimen collected in 2011, None of the specimen were positive

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

Lessons Learned	Action Points
As more vaccines get introduced into the routine national programme, more waste is going to be developed from used vaccine vials and injection safety materials.	Procurement of additional number of incinerator vaccine vials and injection safety materials is on the process for 2012..
None existance of EPI communication strategy made poor social mobilization and unorganized activities on EPI.	EPI Communication strategy is Developed. Production of IEC/BCC materials is underway
Poor regular supportive supervision at national level .	Advocate for fuel and transport support from local government and higher government officials.
nomadic population and hard to reach areas are not reached through routine immunization activities	Implementation of RED Strategy through Integrated and Sustained outreach Services (SOS) four times per year.
Health workers to make best use of village health workers in immunization activities.	Community health workers are involved during campaign and outreach services on planning and field activities vaccine defaulters along with health workers.
Poor vaccine stock and wastage control due to manual management.	Computerized Stock Management Tool (SMT) introduced and functional at National level and other three zobas.

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

1. Rota Vaccine fully liquid formulation of one dose/vial for two immunization schedule for a child. Planned to be introduced in 2013.

## 6.2. Requested vaccine (Rotavirus, 2 -dose schedule)

As reported in the cMYP, the country plans to introduce Rotavirus, using [Rotavirus, 2 -dose schedule](#).

### 6.2.1. Co-financing information

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

Country group	Low			
	Year 1	Year 2	Year 3	Year 4
	2013	2014	2015	2016
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

### 6.2.2. Specifications of vaccinations with new vaccine

	Data from		Year 1	Year 2	Year 3	Year 4
			2013	2014	2015	2016
Number of children to be vaccinated with the first dose	Table 5.2	#	93,462	96,266	99,154	102,129
Number of children to be vaccinated with the second dose	Table 5.2	#	88,625	91,284	94,023	96,843
Immunisation coverage with the second dose	Table 5.2	#	80.70 %	80.94 %	81.17 %	81.84 %
Country co-financing per dose [1]	Table 6.2.1	\$	0.2	0.2	0.2	0.2

[1] Total price per-dose includes vaccine cost, plus insurance, etc.

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

		2013	2014	2015	2016
Number of vaccine doses	#	18,400	15,300	15,700	16,200
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
<b>Total value to be co-financed by country</b>	<b>\$</b>	<b>49,500</b>	<b>41,000</b>	<b>42,000</b>	<b>43,500</b>

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

		2013	2014	2015	2016
Number of vaccine doses	#	227,100	188,500	194,100	199,900
Number of AD syringes	#	0	0	0	0
Number of re-constitution syringes	#	0	0	0	0
Number of safety boxes	#	2,825	2,500	2,550	2,625
<b>Total value to be co-financed by country</b>	<b>\$</b>	<b>608,000</b>	<b>504,500</b>	<b>520,000</b>	<b>535,500</b>

## 6.2.5. New and Under-Used Vaccine Introduction Grant

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

### Calculation of lump-sum for the Rotavirus, 2 -dose schedule

Year of New Vaccine Introduction	Births (from Table 5.2)	Share per Birth in US\$	Total in US\$
2013	114,395	0.80	100,000

[1] The Grant will be based on a maximum award of \$0.80 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\$

Cost Category	Full needs for new vaccine introduction in US\$	Funded with GAVI introduction grant in US\$
Training	45,000	34,000
Social Mobilization, IEC and advocacy	20,000	15,000
Cold Chain Equipment & Maintenance	20,000	5,000
Vehicles and Transportation	50,000	20,000
Programme Management	2,000	2,000
Surveillance and Monitoring	20,000	5,000
Human Resources	10,000	10,000
Waste Management	20,000	9,000
Technical Assistance	0	0
Other (please specify)		
<b>Total</b>	<b>187,000</b>	<b>100,000</b>

Please describe others sources of funding if available to cover your full needs

The amount of budget allocated for the introduction of the new vaccine by GAVI is limited. The Government makes subsidy (\$ 0.75) per liter in the cost of fuel for the operational activities in child immunization especially in hard to reach areas.

## 7. NVS Preventive Campains

No NVS Prevention Campaign Support this year

## 8. Procurement and Management

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

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

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

Grant fund for operational activities and for Immunization Service Support (ISS) is directly transferred to the MoH account in the National Bank of Eritrea and managed according the financial regulation of the Ministry of Finance in the country. Vaccines and injection supplies is procured from WHO accredited Serum Institutes through UNICEF and delivered to National Vaccine Store according the agreed schedule in two shipments per year.

b) If an alternative mechanism for procurement and delivery of vaccine 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.

The procurement and delivery process of vaccines and injection safety materials is to be through UNICEF

c) Please describe the introduction of the vaccines (refer to cMYP)

The introduction of Rota vaccine in to routine immunization program in July 2013 which is included in cMYP 2012-2016. Rota Vaccine will be provided at national level for children, <1yr old within two immunization schedule.

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

The fund should be transferred to the Ministry of Health Account with following address.

Name of Institution: **Ministry of Health** Eritrea

(Account Holder)

**Address** Denden Street No. 174; P.O. Box 212

City – Country: **Asmara – Eritrea**

Telephone No: **+291-1-120297** Fax no: **+291-1-122899 +291-1-125835**

**For credit to:**

Bank account's title: **Ministry of Health Project**

Bank account No: **1203010107**

Bank's Name: **National Bank of Eritrea**

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

The Government of State of Eritrea is fully committed to the improvement of the health status of its people as evident from the trends in the major health indication in the country. Based on this the GoE adheres to the agreement of partners to co-finance the government shares for the introduction of new and underused vaccines. The government of Eritrea is fully aware that it will take over full responsibility of financial sustainability of the new vaccine according the agreements made through UNICEF on annual bases.

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

Monthly base an electronic copy is sent to the National HMIS through which all the programs receive their data collection from store. Data is analyzed and monitored starting from service delivery level through immunization monitoring chart and regular data quality self assessment (DQS) and immunization register. Data is utilized and used for information and decision making in which the coverage trends will also monitored. Monthly data report of the EPI program is also sent to AFRO for their feed back and information

## 8.2. Procurement and Management for NVS Preventive Campaign(s)

No NVS Prevention Campaign Support this year

## 8.3. Vaccine Management (EVSM/EVM/VMA)

Did the country have Effective Vaccine Management Assessment (VMA) in the past? **Yes**

When was the last VMA conducted? **September 2009**

Did the country have Effective Vaccine Store Management (EVSM) in the past? **Yes**

When was the last EVSM conducted? **October 2009**

Did the country have Effective Vaccine Management (EVM) in the past? **Yes**

When was the EVM conducted? **September 2009**

If your country conducted either EVSM or VMA in the past two years, please attach relevant reports. (Document N°13)

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 Effective Vaccine Store Management (EVSM) and Vaccine Management Assessment(VMA) tools have been replaced by an integrated Effective Vaccine Management (EVM) tool. The information on EVM tool can be found at [http://www.who.int/immunization\\_delivery/systems\\_policy/logistics/en/index6.html](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.

As a result of VMA in 2009, improvement plan and implementation schedules were developed. The improvement plan is attached in section 12, attachment #.

- A new 30m3 walk in cold room and standby generator have been procured and installed at national level
- 4 automatic transfer switches have been procured and installed in four zobas for the four cold rooms
- Computerized stock management of vaccines and other EPI logistics at national level implemented
- Quarterly delivery of vaccines from national to zoba level is arranged as schedule of delivery of vaccines
- Cold chain assessment and inventory was carried out in 256 health facilities and a total of 385 equipment and replacement plan developed
- Holding temperature of the cold chain equipment even at the weekend is in place at all levels

Computerized stock management of vaccines in three Zobal implemented.

Does the country plan to conduct an Effective Vaccine Management (EVM) Assessment in the future? **Yes**

When is the next Effective Vaccine Management (EVM) Assessment planned? **October 2012**

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












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

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

- The fund supported through GAVI for introduction of new vaccines is relatively low. Eritrea is a country with limited partners supporting EPI services on the introduction of new vaccine. Finally meaning it is left only for GAVI and the Government.
- Transport cost in Eritrea is extremely high sometimes takes almost 2/3 of total operational cost on implementing the regular EPI activities. As there are no other partners contributing for new vaccine introduction we kindly request reconsideration on increasing the operational cost in order to cover better the hard to reach and nomadic population .

## 10. Attachments

### 10.1. List of documents attached to this proposal

Document Number	Document	Section	Mandatory	File
1	MoH Signature (or delegated authority) of Proposal			MoH Minister Signature.doc File desc: Date/time: 8/27/2012 6:44:36 AM Size: 422912
2	MoF Signature (or delegated authority) of Proposal			MoF Minister Signature.doc File desc: Date/time: 8/30/2012 1:51:52 AM Size: 445440
3	Signatures of ICC or HSCC or equivalent in Proposal			ICC Signatures.doc File desc: Date/time: 8/27/2012 7:06:12 AM Size: 468480
4	Minutes of ICC/HSCC meeting endorsing Proposal			ICC meeting endorsing RV Proposal.doc File desc: Date/time: 8/29/2012 12:26:15 AM Size: 50176
5	comprehensive Multi Year Plan - cMYP			ERI cMYP 2012 2016 March 2012 Final.pdf File desc: Date/time: 8/16/2012 9:56:11 AM Size: 464621
5	Minutes of NITAG meeting endorsing proposal	4.2		National Immunization Technical Advisory Group.doc File desc: Date/time: 8/30/2012 2:04:21 AM Size: 19968
6	cMYP Costing tool for financial analysis			cMYP Costing Tool Vs. 2.5 Final.xls File desc: Date/time: 8/16/2012 10:18:01 AM Size: 3509760
7	Plan for NVS introduction (if not part of cMYP)	5.1		Intoduction Plan of Rota Vaccine 2.doc File desc: Date/time: 8/31/2012 12:33:33 AM Size: 223744
8	Improvement plan based on EVM			VMA Improvement Plan & Status of Implementation.doc File desc: Date/time: 8/22/2012 11:11:10 AM Size: 91648

## 11. Annexes

### Annex 1 - NVS Routine Support

#### Annex 1.1 - NVS Routine Support (Rotavirus, 2 -dose schedule)

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

		2013	2014	2015	2016
Number of vaccine doses	#	18,400	15,300	15,700	16,200
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	\$	49,500	41,000	42,000	43,500

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

		2013	2014	2015	2016
Number of vaccine doses	#	227,100	188,500	194,100	199,900
Number of AD syringes	#	0	0	0	0
Number of re-constitution syringes	#	0	0	0	0
Number of safety boxes	#	2,825	2,500	2,550	2,625
Total value to be co-financed by country	\$	608,000	504,500	520,000	535,500

**Table Annex 1.1 C: Summary table for vaccine Rotavirus, 2 -dose schedule**

ID	Data from		2013	2014	2015	2016	
	<b>Number of surviving infants</b>	Table 5.2	#	109,819	112,784	115,829	118,333
	<b>Number of children to be vaccinated with the first dose</b>	Table 5.2	#	93,462	96,266	99,154	102,129
	<b>Number of children to be vaccinated with the second dose</b>	Table 5.2	#	88,625	91,284	94,023	96,843
	<b>Immunisation coverage with the second dose</b>	Table 5.2	%	81.00 %	81.00 %	81.00 %	82.00 %
	<b>Number of doses per child</b>	Parameter	#	2	2	2	2
	<b>Estimated vaccine wastage factor</b>	Table 5.2	#	1.05	1.05	1.05	1.05
	<b>Number of doses per vial</b>	Parameter	#	1	1	1	1
	<b>AD syringes required</b>	Parameter	#	No	No	No	No
	<b>Reconstitution syringes required</b>	Parameter	#	No	No	No	No
	<b>Safety boxes required</b>	Parameter	#	No	No	No	No
g	<b>Vaccine price per dose</b>	Table Annexes 4A	\$	2.55	2.55	2.55	2.55
cc	<b>Country co-financing per dose</b>	Table 6.4.1	\$	0.2	0.2	0.2	0.2
ca	<b>AD syringe price per unit</b>	Table Annexes 4A	\$	0.0465	0.0465	0.0465	0.0465
cr	<b>Reconstitution syringe price per unit</b>	Table Annexes 4A	\$	0	0	0	0
cs	<b>Safety box price per unit</b>	Table Annexes 4A	\$	0.0058	0.0058	0.0058	0.0058
fv	<b>Freight cost as % of vaccines value</b>	Table Annexes 4B	%	5.00 %	5.00 %	5.00 %	5.00 %
fd	<b>Freight cost as % of devices value</b>	Parameter	%	10.00 %	10.00 %	10.00 %	10.00 %

**Table Annex 1.1 D: Estimated numbers for Rotavirus, 2 -dose schedule, associated injection safety material and related co-financing budget (page 1)**

		Formula	2013		
			Total	Government	GAVI
<b>A</b>	<b>Country co-finance</b>		7.47 %		
<b>B</b>	<b>Number of children to be vaccinated with the first dose</b>	Table 1	93,462	6,982	86,480
<b>C</b>	<b>Number of doses per child</b>	Vaccine parameter (schedule)	2.00		
<b>D</b>	<b>Number of doses needed</b>	B x C	186,924	13,963	172,961
<b>E</b>	<b>Estimated vaccine wastage factor</b>	Wastage factor table	1.05		
<b>F</b>	<b>Number of doses needed including wastage</b>	D x E	196,271	14,661	181,610
<b>G</b>	<b>Vaccines buffer stock</b>	(F – F of previous year) * 0.25	49,068	3,666	45,402
<b>I</b>	<b>Total vaccine doses needed</b>	F + G	245,339	18,327	227,012
<b>J</b>	<b>Number of doses per vial</b>	Vaccine parameter	1.00		
<b>K</b>	<b>Number of AD syringes (+ 10% wastage) needed</b>	(D + G) x 1.11	0	0	0
<b>L</b>	<b>Reconstitution syringes (+ 10% wastage) needed</b>	I / J * 1.11	0	0	0
<b>M</b>	<b>Total of safety boxes (+ 10% of extra need) needed</b>	(K + L) /100 * 1.11	2,816	0	2,816
<b>N</b>	<b>Cost of vaccines needed</b>	I x g	625,615	46,732	578,883
<b>O</b>	<b>Cost of AD syringes needed</b>	K x ca	0	0	0
<b>P</b>	<b>Cost of reconstitution syringes needed</b>	L x cr	0	0	0
<b>Q</b>	<b>Cost of safety boxes needed</b>	M x cs	0.00	0	0
<b>R</b>	<b>Freight cost for vaccines needed</b>	N x fv	31,281	2,337	28,944
<b>S</b>	<b>Freight cost for devices needed</b>	(O+P+Q) x fd	0	0	0
<b>T</b>	<b>Total fund needed</b>	(N+O+P+Q+R+S)	656,896	49,068	607,828
<b>U</b>	<b>Total country co-financing</b>	I 3 cc	49,068		
<b>V</b>	<b>Country co-financing % of GAVI supported proportion</b>	U / T	7.47 %		

**Table Annex 1.1 D: Estimated numbers for Rotavirus, 2 -dose schedule, associated injection safety material and related co-financing budget (page 2)**

		Formula	2014		
			Total	Government	GAVI
<b>A</b>	<b>Country co-finance</b>		7.47 %		
<b>B</b>	<b>Number of children to be vaccinated with the first dose</b>	Table 1	96,266	7,191	89,075
<b>C</b>	<b>Number of doses per child</b>	Vaccine parameter (schedule)	2.00		
<b>D</b>	<b>Number of doses needed</b>	B x C	192,532	14,382	178,150
<b>E</b>	<b>Estimated vaccine wastage factor</b>	Wastage factor table	1.05		
<b>F</b>	<b>Number of doses needed including wastage</b>	D x E	202,159	15,101	187,058
<b>G</b>	<b>Vaccines buffer stock</b>	(F – F of previous year) * 0.25	1,472	110	1,362
<b>I</b>	<b>Total vaccine doses needed</b>	F + G	203,631	15,211	188,420
<b>J</b>	<b>Number of doses per vial</b>	Vaccine parameter	1.00		
<b>K</b>	<b>Number of AD syringes (+ 10% wastage) needed</b>	(D + G) x 1.11	0	0	0
<b>L</b>	<b>Reconstitution syringes (+ 10% wastage) needed</b>	I / J * 1.11	0	0	0
<b>M</b>	<b>Total of safety boxes (+ 10% of extra need) needed</b>	(K + L) / 100 * 1.11	2,494	0	2,494
<b>N</b>	<b>Cost of vaccines needed</b>	I x g	519,260	38,788	480,472
<b>O</b>	<b>Cost of AD syringes needed</b>	K x ca	0	0	0
<b>P</b>	<b>Cost of reconstitution syringes needed</b>	L x cr	0	0	0
<b>Q</b>	<b>Cost of safety boxes needed</b>	M x cs	0.00	0	0
<b>R</b>	<b>Freight cost for vaccines needed</b>	N x fv	25,963	1,940	24,023
<b>S</b>	<b>Freight cost for devices needed</b>	(O+P+Q) x fd	0	0	0
<b>T</b>	<b>Total fund needed</b>	(N+O+P+Q+R+S)	545,223	40,727	504,496
<b>U</b>	<b>Total country co-financing</b>	I 3 cc	40,727		
<b>V</b>	<b>Country co-financing % of GAVI supported proportion</b>	U / T	7.47 %		

**Table Annex 1.1 D: Estimated numbers for Rotavirus, 2 -dose schedule, associated injection safety material and related co-financing budget (page 3)**

		Formula	2015		
			Total	Government	GAVI
<b>A</b>	<b>Country co-finance</b>		7.47 %		
<b>B</b>	<b>Number of children to be vaccinated with the first dose</b>	Table 1	99,154	7,407	91,747
<b>C</b>	<b>Number of doses per child</b>	Vaccine parameter (schedule)	2.00		
<b>D</b>	<b>Number of doses needed</b>	B x C	198,308	14,814	183,494
<b>E</b>	<b>Estimated vaccine wastage factor</b>	Wastage factor table	1.05		
<b>F</b>	<b>Number of doses needed including wastage</b>	D x E	208,224	15,554	192,670
<b>G</b>	<b>Vaccines buffer stock</b>	(F – F of previous year) * 0.25	1,517	114	1,403
<b>I</b>	<b>Total vaccine doses needed</b>	F + G	209,741	15,668	194,073
<b>J</b>	<b>Number of doses per vial</b>	Vaccine parameter	1.00		
<b>K</b>	<b>Number of AD syringes (+ 10% wastage) needed</b>	(D + G) x 1.11	0	0	0
<b>L</b>	<b>Reconstitution syringes (+ 10% wastage) needed</b>	I / J * 1.11	0	0	0
<b>M</b>	<b>Total of safety boxes (+ 10% of extra need) needed</b>	(K + L) / 100 * 1.11	2,528	0	2,528
<b>N</b>	<b>Cost of vaccines needed</b>	I x g	534,840	39,952	494,888
<b>O</b>	<b>Cost of AD syringes needed</b>	K x ca	0	0	0
<b>P</b>	<b>Cost of reconstitution syringes needed</b>	L x cr	0	0	0
<b>Q</b>	<b>Cost of safety boxes needed</b>	M x cs	0.00	0	0
<b>R</b>	<b>Freight cost for vaccines needed</b>	N x fv	26,742	1,998	24,744
<b>S</b>	<b>Freight cost for devices needed</b>	(O+P+Q) x fd	0	0	0
<b>T</b>	<b>Total fund needed</b>	(N+O+P+Q+R+S)	561,582	41,949	519,633
<b>U</b>	<b>Total country co-financing</b>	I 3 cc	41,949		
<b>V</b>	<b>Country co-financing % of GAVI supported proportion</b>	U / T	7.47 %		

**Table Annex 1.1 D: Estimated numbers for Rotavirus, 2 -dose schedule, associated injection safety material and related co-financing budget (page 4)**

		Formula	2016		
			Total	Government	GAVI
<b>A</b>	<b>Country co-finance</b>		7.47 %		
<b>B</b>	<b>Number of children to be vaccinated with the first dose</b>	Table 1	102,129	7,629	94,500
<b>C</b>	<b>Number of doses per child</b>	Vaccine parameter (schedule)	2.00		
<b>D</b>	<b>Number of doses needed</b>	B x C	204,258	15,258	189,000
<b>E</b>	<b>Estimated vaccine wastage factor</b>	Wastage factor table	1.05		
<b>F</b>	<b>Number of doses needed including wastage</b>	D x E	214,471	16,021	198,450
<b>G</b>	<b>Vaccines buffer stock</b>	(F – F of previous year) * 0.25	1,562	117	1,445
<b>I</b>	<b>Total vaccine doses needed</b>	F + G	216,033	16,138	199,895
<b>J</b>	<b>Number of doses per vial</b>	Vaccine parameter	1.00		
<b>K</b>	<b>Number of AD syringes (+ 10% wastage) needed</b>	(D + G) x 1.11	0	0	0
<b>L</b>	<b>Reconstitution syringes (+ 10% wastage) needed</b>	I / J * 1.11	0	0	0
<b>M</b>	<b>Total of safety boxes (+ 10% of extra need) needed</b>	(K + L) / 100 * 1.11	2,606	0	2,606
<b>N</b>	<b>Cost of vaccines needed</b>	I x g	550,885	41,150	509,735
<b>O</b>	<b>Cost of AD syringes needed</b>	K x ca	0	0	0
<b>P</b>	<b>Cost of reconstitution syringes needed</b>	L x cr	0	0	0
<b>Q</b>	<b>Cost of safety boxes needed</b>	M x cs	0.00	0	0
<b>R</b>	<b>Freight cost for vaccines needed</b>	N x fv	27,545	2,058	25,487
<b>S</b>	<b>Freight cost for devices needed</b>	(O+P+Q) x fd	0	0	0
<b>T</b>	<b>Total fund needed</b>	(N+O+P+Q+R+S)	578,430	43,207	535,223
<b>U</b>	<b>Total country co-financing</b>	I 3 cc	43,207		
<b>V</b>	<b>Country co-financing % of GAVI supported proportion</b>	U / T	7.47 %		



## **Annex 2 - NVS Routine – Preferred Second Presentation**

No NVS Routine – Preferred Second Presentation requested this year

### **Annex 3 - NVS Preventive campaign(s)**

No NVS Prevention Campaign Support this year

## Annex 4

### Table Annex 4A: Commodities Cost

Vaccine	Presentation	2013	2014	2015	2016
DTP-HepB, 10 dose(s) per vial, LIQUID	10				
DTP-HepB-Hib, 1 dose(s) per vial, LIQUID	1	2.017	1.986	1.933	1.927
DTP-HepB-Hib, 10 dose(s) per vial, LIQUID	10	2.017	1.986	1.933	1.927
DTP-HepB-Hib, 2 dose(s) per vial, LYOPHILISED	2	2.017	1.986	1.933	1.927
HPV bivalent, 2 dose(s) per vial, LIQUID	2	5.000	5.000	5.000	5.000
HPV quadrivalent, 1 dose(s) per vial, LIQUID	1	5.000	5.000	5.000	5.000
Measles, 10 dose(s) per vial, LYOPHILISED	10	0.242	0.242	0.242	0.242
Meningococcal, 10 dose(s) per vial, LIQUID	10	0.520	0.520	0.520	0.520
MR, 10 dose(s) per vial, LYOPHILISED	10	0.494	0.494	0.494	0.494
Pneumococcal (PCV10), 2 dose(s) per vial, LIQUID	2	3.500	3.500	3.500	3.500
Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID	1	3.500	3.500	3.500	3.500
Rotavirus, 2-dose schedule	1	2.550	2.550	2.550	2.550
Rotavirus, 3-dose schedule	1	3.500	3.500	3.500	3.500
Yellow Fever, 10 dose(s) per vial, LYOPHILISED	10	0.900	0.900	0.900	0.900
Yellow Fever, 5 dose(s) per vial, LYOPHILISED	5	0.900	0.900	0.900	0.900

**Note for HPV and MR:** These prices are indicative only as GAVI has not procured HPV and MR vaccines for GAVI countries yet. Prices will be finalised through tender processes in Q3. GAVI will only fund HPV vaccines if an acceptable price reduction is secured from the current price indicated. The MR price is based on the current price to UNICEF

Supply	Form	2013	2014	2015	2016
AD-SYRINGE	SYRINGE	0.047	0.047	0.047	0.047
RECONSTIT-SYRINGE-PENTAVAL	SYRINGE	0.047	0.047	0.047	0.047
RECONSTIT-SYRINGE-YF	SYRINGE	0.004	0.004	0.004	0.004
SAFETY-BOX	SAFETYBOX	0.006	0.006	0.006	0.006

**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 Annex 4B: Freight cost as percentage of value

Vaccine Antigen	Vaccine Type	No Threshold	500,000\$	
			<=	>
DTP-HepB	HEPBHIB	2.00 %		
DTP-HepB-Hib	HEPBHIB		23.80 %	6.00 %
HPV bivalent	HPV	3.50 %		
HPV quadrivalent	HPV	3.50 %		
Measles	MEASLES	14.00 %		
Meningococcal	MENINACONJUGATE	10.20 %		

MR	MR	13.20 %		
Pneumococcal (PCV10)	PNEUMO	3.00 %		
Pneumococcal (PCV13)	PNEUMO	6.00 %		
Rotavirus	ROTA	5.00 %		
Yellow Fever	YF	7.80 %		

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

Vaccine	2013	2014	2015	2016
Rotavirus, 1 dose(s) per vial, ORAL	0.2	0.2	0.2	0.2

**Table Annex 4D: 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

Vaccine	Vaccine wastage rate	VaccineWastageFactor
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**Table Annex 4E: Vaccine maximum packed volumes**

Vaccine product	Designation	Vaccine formulation	Admin route	No. Of doses in the schedule	Presentation (doses/vial, pre-filled)	Packed volume vaccine (cm <sup>3</sup> /dose)	Packed volume diluents (cm <sup>3</sup> /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	
Diphtheria-Tetanus	DT	liquid	IM	3	10	3	
Tetanus-Diphtheria	Td	liquid	IM	2	10	3	
Tetanus Toxoid	TT	liquid	IM	2	10	3	
Tetanus Toxoid	TT	liquid	IM	2	20	2.5	
Tetanus Toxoid UniJect	TT	liquid	IM	2	Uniject	12	
Measles	Measles	lyophilized	SC	1	1	26.1	20
Measles	Measles	lyophilized	SC	1	2	13.1	13.1
Measles	Measles	lyophilized	SC	1	5	5.2	7
Measles	Measles	lyophilized	SC	1	10	3.5	4
Measles-Rubella freeze dried	MR	lyophilized	SC	1	1	26.1	26.1
Measles-Rubella freeze dried	MR	lyophilized	SC	1	2	13.1	13.1
Measles-Rubella freeze dried	MR	lyophilized	SC	1	5	5.2	7

Measles-Rubella freeze dried	MR	lyophilized	SC	1	10	2.5	4
Measles-Mumps-Rubella freeze dried	MMR	lyophilized	SC	1	1	26.1	26.1
Measles-Mumps-Rubella freeze dried	MMR	lyophilized	SC	1	2	13.1	13.1
Measles-Mumps-Rubella freeze dried	MMR	lyophilized	SC	1	5	5.2	7
Measles-Mumps-Rubella freeze dried	MMR	lyophilized	SC	1	10	3	4
Polio	OPV	liquid	Oral	4	10	2	
Polio	OPV	liquid	Oral	4	20	1	
Yellow fever	YF	lyophilized	SC	1	5	6.5	7
Yellow fever	YF	lyophilized	SC	1	10	2.5	3
Yellow fever	YF	lyophilized	SC	1	20	1.5	2
Yellow fever	YF	lyophilized	SC	1	50	0.7	1
DTP-HepB combined	DTP-HepB	liquid	IM	3	1	9.7	
DTP-HepB combined	DTP-HepB	liquid	IM	3	2	6	
DTP-HepB combined	DTP-HepB	liquid	IM	3	10	3	
Hepatitis B	HepB	liquid	IM	3	1	18	
Hepatitis B	HepB	liquid	IM	3	2	13	
Hepatitis B	HepB	liquid	IM	3	6	4.5	
Hepatitis B	HepB	liquid	IM	3	10	4	
Hepatitis B UniJect	HepB	liquid	IM	3	Uniject	12	
Hib liquid	Hib_liq	liquid	IM	3	1	15	
Hib liquid	Hib_liq	liquid	IM	3	10	2.5	
Hib freeze-dried	Hib_lyo	lyophilized	IM	3	1	13	35
Hib freeze-dried	Hib_lyo	lyophilized	IM	3	2	6	
Hib freeze-dried	Hib_lyo	lyophilized	IM	3	10	2.5	3
DTP liquid + Hib freeze-dried	DTP+Hib	liquid+lyop.	IM	3	1	45	
DTP-Hib combined liquid	DTP+Hib	liquid+lyop.	IM	3	10	12	
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	
DTP-HepB-Hib liquid	DTP-HepB+Hib	liquid+lyop.	IM	3	2	11	
DTP-HepB-Hib liquid	DTP-HepB-Hib	liquid	IM	3	10	4.4	
DTP-HepB-Hib liquid	DTP-HepB-Hib	liquid	IM	3	2	13.1	

DTP-HepB-Hib liquid	DTP-HepB-Hib	liquid	IM	3	1	19.2	
Meningitis A/C	MV_A/C	lyophilized	SC	1	10	2.5	4
Meningitis A/C	MV_A/C	lyophilized	SC	1	50	1.5	3
Meningococcal A/C/W/	MV_A/C/W	lyophilized	SC	1	50	1.5	3
Meningococcal A/C/W/Y	MV_A/C/W/Y	lyophilized	SC	1	10	2.5	4
Meningitis W135	MV_W135	lyophilized	SC	1	10	2.5	4
Meningitis A conjugate	Men_A	lyophilized	SC	2	10	2.6	4
Japanese Encephalitis	JE_lyo	lyophilized	SC	3	10	15	
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	
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	
Pneumo. conjugate vaccine 10-valent	PCV-10	liquid	IM	3	1	11.5	
Pneumo. conjugate vaccine 10-valent	PCV-10	liquid	IM	3	2	4.8	
Pneumo. conjugate vaccine 13-valent	PCV-13	liquid	IM	3	1	12	
Polio 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 Papillomavirus vaccine	HPV	liquid	IM	3	1	15	
Human Papillomavirus 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	

## 12. Banking Form

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

<b>Name of Institution (Account Holder):</b>	Ministry of Health		
<b>Address:</b>	Denden Street # 174		
<b>City Country:</b>	Asmara Eritrea		
<b>Telephone no.:</b>	+291-1-1202097	<b>Fax no.:</b>	+291-1-122899
<b>Currency of the bank account:</b>		USD	
<b>For credit to:</b>			
<b>Bank account's title:</b>	Ministry of health Project		
<b>Bank account no.:</b>	1203010107		
<b>Bank's name:</b>	National Bank of Eritrea		

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

By who is the account audited? General Audit Office

Signature of Government's authorizing official

<b>Name:</b>	H.E. AMINA NURHUSSIEN	<b>Seal</b>
<b>Title:</b>	Minister of Health	
<b>Signature:</b>		
<b>Date:</b>	28/08/2012	

FINANCIAL INSTITUTION		CORRESPONDENT BANK (In the United States)	
<b>Bank Name:</b>	Bank of Eritrea		
<b>Branch Name:</b>	Asmara Main Office		
<b>Address:</b>	P.O.Box 849		
<b>City Country:</b>	Asmara Eritrea		
<b>Swift Code:</b>			
<b>Sort Code:</b>			
<b>ABA No.:</b>			
<b>Telephone No.:</b>	+291-1-123033		
<b>FAX No.:</b>	+291-1-122098		

I certify that the account No 1203010107 is held by at this banking institution

The account is to be signed jointly by at least 3 (number of signatories) of the following authorized signatories:

1	<b>Name:</b>	H.E. AMINA NURHUSSIEN
	<b>Title:</b>	Minister of Health
2	<b>Name:</b>	Mr. YEMANE TEADEL
	<b>Title:</b>	Director of Finance and Administration MoH
3	<b>Name:</b>	Mr. ASEMEHEY YEBIO
	<b>Title:</b>	Head of Finance MoH

<b>Name of bank's authorizing official</b>	
Mr. KIBREAB WOLDEMARIAM	
<b>Signature:</b>	
<b>Date:</b>	8/29/2012 12:00:00 AM
<b>Seal:</b>	