GAVI Alliance

Application Form for Country Proposals

For Support to:

Preventive Campaign Support

Submitted by

The Government of

Cambodia

Date of submission: **8/30/2012**

Deadline for submission: 8/31/2012

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

Start Year	2008	End Year	2015

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 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]
Preventive Campaign Support	MR, 10 dose(s) per vial, LYOPHILISED	2013	2013	

[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.

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

2. Table of Contents

3. Executive Summary

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

- For each specific request, NVS routine support or NVS campaign :
  - The duration of support
  - The total amount of funds
  - 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

The Ministry of Health in Cambodia is requesting assistance from GAVI for the introduction of measles/rubella (MR) vaccine into its routine EPI schedule through specific support to undertake a wide age range supplementary immunization activity with MR vaccine targeting all children from 9 months to 14 years, 11 months of age.

The Ministry of Health considers that MR vaccine is the next logical choice for new vaccine introduction, and the National Immunization Program is fully prepared to undertake this successfully. As Cambodia moves towards measles elimination in 2012, and following successful measles SIAs in 2011 and introduction of the 2nd routine measles doses at 18 months (with GAVI support), the impact and importance of rubella virus is becoming proportionally greater. At present, rubella vaccine is not provided through the routine national immunization programme in Cambodia, though it is known to be provided in the private sector. The WHO estimates the annual incidence of congenital rubella syndrome (CRS) in Cambodia of 0.1 to 4 cases per 1000 live births (higher number during epidemic outbreaks). This translates to an average of 85 to 260 cases of CRS every year, which could be totally prevented through immunization with rubella vaccine.

The Ministry of Health is planning MR vaccine introduction in 2013, and aim to implement successfully the proposed MR SIA between the months of October to December. As part of this assistance the Ministry of Health is requesting GAVI to support for the procurement of MR vaccine and supplies sufficient to vaccinate an estimated target population of 4,953,203 children. Total estimated cost of the MR vaccine SIA is 8,280,707 USD, with a request to GAVI for support for 4,318,144 USD to cover vaccine and injection safety supplies and 3,219,582 USD to support SIA operational costs. The remaining balance of 742,980 USD for operational costs is expected to be provided by United Nations Foundation or in country health partners. Following the completion of the MR SIA, the Ministry of Health is committed to absorb the full cost of MR vaccine procurement for the routine EPI program, and has allocated an additional 400,000 USD per year to the regular vaccine procurement budget to accommodate this, through additional costs at present are only estimated to be in the order of 200,000 USD.

The National Immunization Program has fully integrated rubella into the existing measles surveillance system which is performing well, and with the assistance of the WHO established a congenital rubella syndrome(CRS) surveillance sentinel sites in 2011, with both systems confirm the burden of rubella for the population. In 2011, 1096 laboratory confirmed cases of rubella were detected through routine surveillance, and 23 infants were identified at the sentinel surveillance site with clinical symptoms consistent with CRS.

Cambodia current immunization performance is sound, both for routine EPI with greater than 90% measles vaccine coverage rates for infants under 1 year reported in recent years, and the undertaking of two successful measles SIA in 2011, which place the country in a strong position to implement the proposed MR SIA in late 2013. In addition, the NIP has recently launched a new high risk community strategy that is designed to improve immunization coverage in the most marginalized communities, as a result of the 2012

International EPI review and 2011 measles SIA, and will ensure greater equity in the delivery of MR vaccine to population throughout Cambodia. Furthermore, cold chain systems and practices have recently been reviewed as part of the Effective Vaccine Management Initiative (EVM) process and were found to have appropriate capacities to safely absorb MR vaccine.

There is strong partners support for the introduction of MR vaccine into Cambodia. Initial options papers and guidance has been provided by the World Health Organization and the plan for MR inclusion in to the routine EPI schedule from 2013 has been fully supported by all health partners at the Technical Working Group A wide age range rubella SIA is inline with current efforts for the country and region to achieve measles elimination and is also in coordination with Cambodia's neighbours in Laos and Vietnam that have already introduced or plan to introduce MR vaccine. Finally, the proposed MR SIA will be the largest public health undertaking in Cambodia's history and will provide an ideal forum to bring together high level political support throughout the country and from the health partner and civil society sectors in support of immunization, and place Cambodia in a sound position for the further introduction of new vaccines in coming years.

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 Cambodia 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

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

The Government of Cambodia 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) 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) 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 **October 2013** for MR, 10 dose(s) per vial, LYOPHILISED.

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. MAM BUN HENG	**Name**	H.E. KEAT CHHON
Date		**Date**	
Signature		**Signature**	

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

Full name	Position	Telephone	Email
Dr. Chheng Morn	Deputy NIP Manager	855 12 913 794	chheng_morn@yahoo.com
Prof. Sann Chan Soeung	Deputy Director General of Health	855 12 933 344	workmoh@gmail.com
Richard Duncan	WHO EPI Cambodia	855 12 905 504	duncanr@wpro.who.int

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 **12/07/2012** 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 .

Name/Title*	Agency/Organisation*	Signature
Full list of organizations provided in Document 3 - Attachments	Full list of organizations provided in Document 3 - Attachments	

4.1.3. 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 routine support and/or campaign support. Please provide information about the ICC, HSCC, or equivalent committee in your country in the table below.

Profile of the ICC, HSCC, or equivalent committee

Name of the committee	Technical Working Group for Health
Year of constitution of the current committee	2004
Organisational structure (e.g., sub-committee, stand-alone)	Stand Alone
Frequency of meetings	Monthly

Composition

Function	Title / Organisation	Name
Chair	Minister of Health	H.E. Dr.Mam Bunheng
Secretary	Secretary of State for Health/MoH	H.E. Prof. Eng Huot
Members	WHO Representative	Pieter Van Maaren
	Representative of AusAID	Marion Kelly
	Representaive of UNICEF	Viorica Berdaga
	Representative of UNFPA	Sok Sokun
	Representative of WB	Pema Lhazom
	Representative of JICA	Yumiko Sasaka
	Representative of MEDICAM	Sao Sovanratnak
	Representative of GTZ	Delio Fernandes
	Representative of EPOS	Marcel Regras
	Director of General for Administration and Finance MOH	Koeut Meach
	Chief of NGO Relation Office/MoH	Them Viravann
	Representative of USAID	Robin Martz

Major functions and responsibilities of the ICC/HSCC:

The principal function of the Technical Working Group for Health (TWG-H) is to ensure effective coordination of the response of the Royal Government of Cambodia, led by the Ministry of Health, in responding to the health challenges of the country. The TWG -H provides a mechanism for the MoH and its development partners jointly to: identify priorities; harmonize activities; discuss and address technical issues; improve utilization and mobilization of resources; and facilitate monitoring of progress.

TWG-H actions will support Cambodia to attain the Millennium Development Goals through implementation of the RGC's Rectangular Strategy, the current national development plans and the National Strategic Development Plan (NSDP)2006–2010. While the TWG-H helps to identify realistic policy goals it is the RGC/MOH that will take policy decisions. The TWG-H will facilitate the implementation, monitoring and evaluation and, where necessary, modification of the Health Strategic Plan linking with other sectors and their TWGs as needed. The TWG-H will help all stakeholders to fully participate in dialogue on issues within its scope.

The major functions of the TWG-H are to:

• Provide a forum for sharing information between key stakeholders

• Advise the MoH on strategic and policy issues

• Provide a monitoring overview of sector performance

• Facilitate intra-sector and inter-sector harmonization and alignment

The objectives of the TWG-H are:

1. To review progress, discuss issues and give over sight to the design, implementation and management of the Health Strategic Plan;

2. To promote the improvement of Sector-Wide Management (SWiM)and progress toward a Sector-Wide Approach (SWAp) in the health sector;

3. To promote efficient use of limited resources in the health sector through prioritization, coordination and joint activities and through use of the Medium-Term Expenditure Framework;

4. To review progress and advise on the development and implementation of sub sector plans;

5. To discuss and advise on plans for the Joint Annual Performance Review and the mid-term review and final evaluation of the Health Strategic Plan and to ensure that review findings are taken into account in the preparation of the Annual Operational Plans and Three -year Rolling Plan;

6. To discuss health sector linkages to larger government initiatives for poverty reduction and to ensure adequate health sector input to the Cambodia Development Cooperation Forum (CDCF) process;

7. To discuss implications of, and provide input to, larger government-wide reforms such as those in public administration, public financial management, decentralization and governance in co -ordination with the Government Donor Co-ordination Committee (GDCC);

8. To ensure regular sharing of information from health sector partners on progress in implementation of projects and to review plans fornew projects to ensure their relevance and to avoid duplication;

9. To enhance monitoring and evaluation of progress through use of agreed indicators, including CMDG indicators and Joint Monitoring Indicators (JMIs), and regular reporting on targets and benchmarks;

10. To review results and give advice on important pilot initiatives in service delivery, financing, management and quality improvement and ensure that lessons learned are used in policy development;

11. To strengthen linkages and mechanisms for coordination with the Sub-TWG-H, and Pro-TWG-H to facilitate the achievement of the harmonization and alignment objectives at the implementation level.

In addition to its routine business of reviewing progress reports and analytical studies, and providing inputs to sectoral planning, theTWG-H has higher level functions that include:

•identifying NSDP strategies, priorities and indicators;

•identifying data sources for NSDP monitoring;

•agreeing on any additional analytical work to enhance NSDP monitoring;

•establishing and monitoring JMIs for the health sector that are linked to NSDP targets;

•reporting to GDCC on JMIs, H-A-R Action Plan and the TWG-H Action Plan activities;

•following up on relevant discussions which take place at GDCC and CDCF, and identify issues for discussion at those higher-level forum.

The Department of International Cooperation/Ministry of Health, as the focal point for ODA coordination and resource to the TWG-H Secretariat,, has a key role in ensuring that these higher level functions are fully addressed.

GDCC is tasked with coordinating the work of the TWGs and, jointly with Development Partners, monitoring progress on key issues. DIC is responsible for generating progress reports for dissemination and forwarding to GDCC through CRDB/CDC (the GDCC Secretariat), along with issues to be resolved by GDCC. DIC should therefore establish points of contact and liaise closely with CRDB/CDC to ensure the effective development of these reports.

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

1.	To discuss and advise on plans for the Joint Annual Performance Review and the mid-term review and final evaluation of the Health Strategic Plan and to ensure that review findings are taken into account in the preparation of the Annual Operational Plans and Three-year Rolling Plan and Monitoring JMIs for the health sector that are linked to NSDP targets
2.	To ensure regular sharing of information from health sector partners on progress in implementation of projects and to review plans for new projects to ensure their relevance and to avoid duplication;
3.	To review results and give advice on important pilot initiatives in service delivery, financing, management and quality improvement and ensure that lessons learned are used in policy development.

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 .

4.2.1. The NITAG Group for Immunisation

Profile of the NITAG

Name of the NITAG	
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

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 : 5
- Please attach relevant Vaccine Introduction Plans as DOCUMENT NUMBER : 6
- 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	14,741,414	2012	General Population Census of Cambodia - Report 12, Population Projections January 2011
Infant mortality rate (per 1000)	45	2009	CDHS 2010
Surviving infants[1]	388,003	2012	cMYP 2008 - 2015
GNI per capita (US$)	610	2009	World Bank 2010
Total Health Expenditure (THE) as a percentage of GDP	7 %	2009	National health accounts: country information. Geneva, World Health Organization. Accessed in July 2
General government expenditure on health (GGHE) as % of General government expenditure	14 %	2009	National health accounts: country information. Geneva, World Health Organization. Accessed in July 2

[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

The first national Health Sector Strategic Plan, approved in 2002, was reviewed in 2007 and resulted in the Health Strategic Plan 2008-2015 (HSP2). It presents the vision as "To enhance sustainable development of the health sector for better health and well-being of all Cambodia, especially of the poor, women and children, thereby contributing to poverty alleviation and socio-economic development." The mission of the Ministry of Health is "To provide stewardship for the entire health sector and to ensure a supportive environment for increased demand and equitable access to quality health services in order that all the peoples of Cambodia are able to achieve the highest level of health and well-being", based on values of equity and the right to health.

The building blocks of HSP2 are three main health program areas to:

• reduce maternal, newborn and child morbidity and mortality, with increased reproductive health;
• reduce morbidity and mortality due to HIV/AIDS, malaria, TB and other communicable diseases; and
• reduce the burden of non communicable diseases and other health problems, which implement a set of the following five cross-cutting health strategies:
• health service delivery;
• healthcare financing;
• human resource for health;
• health information system; and
• health system governance.

The HSP2 implementation plan identifies an initial three-year consolidation phase to decide key policies in

relation to health financing and health system governance requirements under decentralization and deconcentration, followed by a scaling-up phase. A monitoring and evaluation process has been established, including indicators to measure performance, refine existing health policies and determine the effectiveness of interventions. Annual targets are monitored at the National Health Congress and Joint Annual Performance Review and directives for the next Annual Operational Plan issued. Three year Rolling Plans provide medium term guidance.

In order to strengthen its stewardship over the health sector, the Ministry of Health has been developing tools to apply sectoral resources where they are most needed, through direct allocation as well as through advocacy, influence and regulation. The Ministry recently developed a comprehensive system of sectoral operational planning to support implementation of the Health Strategic Plan. Strategic planning, aligned with the National Strategic Development Plan, is operationalized through Annual Operational Plans, forming the basis for three year Rolling Plans that link mid-term operational and investment planning. This is consolidated planning, encompassing the entire public health sector. It is bottom-up, with each facility or administrative unit preparing annual plans based on sector wide priorities, but accounting for its own specific goals, capacities and challenges. The year 2012 marked the eight year of the Annual Operational Plans, which will become an increasingly useful tool for resource allocation as the links between planning and budgeting processes are strengthened in coming years. The Ministry of Health has introduced the Joint Annual Plan Appraisal for review of resource allocation with health partners to facilitate this.

Implementation of strategic and operational plans is monitored through the Ministry of Health's health information systems, which inform the Joint Annual Performance Review and the National Health Congress. This consultative event reviews performance toward strategic goals and identifies priorities for action during the coming year. At the 2009 and 2010 Joint Annual Performance Review, key bottlenecks to improvement of sector performance were identified, and a set of priority interventions was recommended for which resource allocations within individual operational plans should increase. Health facility development is guided by the Health Coverage Plan, which will become an important strategic management tool for the health sector once linkages with human resource planning and national capital investment planning are strengthened.

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

National Strategic Development Plan 2008 – 2015

Health Strategic Plan 2008 – 2015

Multi Year Plan for Immunization 2008 – 2015 (updated May 2012)

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

The cMYP for immunizations is specifically aligned with the Health Strategic Plan 2008 - 2015 both in terms of strategic goals and timeframe. It is the cMYP for immunizaiton that operationalizes the key strategic goals of the Ministry of Health and the Government of Cambodia within National Strategic Development Plan.

The cMYP was updated in April 2010 to incorporate the inclusion of a 2nd dose of measles vaccine as part of the routine EPI schedule (introduced June 2012), with an addendum developed in May 2012 to incorporate the inclusions of measles/rubella vaccine into the routine EPI schedule and undertaking of a wide age range measles/rubella vaccine supplementary immunization activity. These updates to the cMYP are fully inline with the goals of the Health Strategic Plan 2008 - 2015. Financial costings for the cMYP and the updates are used by the NIP for inclusions in wider health planning processes.

It is expected that the cMYP will be updated in line with the development of the next Health Strategic Plan when the current one ends in 2015, and the NIP is expecting to start this process of mapping out strategic immunization goals for the period post 2015 in the 2nd quarter 2013.

Please indicate the national planning budgeting cycle for health

The government budget for health has increased steadily over recent years, reaching US$ 9.4 per capita for the recurrent budget of the Ministry of Health in 2009. The challenge, however, lies, not only in adequate finances, but also in allocation and management. Although overall disbursement at the end of budget execution is acceptable (around 95%), provinces and districts face irregular and untimely disbursement. Cambodia is also still highly dependant on donor funding and the challenge is to coordinate action to cover national priorities.

Despite the increasing investment in health from government and external sources, the largest portion of health expenditure comes from out of pocket sources and goes towards unregulated private healthcare. The World Bank Poverty Assessment 2006 estimates out of pocket expenditure to be US$ 15 per capita per year (secondary analysis of Cambodian Socio-Economic Survey CSES 2004). CDHS 2005 reports even higher out of pocket spending, almost US$ 25 per capita per year, with potential underreporting in the CSES and over reporting in the CDHS. Analysis of CSES 2007 seems to indicate an increase in out-of-pocket spending for all quintiles except the richest, which points again towards increased inequities despite overall positive progress. The underlying reasons for these findings still need further investigation.

Budgets are submitted by national programs and provincial Health Departments to the Dept. of Finance Ministry of Health in June. The Ministry of Health advises institutions of the budget envelope in December of the same year. Health Plans are then reviewed in the context of the budget to be provided. Operational costs for Provincial Health Departments and programs are released on a quarterly basis by the Dept. of Finance.

Please indicate the national planning cycle for immunisation

January: Annual Program Review involving representatives for all 24 provincial and 77 district health departments and partner and donor agencies

March – April: Set Objectives and Targets for 3 years and detailed activities with an annual budget for the following year, based on the c-MYP.

June: Submit Annual Operational Plan (AOP) to Dept.of Planning and Dept. of Finance

December: Review and Revise AOP based on current situation and budget available

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

At present, SSD is not used in the routine immunization reporting system. There is minimal gap in gender disaggregated coverage rates, with the 2010 DHS survey findings demonstrating that female DPT3 coverage rates (85%) were slightly higher than the coverage rates for males (84%) (DHS Survey 2010).

Starting in 2010, gender specific immunization cards are being used that have the relevant growth charts for males and females.

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

not applicable

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

The 2010 EPI review focused on immunization service delivery and aimed to review fixed and outreach strategies and their ability to reach the unimmunized. Coverage data at health centre level was collected and under-served villages were visited. At village level immunization cards were checked from house to house and mothers were asked questions about difficulties. The review found four categories of social situation that

act as barriers to full immunization:

Mobile: people who regularly move from one place to another, usually in search of work.

Rural Hard to Reach: people who live in rural areas that have obstacles to easy access. This can include not only physical distance, but also poor quality roads, seasonal flooding, and newly settled areas.

Ethnic: the Ethnic category includes minority people who may have a different language and cultural identity.

Urban Poor: typically slum dwellers and squatters who are often the poorest of the poor in comparison to the rural poor.

As a result of the 2010 review, The National Immunization Programme (NIP) increased its efforts to reach these high risk, or under-served populations in both of the measles SIA in 2011, and as part of the routine EPI from 2012. Also, for the 2013MR SIA, the focus on high risk communities will be continued. All provinces and ODs will be requested to identify their high risk communities based on the known access of each village or urban community to immunization services, work that has been rolled out in 2012 with the new micro planning guidelines. As with the 2011 measles SIA, high risk communities will receive specific attention during the implementation and monitoring of quality of the SIA.

A copy of the 2010 EPI Review is provided in the attachments.

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

Cambodia is fully prepared for the introduction of MR vaccine into its routine EPI schedule and the undertaking of a wide age range SIA with MR vaccine in 2013. Key steps that have been undertaken to ensure that the country is fully prepared for the introduction of this vaccine are:

1. Establishment of rubella surveillance system (as part of the current measles surveillance system) and establishment of two CRS sentinel surveillance sites. Both systems are performing well, and provide information on rubella disease incidence and burden and will be able to monitor the impact of rubella containing vaccine introduction.

2. Development of an options paper (provided as an attachment) for new vaccine introduction in 2013 (using GAVI support) that was widely circulated among key stakeholders and partners and provided a basis for the informed discussion and decision about the choice to select MR vaccine for introduction in 2013. The introduction of MR vaccine and the supporting MR SIA has been fully endorsed by both the MOH, and partner agencies, and additional funding requirements for routine MR vaccine procurement have been allocated by the MOH from 2013.

3. Updating of the NIP cMYP to include the introduction of MR vaccine into the routine, and the cMYP costing tool to identify the expenditure and financing requirements for new vaccine introduction. This update also reviewed the various schedule options for MR vaccine introduction, benefits and challenges with both options (MR at 9 months and Measles vaccine at 18 months, or 2 MR doses at 9 and 18 months) and identified the requirements for successful vaccine introduction. The review of MR vaccine schedule options was supported by the WHO Western Pacific Regional Office (report attached).

4. Review of cold chain capacity to ensure sufficient storage space available for MR vaccine introduction, as part of wider cold chain strengthening efforts under the EVM process, that was conducted in Cambodia in the first quarter 2012.

5. Development of a high risk community initiative, that is designed to improve immunization coverage in the most marginalized communities, and is based on the successful identification and targeting of high risk communities during the 2011 measles SIA. This strategy is being piloted in three (3) provinces in 2012, with plans for national scale up from 2013.

6. Development of a MR SIA background paper, target population estimates and funding requirements to inform discussion at all levels on the scope of the proposed MR SIA, and start the process of planning and resource allocation for this initiative.

7. Cambodia has undertaken two highly successful measles SIA in 2011 and should ensure that the proposed 2013 MR SIA is successful as it will be built on the experience and lessons learnt from these two campaigns in 2011, and will include some of the new initiatives for rapid coverage report and targeting of high risk communities (SIA reports attached).

5.1.1 MCV Immunisation coverage

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

Table 5.1.1: MCV Immunisation coverage

Coverage	2005		2006		2007	
	Administrative1)	WHO/UNICEF2)	Administrative1)	WHO/UNICEF2)	Administrative1)	WHO/UNICEF2)
Measles 1st dose (%)	79	79	78	78	79	79
Measles 2st dose (%)	0	0	0	0	0	0
Supplementary Immunization Activities (SIA) (%)	0	0	0	0	105	100

Coverage	2008		2009		2010	
	Administrative1)	WHO/UNICEF2)	Administrative1)	WHO/UNICEF2)	Administrative1)	WHO/UNICEF2)
Measles 1st dose (%)	89	89	92	92	93	93
Measles 2st dose (%)	0	0	0	0	0	0
Supplementary Immunization Activities (SIA) (%)	0	0	0	0	0	0

Coverage	2011	
	Administrative1)	WHO/UNICEF2)
Measles 1st dose (%)	93	93
Measles 2st dose (%)	0	0
Supplementary Immunization Activities (SIA) (%)	100	100

Note:

1)National reported Administrative Coverage

2)WHO/UNICEF estimated coverage

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

5.2. Baseline and Annual Targets (NVS Routine Support)

No NVS Routine Support is requested

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

5.3.1 Baseline and annual targets (MR campaign)

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

RCV Start **9 months**

RCV End **15 years**

Cohort population = population 9 months - 15 years old

GAVI supports no more than 15 cohorts. If the application is not within 9 months to 15 years, please provide justification

not applicable

Table 5.3.1 Baseline NVS preventive campaign figures for MR

Number	Base Year	Baseline and Targets
	2013	2013
Total births	397,160	397,160
Total population 9 months - 15 years old	4,953,203	4,953,203
Target population vaccinated with MR	4,953,203	4,953,203
MR (campaign) coverage (%) [1]	100.00 %	100.00 %
Wastage rate in base year and thereafter (%) for MR (campaign)	25	25
Wastage factor in base year and thereafter for MR	1.33	1.33

[1] Number of persons vaccinated out of total births

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

No NVS Routine Support is requested

7. NVS Preventive Campains

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

Disease	Title of the assessment	Date	Results
Rubella	NIP Measles/Rubella Surveillance System	2011	1096 lab confirmed rubella cases in 2011
Congenital Rubella Syndrome (CRS)	Results of CRS Sentinel Surveillance	Aug 2011 to July 2012	20 clinically compatible CRS cases from 2 sentinel surveillance sites

If MR vaccines have already been introduced in your country during campaigns, 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

7.1.1 Epidemiology and disease burden for Measles-Rubella

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

Epidemiological information on burden of disease:

- ☑ 1 - Rubella data from the measles case-based surveillance system (including the age distribution of rubella cases)
- ☐ 2 - Rubella seroprevalence surveys
- ☑ 3 - Congenital Rubella Syndrome (CRS) burden information, e.g. retrospective search, modelled estimates for CRS burden, prospective surveillance
- ☐ 4 - Other

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

7.2.1. Summary for MR campaign support

Please give a summary of the cMYP and/or the MR, 10 dose(s) per vial, LYOPHILISED campaign introduction plan sections that refer to the introduction of MR, 10 dose(s) per vial, LYOPHILISED campaign. Outline the key points that informed the decision-making process (data considered etc):

The WHO recommends that countries take advantage of the measles platform of two doses of measles vaccine to introduce rubella-containing vaccine (RCV), by conducting a wide age-range catch-up campaign, followed immediately by introduction of MR vaccine in the routine program.

A measles/rubella(MR) vaccine SIA will be undertaken in Q3/4 2013, that targets 9 months to 14 years, 11 months (both males and female). Rubella surveillance data for 2011 showed that approximately 70% of lab confirmed rubella cases were in children less than 15 years of age, and they are the ones that likely drive transmission. An SIA that covers these age cohorts will likely result in the rapid reduction in rubella virus circulation and CRS cases. An estimated 4.9 million children (or approximately 1/3 of the total population) are planned to receive for MR vaccine.

The MR SIA will build on the lessons and success of the 2011 measles vaccine SIA, especially the strategy of the NIP to identify, target and intensively monitor coverage in high risk communities (urban poor, remote rural, ethnic and migrant populations). Given the target age cohorts, the majority of this SIA will be undertaken in schools and will require effective coordination between the Ministries of Health and Education. MR SIA 2013 financial requirements are provided in the updated cMYP costings 2008-2015. Procurement of vaccine and injection safety supplies will be fully supported through GAVI. Total operational costs for the SIA are estimated to be 3,962,562 USD(or 0.80 USD per child), with GAVI funding 3,219,582 USD (0.65 USD per child)and the remainder (742,980 USD) being provided from UN Foundation/in country SWAp funding sources. Further information on the MR SIA 2013 is provided in the detailed planning guide that has been developed and is attached with this proposal.

Please summarise (1) the waste management plan and (2) 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 if the supplies for the campaign will have any impact in the shipment plans for your routine vaccines and how it will be handled:

1. Waste Management Plan

Every province will be responsible for developing a "Waste Disposal Plan" to ensure that all used injection equipment is disposed of correctly according to the National EPI Policy by incineration. Safety boxes containing used injection equipment are to be kept in a secure location at the Health Centre or Operational District level, until the end of the SIA, when they should be transported to the closest site with a high temperature incinerator that is approved for use by the Ministry of Health. Provincial Health Departments are ultimately responsible for ensuring that all safety boxes are disposed of correctly, and this is documented, with spot checks to be undertaken by NIP staff.

Total estimated safety boxes to be generated during this SIA is 67,000, with estimated days to burn calculated for at the provincial level in the MR SIA Background Paper 2012 (attached to this application). These estimates do not take into account the availability of incineration equipment at the operational district level, but should be used by provinces as guidance for the volume of used injection safety equipment that will be generated and the likely time required to dispose. Funding for transporting of filled safety boxes and incineration costs will be incorporated into the provincial level MR SIA budget.

2. Cold Chain Capacity for MR vaccine introduction

Estimates of the impact of MR vaccine introduction into the routine EPI schedule on cold chain capacity has been included in the addendum to the cMYP. The introduction of MR vaccine into the routine immunization schedule will be cold chain neutral, as this involve the switch measles vials (estimate volume per dose = 3.5 cm3) to measles/rubella vials which have a smaller volume per dose requirement (2.5 cm3 vs. 3.5 cm3 - WHO Vaccine Volume Calculator 2009*). At the national level, MR vaccine introduction results in a decrease need of 9% of -20 deg C storage space.

The MR SIA will result in a one time pulse demand on cold chain capacity at the national level. Approximately 6,600,000 dose of MR vaccine (or 660,000 10 dose vial) are expected to be received (note that this does not include estimates of buffer stock) with a corresponding total cold chain volume of 16.500 L or 16.5 m3. At the

National Vaccine Store, there is currently excess capacity approximately 3.62 m3 for -20 C storage, and an additional 13.7 m3 at for +2 to +8 C storage (giving a total excess storage volume of 17.36 m3).

Note that these figures are for maximum stock levels, and will be greater with less stock present. For the +2 to +8 C storage, this is mainly taken up by pentavalent vaccine, and the NIP will coordinate with UNICEF to ensure that pentavalent vaccine shipments and MR vaccine shipments do not occur concurrently. At present, Cambodia normally receives two pentavalent vaccines per year (start of year and mid year) which will be ideal for receiving MR SIA vaccine, and for each month less stock of pentavalent vaccine not present at the national level frees up significant additional cold chain storage space.

There will also be options of using commercial cold storage facilities at the National Airport which is situated close to the National Cold Store if any additional surge capacity is needed, thought this is not expected.

Estimates of cold chain requirements at the provincial level are provided in the MR SIA Planning Document which is uploaded as an attachment. Where cold chain requirement exceed available capacities at the local level, staggered vaccine shipments from the national cold store will need to be arranged. This was practices during the 2011 measles SIA and provincial staff have good experience in estimating local cold chain capacities and requirements and developing needed shipment plans.

7.2.2. Grant Support for Operational Costs of the MR Campaign

Please indicate in the tables below how the support Grant [1] will be used to support the operational costs of the campaign and other critical pre-introduction activities. 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 (refer to the cMYP and the MR, 10 dose(s) per vial, LYOPHILISED campaign introduction plan).

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

Year of MR support	Target population vaccinated (from Table 5.3)	Share per population 9 months-15 years old in US$	Total in US$
2013	4,953,203	0.65	3,219,582

[1] The Grant will be based on a maximum award of 0.65 per cohort population

Cost (and finance) of the MR, 10 dose(s) per vial, LYOPHILISED campaign US$

Cost Category	Full needs for new vaccine introduction in US$	Funded with GAVI introduction grant in US$
	2013	2013
Training	290,000	290,000
Social Mobilization, IEC and advocacy	615,320	515,320
Cold Chain Equipment & Maintenance		0
Vehicles and Transportation	549,941	549,941
Programme Management		0
Surveillance and Monitoring	307,660	307,660
Human Resources	1,485,961	842,981
Waste Management	75,552	75,552
Technical Assistance	50,000	0
Planning	440,000	440,000
Volunteer incentives	198,128	198,128
Other (please specify)		
Total	**4,012,562**	**3,219,582**

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

Total operational costs are estimated at 3,962,562 USD. These estimates are based on the 2011 measles SIA that had an average operational cost of1.10 USD per target child, but this is expected to be lower with the MR SIA given that the vast majority of children will be able to be vaccinated within the school environment, which should substantially reduce overall costs. The NIP have a provisional working estimate of 0.80 USD per child for budget estimation. GAVI have indicated that they will support operational costs at 0.65 USD per target child, with the NIP required to mobilize a further 0.15 USD per child from other sources. Currently, WHO is in discussions with the UN Foundation to see if this funding gap could be supported, given the MR SIA's strong linkages with measles elimination through the combined delivery of measles vaccine. Additional financial support through the Second Health Sector Support Program (HSSP2) is also being explored. HSSP2 is a joint financing mechanism for health, with particular emphasis on health of women, children and the poor. Pooled resources are from the World Bank and other donors, including the UK's overseas development agency (DFID), the Australian Agency for International Development (AusAID), United Nations Children's Fund (UNICEF),United Nations Population Fund (UNFPA) and French Development Cooperation(AFD).

7.2.3 Evidence of introduction of RCV in routine programme

Please provide evidence that the country can finance the introduction of Rubella-Containing-Vaccine (RCV) into the routine programme through one of the following:

- ☐ 1 - A commercial contract for purchase of MR/MMR (Meales Rubella/Meales Mumps Rubella) vaccine together with shipping documents, invoice, etc.
- ☑ 2 - Proof that RCV has been integrated into the cMYP with the budget line for vaccines increased to include purchase of RCV as part of the health sector budget to indicate that RCV funds are allocated
- ☐ 3 - A letter from the Minister of Finance or Budget ensuring additional funding for RCV purchase
- ☐ 4 - An MOU between government and donor(s) (or other written document that proves donor commitment) for at least one year for purchase of RCV for use in the routine programme
- ☐ 5 - Other

7.2.4 Introduction planning for RCV

Countries should describe their plan for introduction including surveillance activities:

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

Please describe a Plan Of Action (POA) for the introduction of RCV into the national programme or provide the POA as an attachment - Refer to section 10. Attachments. (Document N°)

See Addendum to cMYP 2008 to 2015 – Measles/Rubella VaccineIntroduction and MR Vaccine Introduction Plan (attached) for full plan of action for MR vaccine introduction in Cambodia.

INSTRUCTIONS

Components of the POA/cMYP should include:

a. Comprehensive vaccination strategy for the introduction of RCV including a description of:

i. Initial Measles and rubella (MR) campaign

ii. Replacing Measles containing vaccine (MCV) with Measles and rubella (MR) / Measles, mumps, and rubella (MMR) in the routine childhood vaccination programme

iii. Strategies for targeting Women of Childbearing Age (WCBA), such as vaccination during routine services, post-partum, at 1st well baby visit, SIAs

iv. Linkage to the current routine immunisation schedule

v. Linkage to measles second dose, if applicable

vi. Description of how the country plans to continue to maintain high MR/MMR vaccine coverage either through routine immunisation or through Supplementary Immunization Activities (SIAs)

b. A brief description of the following surveillance activities:

i. Integration of Rubella surveillance with case-based measles surveillance

ii. Congenital Rubella Syndrome (CRS) surveillance or plans to establish sentinel site CRS surveillance

iii. Adverse Event Following Immunization (AEFI) surveillance

c. Vaccine coverage monitoring and reporting

d. The communication strategy for the introduction of RCV

7.2.5 Measles surveillance indicators

Please provide information on the following indicators of the quality of measles surveillance for at least two years prior to application (if available):

Surveillance indicator	2010	2011
Reporting rate at national level 1)	17	20
	100,000	100,000
Laboratory confirmation rate (%) 2)	79	85

Note:

1) Reporting rate at national level = number of discarded measles cases per 100,000 population per year

2) Laboratory confirmation rate (%) = number of suspected cases with specimens collected for testing divided by the number of suspected cases not confirmed through epidemiological linkage

7.2.6 Rubella Containing Vaccine introduction Grant

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

Calculation of lump-sum for the MR, 10 dose(s) per vial, LYOPHILISED

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

Year of New Vaccine Introduction	Births (From Table 5.3)	Share per Birth in US$	Total in US$
2013	397,160	0.80	317,728

[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 MR, 10 dose(s) per vial, LYOPHILISED US$

Cost Category	Full needs for new vaccine introduction in US$	Funded with GAVI introduction grant in US$
Training	200,000	175,000
Social Mobilization, IEC and advocacy	91,000	91,000
Cold Chain Equipment & Maintenance	20,000	20,000
Vehicles and Transportation	0	0
Programme Management	30,000	20,000
Surveillance and Monitoring	10,000	0
Human Resources	0	0
Waste Management	0	0
Technical Assistance	40,000	11,728
Other (please specify)		
Total	**391,000**	**317,728**

8. Procurement and Management

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

No NVS Routine Support is requested

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

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

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

The Ministry of Health requests that MR vaccine and injection safety supplies be procured through UNICEF. In addition, procurement of MR vaccine for use in the routine EPI by the Ministry of Health will also through UNICEF supply, as per current arrangements for other MOH funded vaccines (OPV, BCG, measles and TT vaccines).

b) Please indicate when you are planning to conduct the campaign (month and year) and how the campaign is going to be rolled out (e.g. in different phases or one time).

The NIP has decided that the MR SIA should occur from October 2013. This will allow sufficient time for the confirmation of GAVI support, arrival and distribution of all related SIA material, appropriate planning, training and social mobilization of communities and coordination with the Ministry of Education. Given the large target population proposed for the SIA, it will need to be staggered over a number of months during Q42013, which will also take into account the end of the wet season in Cambodia and when access to remote communities is easier.

As per the February 2011 measles SIA, this campaign will be staggered into 3 phases, each of 3 weeks. Each phase will comprise of 8 province (of a total of 24 province), with an additional 1 week allocated for catch up activities and movement of supervisors and supplies between phases. The majority of the SIA is expected to be completed by the end of December 2013, through mop up activities may extend in some provinces into January 2014. The final report on SIA coverage and performance will be released to partners by the end of January 2014.

Full details of the timetable for planning and implementation of the MR SIA is provided in Annex 3 of the MR SIA Planning Document 2012 which is attached to this application.

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

Monitoring of the SIA implementation

Rapid Coverage Assessments (RCA)

RCA, rather than coverage calculations will be used as the most reliable forms of monitoring progress, given the uncertainties of true village populations. During the MR SIA two types of RCA will be undertaken:

- MR vaccine RCA to be conducted at every site to confirm the quality of implementation, using a random samples of 20 children in the target age ranges. RCA will be primarily conducted by local level supervisors or other non vaccination team members, and will provide a pass/fail assessment of the area. Areas that fail the RCA will require further mop up activities and additional RCA to confirm that no children have been missed.
- Identified high risk communities, in addition to the RCA for MR vaccine, will also do a RCA for routine EPI coverage for children from 9 to 23 months that will assess their routine immunization “up to date” status, based on the system implemented during the 2011 measles SIA. This will be collated by the NIP at the provincial and national levels and allow a post SIA detailed assessment to be made where areas of weak routine immunization remain for focus and correction through the routine EPI.

Administrative Coverage Data

In addition to the use of RCA for monitoring the quality of coverage, traditional reporting systems based on administrative data will also be used, but will be monitored in “real time” with daily reporting, collation and assessment of coverage data by the WHO/NIP, as was implemented during the 2011 measles SIA. All districts will need to reporting summary results at the end of each day to

their NIP supervision focal point who will then transmit this data to a centralized data focal point, either via email or SMS. Data will be reviewed each evening and a detailed report issued to all NIP and partner focal points the following morning to allow rapid sharing of information and issues, and immediately identify areas of concern for swift correction. These systems were developed during the 2011 measles SIA and the NIP is experienced in their use.

8.3. Vaccine Management (EVSM/EVM/VMA)

Did the country have Effective Vaccine Management Assessment (VMA) in the past? **No**

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

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

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

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

If your country conducted either EVSM or VMA in the past two years, please attach relevant reports. (Document N°8)

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

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.

All recommendations from the 2009 EVSM fully implemented, which has included training of Central Medical Store (CMS) staff in vaccine management and handling through the placement of an NIP staff full time at the CMS in 2009 and development of standard operating procedures.

The EVM was completed in March 2012, and the NIP is currently in the process of working with in country partners (WHO and UNICEF) to review the EVM improvement plan and coordinate key activities. At present, all activities on track from implementation and include:

- planning for a temperature monitoring study of the cold chain distribution system in Cambodia including the trialling of cold water packs to protect vaccines against freezing (Q1 2013)

- review of cold chain capacities at all levels for introduction of new vaccines (currently underway with assistance of WHO).

- Training of EPI staff (including new staff) in cold chain systems and equipment maintenance (ongoing).

- Conduct a temperature mapping study for cold rooms at the CMS (ongoing).

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? **January 2014**

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)

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		✓	MR Proposal - Minister of Health Signature.pdf File desc: MR Vaccine Application - Minister of Health signature Date/time: 8/14/2012 3:21:41 AM Size: 1742350
2	MoF Signature (or delegated authority) of Proposal		✓	MR Applicaiton MEF Signature.pdf File desc: MR Vaccine Application - Minister of Economy and Finance Signature Date/time: 8/30/2012 6:02:43 AM Size: 755478
3	Signatures of ICC or HSCC or equivalent in Proposal		✓	TWGH Meeting Signature List - 12 July 12.pdf File desc: Technical Working Group for Health (ICC) Meeting signature list endorsing GAVI MR vaccine proposal - 12 July 2012 Date/time: 8/15/2012 11:25:38 PM Size: 1687126
4	Minutes of ICC/HSCC meeting endorsing Proposal		✓	TWGH Meeting Minutes - 12 July 12.pdf File desc: Technical Working Group for Health (ICC) Meeting minutes endorsing GAVI MR vaccine proposal - 12 July 2012 Date/time: 8/15/2012 11:21:23 PM Size: 3702261
5	comprehensive Multi Year Plan - cMYP		✓	UPDATED cMYP NIP [2011] 2008-2015.pdf File desc: cMYP 2008 - 2015 Cambodia Date/time: 6/20/2012 4:25:49 AM Size: 718162
6	cMYP Costing tool for financial analysis		✓	cMYP Costings Cambodia - MR Vaccine 2013-2015.xls File desc: cMYP Costing Tool [including MR vaccine] Date/time: 6/22/2012 3:37:07 AM Size: 548864
7	Plan for NVS introduction (if not part of cMYP)	5.1	✓	MR Vaccine Introduction Plan - 20 Jun 12.pdf File desc: MR Vaccine Introduction Plan - Detailed Date/time: 7/17/2012 11:29:38 PM Size: 58600
8	Improvement plan based on EVM		✓	EVM-imp-plan-Cambodia-2012 - Final.pdf File desc: EVM Improvement Plan January 2012 Date/time: 6/20/2012 4:30:10 AM Size: 8128
11	Evidence of introduction of RCV in routine programme	7.c.3	✗	Minute of HSSC Meeting 2012 - Final Soeung.pdf File desc: Meeting minutes signed by Minister of Health confirming increase in

				vaccine procurement budget for MR vaccine Date/time: 8/29/2012 3:45:35 AM Size: 84992
12	Plan Of Action for RCV introduction	7.c.4	✕	MR Vaccine Introduction Plan - 20 Jun 12.pdf File desc: MR Vaccine Introduction Plan Date/time: 8/29/2012 3:46:50 AM Size: 58600

11. Annexes

Annex 1 - NVS Routine Support

No NVS Routine Support is requested

Annex 2 - NVS Routine – Preferred Second Presentation

No NVS Routine – Preferred Second Presentation requested this year

Annex 3 - NVS Preventive campaign(s)

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

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

	Data from		2013
Total campaign population	Table 5.3.1	#	4,953,203
Immunization coverage	Table 5.3.1	%	100.00 %
Number of persons to be vaccinated	Table 5.3.1	#	4,953,203
Number of doses per persons	Parameter	#	1
Estimated vaccine wastage factor	Table 5.3.1	#	1.33
Number of doses per vial	Parameter	#	10
AD syringes required	Parameter	#	Yes
Reconstitution syringes required	Parameter	#	Yes
Safety boxes required	Parameter	#	Yes
Vaccine price per dose	Table Annexes 4A	$	0.494
AD syringe price per unit	Table Annexes 4A	$	0.0465
Reconstitution syringe price per unit	Table Annexes 4A	$	0.0037
Safety box price per unit	Table Annexes 4A	$	0.0058
Freight cost as % of vaccines value	Table Annexes 4B	%	13.00 %
Freight cost as % of devices value	Parameter	%	0

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

		Formula	GAVI
			2013
B	Number of persons to be vaccinated with the first dose		4,953,203
C	Number of doses per persons		1
D	Number of doses needed	B x C	4,953,203
E	Estimated vaccine wastage factor	Wastage factor table	1.33
F	Number of doses needed including wastage	D x E	6,587,760
G	Vaccines buffer stock	(F – F of previous year) * 0.25	1,646,940
I	Total vaccine doses needed	F + G	8,234,700
J	Number of doses per vial	Vaccine parameter	10
K	Number of AD syringes (+ 10% wastage) needed	(D + G) x 1.11	7,326,159
L	Reconstitution syringes (+ 10% wastage) needed	I / J * 1.11	914,052
M	Total of safety boxes (+ 10% of extra need) needed	(K + L) /100 * 1.11	91,467
N	Cost of vaccines needed	I x g	0.494
O	Cost of AD syringes needed	K x ca	340,666.3935
P	Cost of reconstitution syringes needed	L x cr	3,382
Q	Cost of safety boxes needed	M x cs	531
R	Freight cost for vaccines needed	N x fv	0
S	Freight cost for devices needed	(O+P+Q) x fd	0
T	Total fund needed	(N+O+P+Q+R+S)	4,412,521.3935

Note: There is no cofinancing for NVS preventive campaigns

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
Meningogoccal, 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 liquid)

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 %		
Meningogoccal	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

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
MR, 10 dose(s) per vial, LYOPHILISED	25%	1.33

Table Annex 4E: 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	
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 Papilomavirus vaccine	HPV	liquid	IM	3	1	15	
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	

12. Banking Form

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

Name of Institution (Account Holder):	Ministry of Health		
Address:	No. 151-153, St. Kampuchea Krom,Sangkat Khan 7 Makara		
City Country:	Phnom Penh, Cambodia		
Telephone no.:	855-23 881 408	**Fax no.:**	855-23 881 408
		Currency of the bank account:	US Dollars
For credit to:			
Bank account's title:	MoH: HealthSys Strgh Prj GAVI Alian		
Bank account no.:	000000001180		
Bank's name:	National Bank of Cambodia [NBC]		

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

By who is the account audited? Price Waterhouse Coopers

Signature of Government's authorizing official

		Seal
Name:		
Title:		
Signature:		
Date:		

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

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

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

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

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