GAVI Alliance

Application Form for Country Proposals

Response to conditions

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

Submitted by

The Government of

Papua New Guinea

Deadline for submission: 15 November 2011

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

Start Year 2011 End Year 2015

Revised in January 2011

(To be used with Guidelines of December 2010)

Please submit the Proposal using the online platform https://AppsPortal.gavialliance.org/PDExtranet.

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 language of the arbitration will be English.
For any dispute for which the amount at issue is US$ 100,000 or less, there will be one arbitrator appointed by the GAVI Alliance. For any dispute for which the amount at issue is greater than US $100,000 there will be three arbitrators appointed as follows: The GAVI Alliance and the Country will each appoint one arbitrator, and the two arbitrators so appointed will jointly appoint a third arbitrator who shall be the chairperson.
The GAVI Alliance will not be liable to the country for any claim or loss relating to the programmes described in the application, including without limitation, any financial loss, reliance claims, any harm to property, or personal injury or death. Country is solely responsible for all aspects of managing and implementing the programmes described in its application.

1. Response to conditions

Vaccine: PCV13, 1 dose/vial, liquid

Condition 1:

Papua New Guinea is requested to provide an implementation status report demonstrating that major issues highlighted in the EVM of May 2011 are being resolved.

Implementation status report of EVM'2011 recommendations

The first country-wide assessment using the EVM methodology and tool was carried out in Papua New Guinea from 20 May to 15 June 2011. The recommendations made by the assessment team were translated into time-bound improvement plan at national, provincial and district level.

The improvement plans for both of these levels were prepared to be completed by the end of 2012 as some of the activities would require financial commitment by the national department of health as related to procurement and training. Some of the outlined activities need to be carried out regularly as part of regular supervision and monitoring.

As the time period outlined in the improvement plan (as in the attached EVM report), extends to Dec 2012, PNG is providing a status report of the major tasks as in the plan. However, a status report will be provided along with the GAVI annual progress report to outline the activities conducted for improvement of vaccine management system in the country.

This can be observed from the list provided below, that 8/17 items and 6/20 items have already being addressed at the national and provincial & district level respectively after the EVM assessment was completed in PNG.

Srl. No.	Task Description	Status as of October 2011
National Vaccine Store Level		
1 (Item No. 1)	Review arrival forms for vaccines, consumables.	Review done at the national level and standardized VAR form now used for each shipment and separately for each antigen and logistics
2 (Item No. 3)	Procurement and use of continuous temperature monitoring device for all cold rooms	Discussion with partners as JICA towards the committed Cold Chain support to GoPNG
3 (Item No. 5)	Allocation of appropriate space for storing diluents, syringes and safety boxes	Within the space constraints of the Area Medical Store, specific area for storing of diluents and other logistics being planned.
4 (Item No. 7)	Purchase stand-by generator to run all existing	The old generator is being

	equipments	replaced by a new generator. The new generator to be in place by Dec 2011
Srl. No.	**Task Description**	**Status as of October 2011**
5 (Item No. 9)	Procurement of computer and use of WHO Stock Management System	Procurement of computer for Cold Chain manager at Area Medical Store and National Cold Chain Officer processed in system; Stock management system will be put to place after the computers are procured
6 (Item No. 10)	Establish a system for recording the damaged vaccines and internal review process	System put in place to record the damaged vaccine; to be incorporated in the stock management software when implemented
7 (Item No. 11)	Establish monthly routine reports on internal distributions, quarterly physical stock count and review of distribution system	Vaccine Receiving reports from the provinces have being received by the national level and review of the distribution system to quarterly vaccine distribution planned in 2012
8 (Item No. 14)	Provide a regular supportive supervision using a standard check list and record of it in the visited sites	Done regularly by National Cold Chain Officer
Srl. No.	**Task Description**	**Status as of October 2011**
Provincial and District Vaccine Store level		
9 (Item No. 1)	Establish a record keeping and filing system	In place in all provinces
10 (Item No. 2)	Establish a formal monthly temperature records review system	This is being carried out as part of Reaching Every District review system
11 (Item No. 4)	Expansion of the vaccine storage capacity of the +2°C to + 8°C and the required cold boxes in the identified facilities	Cold Chain inventory of the country (district wise) being updated and support of cold chain equipments from AusAID ensured to identified low-performing districts who require cold chain support.
12 (Item No. 5)	Carry out capacity evaluation for the remaining	Done along with the national cold chain inventory update

	provinces and districts	as detailed above
Srl. No.	**Task Description**	**Status as of October 2011**
13 (Item No. 10)	Review the existing issue/ receive form for vaccines and consumables and use of it.	Provinces to use the amended forms with details as in VAR with one form for each vaccine and separately for logistics
14 (Item No. 20)	Keep up-to-date inventory of cold chain equipment at provincial level	Done along with the national cold chain inventory update as detailed above

Recent initiatives in Papua New Guinea as Reaching Every District to Reach Every Child started by national department of health with support from WHO, UNICEF and AusAID highlights the district level correction of cold chain management issues including all components of RI programme management as a whole. These activities are being carried out at health facility level in the identified low-performing districts and some of the examples of identified areas of concerns in different provinces are presented below as spider graphs:

Fig 1: Assessment of Cold Chain system in 14 Health Facilities in National Capital District province-2011

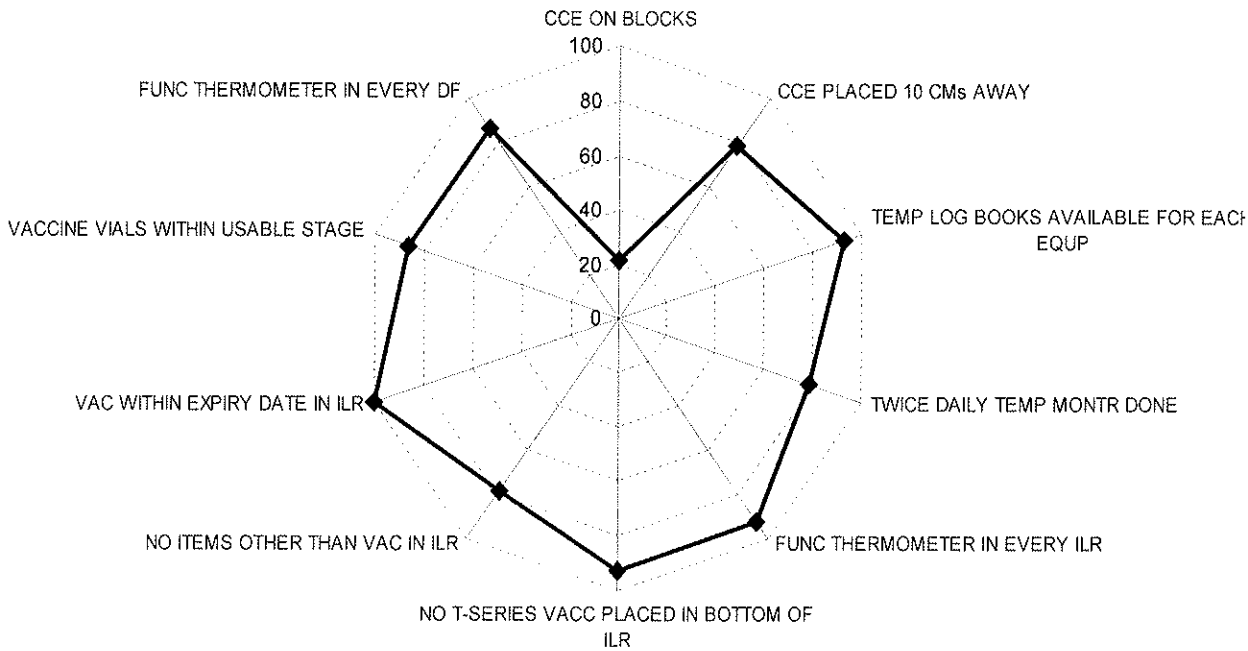


Fig 2: Assessment of Cold Chain in 4 Health Facilities of one district in Autonomous Region of Bougainville-2011

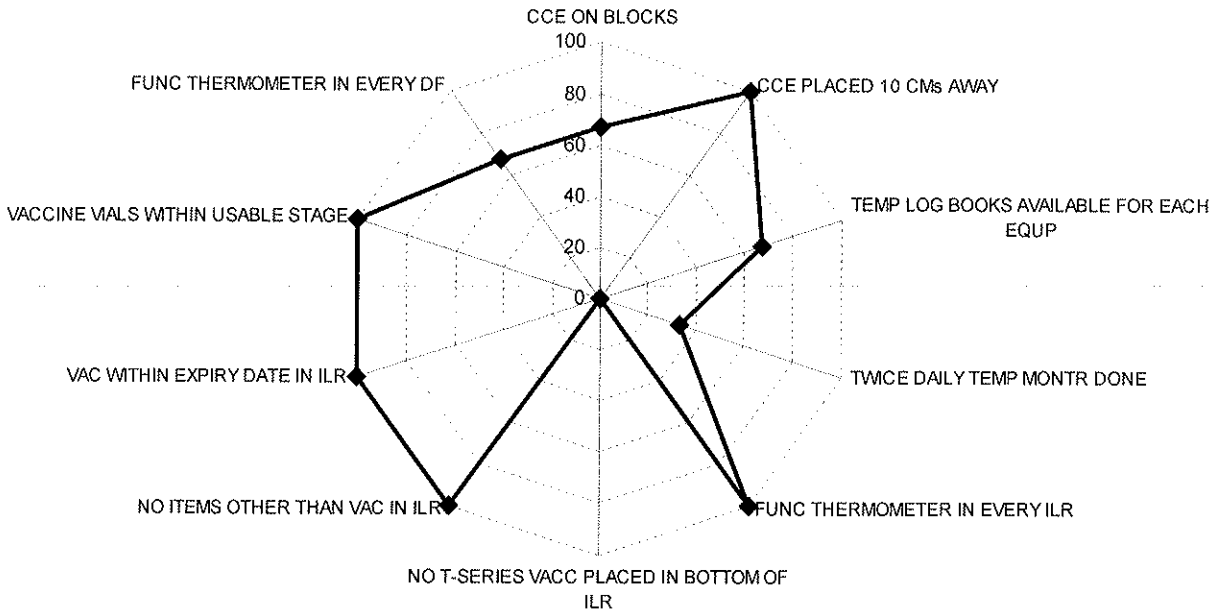
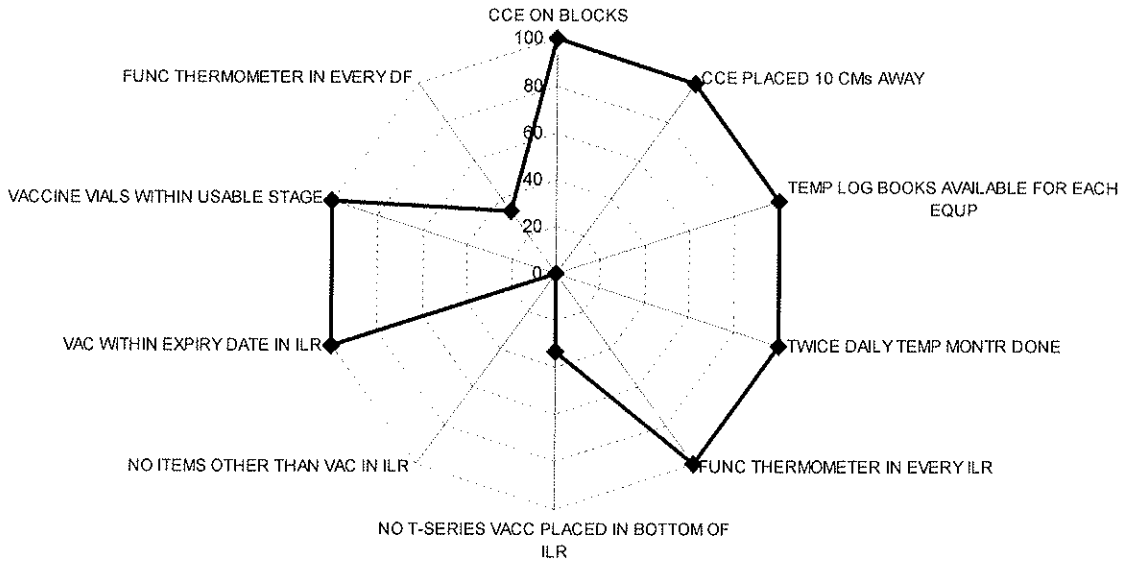


Fig 3: Assessment of Cold Chain in 3 Health Facilities of one district in Milne Bay province-2011



Condition 2:

Papua New Guinea is requested to provide an Introduction Plan (either as a stand-alone document or integrated into cMYP) that shows clearly:

a) Rationale for PCV introduction

b) Programmatic implications of the introduction of PCV vaccine

c) Key activities necessary for the introduction of PCV vaccine with timeline, milestones, and responsible agencies

d) New vaccine introduction budget

PNEUMOCOCCAL VACCINE INTRODUCTION PLAN

A. Background:

Pneumococcal vaccine has documented its potential to reduce child mortality from pneumonia, one of the major killer diseases in Papua New Guinea (PNG). The existing data on pneumonia in PNG and the data from various researches conducted in PNG since 1960 clearly indicate that a combined intervention addressing both prevention through pneumococcal vaccine and treatment through better case management will have a significant impact in reduction of child deaths in PNG, thereby contributing to MDG4 goal. Introduction of pneumococcal vaccine in routine immunization schedule with major interventions as improvement in quality of services at community aid posts, IMCI case management and extension of vitamin A supplementation in second year of life, expansion of oxygen concentrators with promotion of exclusive breast feeding will support the efforts of government of Papua New Guinea to reach the goal of MDG 4. Thus following extensive consultation in the country, with this background, it was decided to introduce pneumococcal vaccine (PCV13) in the country with request of co-financing support from GAVI.

B. Rationale for PCV introduction:

Pneumonia is the most common cause of serious illness and death in children in PNG, accounting for 30-40% of hospitalizations and deaths. WHO estimates that that in 2008, pneumonia accounted for 22% and meningitis accounted for 5% of under-5 mortality in PNG (World Health Statistics 2010). In the absence of vaccination, Streptococcus pneumoniae (pneumococcus) and Haemophilus influenzae are the most common causes of pneumonia death in children, and are also common causes of childhood meningitis and sepsis. Hib vaccine was already introduced in PNG, leaving pneumococcus as the most important cause of child pneumonia and meningitis. PNG has been documented to have high rates of pneumonia and other bacterial diseases among children. WHO estimates that in 2000, pneumococcus caused 20,766 cases of pneumonia, 235 cases of meningitis, and 1,165 cases of other invasive disease among children under 5 years old in PNG, resulting in 825 deaths. (Updated estimates for 2008 are under preparation but not yet available). These estimates are based on data from Australia, Fiji, New Zealand, and Kenya. Sentinel meningitis surveillance data from 8 sites in PNG show that 14% of probable bacterial meningitis cases among children under 5 years old were due to pneumococcus in 2010, confirming that pneumococcus is an important cause of childhood invasive bacterial disease in PNG. Studies have found high rates of mortality and neurologic sequelae following bacterial meningitis in PNG. Annual sector review report of National Health information system shows the national rate of pneumonia case fatality is around 3.0% for the last five years. However, there exist wide inter-provincial differences, which reflect the illness severity at the time of presentation, available system of practice, staff skills and training and resources in the provincial hospitals and health centres. This gets reflected in the national paediatric hospital reporting of 2010, which shows there is no deaths among 144 admission in Alotau hospital, Milne Bay province to 26 deaths among 170 admission in Kimbe (Case Fatality Rate: 15.3%). The high rates of pneumonia and meningitis in PNG are linked to factors that favour bacterial transmission and increased susceptibility to infection. Risk factors include malnutrition, low birth weight and prematurity, parental smoking, absence of breast feeding and feeding of solid and semi-solid feeds in the first weeks or months of

life, pollution from wood smoke in poorly ventilated houses, poor general hygiene, and HIV. Many of these environmental exposures are more common in the Highlands, where pneumonia is more common than in coastal PNG. In PNG early onset of dense upper respiratory tract colonisation with S. pneumoniae and Hi occurs. Most children acquire these two bacteria in the first month or two of life. Simultaneous carriage of multiple pneumococcal serotypes is common. In one study the median onset of any pneumococcal carriage in PNG infants was 18 days, with carriage rates of 61% at 1 month of age. Pneumococcal nasopharyngeal carriage remains high throughout childhood and pneumococcal pneumonia, bacteraemia and meningitis are associated with early and prolonged duration of carriage.

The Government of Papua New Guinea is committed to sustain the funding of the new vaccine and the support to this vaccine has already being planned and costed in the cMYP through to 2015. The same has been endorsed by the Secretary for Health and the national EPI unit has shared the same with finance and budget department of the national government for its continuation of financial support within the government health budget.

C. Programmatic implications for the introduction of the PCV vaccine:

The introduction of the PCV vaccine in the country will have implication on the cold chain storage capacity of the country at all levels of cold chain system. Apart from the cold chain storage capacity of the country, the successful implementation of the programme is also dependant on the budgetary allocation by the national government to procure vaccines. The introduction of a new vaccine in the country is linked to advocacy and awareness of the health staffs and general community for keeping the population adequately informed about the vaccines.

The cold chain capacity of the country at national and provincial levels is adequate to store and manage the arrival of the new vaccine, as outlined in the Effective Vaccine Management assessment study conducted in Papua New Guinea in May 2011, thus it provides enough confidence to the National EPI programme and the Government of Papua New Guinea to plan for introduction of new vaccine in PNG. More so, as outlined in EPI comprehensive multi-year plan in PNG, the national EPI unit has planned for replacement of cold chain equipments in the country over next four years to strengthen the cold chain system.

As for the securing financial commitment to procuring vaccines for the country, the requirement of the vaccine cost and other logistics have already being outlined in cMYP 2011-15 and as all vaccines in Papua New Guinea are procured through government system, this provides enough support to the application for new vaccine. The implementation of DTP-HepB-Hib vaccine through co-financing system also provided enough lessons for national EPI team to learn about the new financial system and thus it is expected that the introduction of this new vaccine will be done without any administrative and procedural hassle.

The required advocacy and awareness of the health staffs and general community is being planned as part of the introduction of the new vaccines and is outlined in the activity listing for introduction of new vaccines.

D. Key activities necessary for the introduction of the PCV vaccine:

The key areas to be addressed for the introduction of PCV vaccine as identified by the National EPI unit are the following:

1. IEC, advocacy and information sharing with the Health workers and all related staffs on Pneumococcal Conjugate Vaccine: Technical know-how on PCV and with simple and clear messages for all health and allied health staffs will be prepared and widely disseminated.

2. Training of the Health Workers on the introduction of PCV: Concise operational and management module on introduction of the PCV with training guidelines for the provinces will be developed and distributed. The IEC material developed for the purpose will also be used as training material.

3. Strengthening immunization waste management & disposal methods: The injection safety assessment planned in the country in October 2011, will further detail the requirements for ensuring strengthening of the immunization waste management in the country which will support the introduction of PCV in the country.

4. Finalization of reporting formats and Immunization Baby Book with the revised immunization schedule with revised management tools for monitoring and supervision

5. Strengthening of existing Meningitis-Encephalitis surveillance in the country with special emphasis to strep. pneumococcus: Special focus will be laid to the existing eight sentinel surveillance site surveillance with inclusion of two more sites which are part of the proposed Japanese Encephalitis surveillance in the country.

6. IEC and strengthening social mobilization activities in the communities: Develop culturally relevant and local context appropriate message in local languages.

7. National Launching ceremony: A national launch of the PCV is being planned to be done by the Minister of Health in presence of staffs of National Department of Health and representatives of all professional bodies working with EPI and all development partners and NGOs.

Srl. No.	Activities	Responsible Agencies	Time- Frame
1	IEC materials for Health workers on PCV	National EPI Unit with technical support from UNICEF, WHO	**Feb 2012- Apr 2012**
2	Advocacy and information sharing with the Health workers and all related staffs	National EPI unit	**Apr 2012- May 2012**
3	Training of Health workers on introduction of PCV	National EPI Unit with technical support from WHO, UNICEF and operational support from AusAID	**Jun 2012- Jul 2012**
4	Collaboration and consultation with Policy planning & HSIP Branch for regularization of management modules and financial system of PCV	Executive Manager-Public Health, Manager-Family Health Services and EPI unit	**Jan 2012-Mar 2012**
5	Update, print and distribute materials for new immunization schedule with PCV	National EPI unit and Health Promotion with technical inputs from WHO and UNICEF	**Jun 2012- Jul 2012**

6	Develop supervisory tools	National EPI Unit with technical support from UNICEF, WHO	**Jul 2012- Aug 2012**
7	Finalization of reporting formats, immunization baby books and data collection tools	National EPI unit, National Health Information System, Provincial health Office and Health promotion with technical inputs from WHO and UNICEF	**Jul 2012- Aug 2012**
8	IEC and social mobilization activities for communities	National EPI and Health promotion with inputs from provinces and technical support from UNICEF and WHO	**Jun 2012- Jul 2012**
9	National Launch	National EPI	**Aug-Sept 2012**

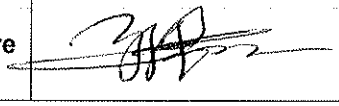
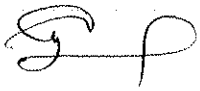
E. Cost (and finance) to introduce the Pneumococcal (PCV13), 1 doses/vial, Liquid (US$):

Cost Category	Total expected amount for the new vaccine introduction (US$)	Amount funded with new vaccine introduction grant (US$)
Training	100,000	20,000
Social Mobilization, IEC and Advocacy	58,000	40,000
Cold chain Equipment and Maintenance	192,000	
Programme Management	250,000	20,000
Surveillance and Monitoring	126,000	8,000
Waste Management	2,000	2,000
Technical Assistance	10,000	10,000

The other detail information on the vaccine introduction has been submitted with the new vaccine application to GAVI.

2. Signatures of the Government

Enter the family name in capital letters.

Minister of Health (or delegated authority)		Minister of Finance (or delegated authority)	
Name	Mr. PASCOE KASE, a/Secretary of Health	**Name**	Ms. ELVA LIONEL Director HSIP
Date	14/11/11.	**Date**	14/11/11
Signature		**Signature**	

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

Enter the family name in capital letters.

Full name	Position	Telephone	Email
Dr. William LAGANI	Manager, Family Health Services	(675) 301 3841	william_lagani@health.gov.pg
Mr. Steven TOIKILIK	National EPI Manager	(675) 323 0976	stoikilik@cbsc.org.pg
Dr. Siddhartha S DATTA	Technical Officer – EPI, WHO	(675) 325 7827	dattas@wpro.who.int
Dr. Grace KARIWIGA	Maternal and Child Health Specialist, UNICEF	(675) 308 7368	gkariwiga@unicef.org