



Global Alliance for Vaccines and Immunisation (GAVI)

APPLICATION FORM FOR COUNTRY PROPOSALS

For Support to:

New and Under-Used Vaccines

(Pneumococcal Vaccine)

Sep 2008

Please return a signed copy of the document to:
GAVI Alliance Secretariat; c/o UNICEF, Palais des Nations, 1211 Geneva 10, Switzerland.

Enquiries to: Dr Ivone Rizzo, irizzo@gavialliance.org or representatives of a GAVI partner agency. All documents and attachments must be in English or French, preferably in electronic form.

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Acronyms

5YDP	Five-year Development Plan	UN	United Nations
AFP	Acute Flaccid Paralysis	UNICEF	The United Nations children's Fund
BCG	Bacillus Calmett and Guiran	USAID	United States of America for International Development
cMYP	comprehensive Multi Year Plan	WB	World Bank
CSO	Central Statistical Organization	WHO	World Health Organization
DTP	Diphtheria, Tetanus and Pertusis vaccine	ARI	Acute Respiratory Infection
DHS	District Health System	NCfHE	National Centre for Health Education
EFARP	Economic, Financial and Administrative Reform	NCSD	Nation Centre for surveillance of Diseases
EPI	Extended Program on Immunization	Pneumo	Pneumococcal Vaccine
FSP	Financial Sustainability Plan	ILR	Ice Lined Refrigerator
GAVI	The Global Alliance for Vaccines and Immunization	WI_CR	Walk In Cold Room
GDP	Gross Domestic Product	RC	Compression Refrigerator
GIVS	Global Immunization Vision and Strategies	VMA	Vaccine Management Assessment
GNP	Gross National Product		
GoY	Government of Yemen		
HBV	Hepatitis B Vaccine		
HF	Health Facility		
HSR	Health Sector Reform		
HSS	Health System Support		
HW	Health Worker		
ICC	Inter-agency Coordination Committee		
ISS	Immunization Services Strengthening		
IMR	Infant Mortality Rate		
JICA	Japanese International Cooperation Agency		
Measles	Measles vaccine		
MDGs	Millennium Development Goals		
MoF	Ministry of Finance		
MOPH&P	Ministry of Public Health & Population		
MoPIC	Ministry of Planning and Development		
MMR	Maternal Mortality Rate		
MNT	Maternal & Neonatal Tetanus		
MR	Measles Rubella vaccine		
NGOs	Non-governmental Organizations		
NHA	National Health Accounts		
NIDs	National Immunization Days		
Penta	Penta-valent Vaccine		
PHC	Primary Health Care		
PRS	Poverty Reduction Strategy		
OPV	Oral Polio Vaccine		
RED	Reach Every District		
SIA	Supplementary Immunization Activities		
SNIDs	Sub-National Immunization Days		
TT	Tetanus Toxoid		

Executive Summary

- This application presented by the Government of Yemen aims for getting the needed support from GAVI to help in the Introduction of the Pneumococcal Vaccine by March 1st, 2009. According to the current availability, Yemen is applying for introducing the 7 Valent Prefilled Pneumococcal Vaccine.
- According to the correspondences with GAVI Secretariat on June 27th, 2008, the information given in this application has been prepared taking in consideration the IRC's comments, requirements and conditions to be met by GOY for obtaining GAVI support to introduce the Pneumococcal Vaccine.
- This application is in line with the current cMYP for EPI covering the years 2009 and 2010
- Pneumococcal Vaccine is to be the 2nd vaccine supported by GAVI. The Government of Yemen agreed to timely pay its share of co-financing for introducing the Pneumococcal Vaccine, i.e. US\$ 0.15 per dose as according to GAVI's Policy and the it's details for the period 2009-2010.

GOY Contribution	2009	2010	Total (2009-2010)
No. of Pneumococcal doses to be funded by GOY	115,500	120,100	235,600
No. of Safety boxes to be funded by GOY	1,300	1,350	2,650
Total Value in US\$ to be co Financed by GOY	358,500	372,500	731,000
GAVI Contribution			
No. of Pneumococcal doses to be funded by GAVI	2,271,500	2,363,000	4,634,500
No. of Safety boxes to be funded by GAVI	25,225	26,250	51,475
Total Value in US\$ to be co Financed by GAVI (MINIMUM)	7,045,000	7,329,000	14,374,000
Total Value in US\$ to be co Financed by GAVI (MAXIMUM)	11,723,500	12,195,500	23,919,000
Total (GOY & GAVI Contribution)			
No. of Pneumococcal doses	2,387,000	2,483,100	4,870,100
No. of Safety boxes	26,525	27,600	54,125
Total Value in US\$ (MINIMUM)	7,403,500	7,701,500	15,105,000
Total Value in US\$ (MAXIMUM)	12,082,000	12,568,000	24,650,000

- Pneumococcal Vaccine is to be the second co-financed vaccine by the Yemeni Government. After the introduction of the Pentavalent Vaccine (DTP-HepB-Hib) nationwide, Yemen contributed to the total cost of the vaccines' introduction in an incremental way with 10% annual increase in the government's share according to the FSP. Despite the fact that GAVI support for the Pentavalent was under Phase 1 which did not require such policy of co-financing, Yemen is expected to cover the cost of the vaccine by the year 2015. This demonstrates the government's commitment for strengthening the financial sustainability of the National Immunization Programme. As of Oct 2007, GOY paid US\$ 1,285,741.54 as its share of co-financing cost of Pentavalent which is much more than the required amount as per GAVI policy. The introduction of Pentavalent Vaccine took place smoothly without major difficulties, but many lessons have been learned and will make use for the introduction of the Pneumococcal Vaccines.
- This application and the cMYP were developed / updated by the Technical Task Force constituted by Health System Strengthening Coordinating Committee (HSSCC), which incorporates previous Interagency Coordination Committee (ICC), under the leadership of the Minister of Public Health & Population. The HSSCC had in depth discussion on this application in addition to updated cMYP in its meetings held on April 2nd and June 23rd, 2008. Furthermore, the updated documents were shared with the HSSCC members who endorsed the application on Sept. 22nd, 2008. HSSCC is chaired by H.E. Minister of Public Health & Population with the membership of EPI , Ministry of Planning, Ministry of Finance , Ministry of Information, Ministry of Endowment, Ministry of Youth, development partners including WHO, UNICEF, World Bank, JICA and USAID.

- After thorough deliberations, considering the estimated Pneumococcal disease burden in Yemen, WHO recommendation and the cost implications for introducing the Pneumococcal Vaccine, all members agreed that introduction of the Pneumococcal Vaccines is very essential to decrease child morbidity and mortality in Yemen. Pneumococcal Vaccine introduction was also considered essential to achieve the MDG4 and the National Goals set in the Yemen's Third Five Year Plan for Health Development and Poverty Reduction (2006-2010) which is decreasing infant and child mortality rate. ARIs are considered the second major cause of deaths (19%) among children under five according to the national indicators. It was also stressed that EPI should lay special emphasis as planned for the waste management associated with the PFS Pneumo Vaccine.
- The Comprehensive Multi Year Plan (cMYP) (2006-2010) has been updated to include Pneumococcal Vaccine to be introduced with GAVI support from 1st March 2009. In addition it has been updated with respect to targets coverage figures and past costing and financing for which updated information was available. The costing and financing analysis has thus been revised based on the updated figures. The updated cMYP is synchronized with the 3rd Five Year National Plan for Health Development and Poverty Reduction. The total cost of routine EPI for the period of 2006 to 2010 after introducing the Pneumococcal Vaccine in March 2009 is around US\$ 185,242,795 and the funding gap for routine EPI with secure fund is around US\$ 6.924 million.
- In depth review of the cold chain at all levels has taken place to assess the vaccine storage capacity. Additional cold chain equipment required for accommodating the Pneumococcal Vaccine in PFS is in advance stages of procurement. 13 cold rooms are required for the central and governorate levels. These cold rooms are being procured and will be installed by the end of Nov 2008 according to the Supply Order which has already been issued. The process of cold chain expansion for introducing the Pneumococcal Vaccine started in April 2008 when the VMA was conducted in Sana'a. The cost of these 13 cold rooms (US\$335,962) has been covered form GAVI/ISS fund. 288 refrigerators of different sizes will be distributed from the stock already available in the central store of MOPH&P. Accordingly the cost of the refrigerators are already covered by the government. All the required cold chain equipment will be installed at designated places by the of November 2008.
- Operational plan of action has been prepared and the cost of the activities will be covered form GoY, GAVI grant and other development partners.
- EPI Yemen is making an overall steady progress in increasing the immunization coverage which increased from 85% in 2005 to 87% in 2007 for the 3rd dose of Pentavalent Vaccine. EPI plans to achieve at least 90% coverage at national level with 3rd dose of Pentavalent (DPT-HepB-Hib) as well as with Pneumococcal Vaccine by the year 2010. Big efforts are being exerted to sustain high coverage and reach regional and global target. The integration of health services at service delivery level through use of multipurpose health workers supported by GAVI/HSS are also expected to boost the immunization coverage. The introduction of Pneumococcal Vaccine, along with the planned social mobilization activities will provide an impetus to EPI, as it is bound to greatly increase the public demand for immunization.

2. Signatures of the Government and National Coordinating Bodies

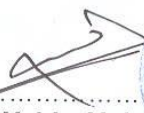
Government and the Inter-Agency Coordinating Committee for Immunisation

The Government of **Yemen** 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 **introducing the Pneumococcal Vaccine into the routine EPI programme activities.**

The Government of **Yemen** 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 N° 6.5 of page 25 of this application shows the amount of support in either supply or cash that is required from the GAVI Alliance. Table N° 6.4 of page 24 of this application shows the Government financial commitment for the procurement of this new vaccine (NVS support only).

Ministry of Health:

Signature: 
 Name: **Dr. Majed Yahia Al-Jonaid**
 Date: **22 Sep 2008**



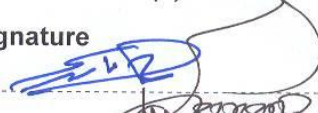
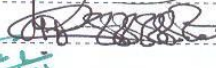




Ministry of Finance:

Signature: 
 Name: **Abdulkarim Al Wali**
 Date: **22 Sep 2008**

National Coordinating Body - Inter-Agency Coordinating Committee for Immunisation:

We the members of the ICC/HSCC¹ met on the **22nd of Sep 2008** 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: (3)

Name/Title	Agency/Organisation	Signature
Dr. Jamal Thabet Nasher	Deputy minister- Planning Sector	
Mr. Ahmed Al Hamati	Deputy minister of information	
Abdoh Al Ammari	Ministry of Finance	
Dr. Arwa Baidar	UNICEF	
Dr. Mona Al Mudhwahi	WHO	
Dr. Abdulhakim Al Kohlani	DG of Disease control	
Dr. Ali Al Mudhwahi	DG of Family Health	
Dr. Mosleh Al Tawali	DG of Planning	
Dr. Mohammed hajar	GAVI Advisor	
Dr. Eissa Mohammed Eissa	EPI Manager	

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

Name: **Dr. Eissa Mohammed Eissa**
 Tel No.: 009671626045
 Fax No.: 009671719807
 Email: eissa_mohd@yahoo.com

Title: **EPI Manager**
 Address: **Yemen-Sana'a, Taiz-Str.**

¹ Inter-agency coordinating committee or Health sector coordinating committee, whichever is applicable.

The Health System Strengthening Coordinating Committee:

Agencies and partners (including Development Partners and CSOs) supporting immunisation services are co-ordinated and organised through a *Health System Strengthening Coordinating Committee* (HSSCC). The HSSCC is responsible for coordinating and guiding the use of the GAVI ISS, NVS and HSS support.

Please provide information about the ICC/HSSCC in your country in the spaces below.

Profile of the HSSCC

Name of the HSSCC: Health System Strengthening Coordinating Committee

Date of constitution of the current HSSCC: 2001, (The committee itself was called ICC and it was changed to HSSCC in 2006 after the expansion of its membership and terms of reference to include health system strengthening objectives in addition to Immunization.

Organisational structure (e.g., sub-committee, stand-alone): HSSCC is a stand-alone committee. A Technical Task Force which is formulated from HSSCC and chaired by the Deputy Minister of Primary Health Care Sector and consists of Family Health Programs including EPI, WHO and UNICEF technical advisor. The Technical Task Force meets more frequently to discuss the technical issues and advise the HSSCC.

Frequency of meetings: Quarterly.

Composition:

Function	Title / Organization	Name
Chair	Minister of public health and population	Dr. Abdul Karim Rasea
Secretary	EPI manager	Dr. Eissa Mohammed Eissa
Members	<ul style="list-style-type: none"> • Undersecretary for PHC / MOPH&P • Undersecretary of Ministry of Planning • Undersecretary of Ministry of Information • Undersecretary of Ministry of Planning • Director General of Finance (MoF) • WHO representative • UNICEF representative • Director General for Family Health • Director General of Disease Surveillance • Director General for Planning • Director General for Health Education • WHO EPI Advisor • National EPI advisor • Japanese Embassy representative • World Bank representative • USAID 	<ul style="list-style-type: none"> • Dr. Majed Yahia Al Junaid • Mr Hesham Sharaf • Mr. Ahmed Al-Hamati • Mr. Ahmed • Mr AbdulKarim AL Wali • Dr. Gholam Popal • Mr Abdu Karimo • Dr. Ali Ahmed Al Mudwahi • Dr Abdel Hakim Al Kohlani • Dr. Mosleh Al-Tawali • Mr. Nasser Al-Absi • Dr. Mohammed Osama Mere • Dr. Mohammed Hajar • Mr. Mansur Al-Shameri • Dr. Afrah Al-Ahmadi • Dr. Iman Awadh

Major functions and responsibilities of the HSSCC:

- Approving all action plans submitted by MOPH&P;
- Supervising implementation of the various activities;
- Advocating for political commitments and financial support;
- Incorporating health issues within the national development plans;
- Putting health issues high on the political agenda;
- Fund raising in support of health initiatives;
- Involving local communities in health interventions;
- Mobilizing resources for the health system;
- Social mobilization and communication related to behaviour change initiatives;
- Supporting the MOPH&P in applying community based initiatives;
- To mobilize and coordinate support from government, partner agencies and others to strengthen EPI;
- To develop a national policy framework for vaccines and immunization and approve addition of new vaccines and technologies to EPI as and when feasible;
- To advocate for increasing commitment to immunization at all levels;
- To advise on national strategic and financial planning;
- To ensure co-ordination among partners and government in planning and implementation of EPI;
- To assess the EPI program activities;
- To develop and monitor EPI communication and social mobilization plan;
- To provide MOPH&P with EPI related technical advices.

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

- Involvement of HSSCC members in the field visits to all levels other than the centre in order to assist in monitoring and evaluating the implementation of EPI activities;
- To take the lead in the inter-sectoral activities working on the social determinants of health issues;
- Involvement of most of the ICC members in the HSSCC to get better understanding, integration and efficient participation.

3. Immunisation Programme Data

Please complete the tables below, using data from available sources. Please identify the source of the data, and the date. Where possible use the most recent data, and attach the source document.

- Please refer to the Comprehensive Multi-Year Plan for Immunisation (or equivalent plan), and attach a complete copy (with an executive summary) as DOCUMENT NUMBER (1)
- Please refer to the two most recent annual WHO/UNICEF Joint Reporting Forms on Vaccine Preventable Diseases and attach them as DOCUMENT NUMBERS (2)
- Please refer to Health Sector Strategy documents, budgetary documents, and other reports, surveys etc, as appropriate.

Table 3.1: Basic facts for the year 2008 (the most recent; specify dates of data provided)

	Figure	Date	Source
Total population	22,313,151	2008	Projections based on the 2004 Census, Central Statistic Organization (CSO)
Infant mortality rate (per 1000)	75/1000	2003	Yemen Family Health Survey – Principal Report (2003)
Surviving Infants*	744,049	2008	The Final Results of the 2004 Census, Central Statistic Office (CSO) & Statistics Dept, EPI
GNI per capita (US\$)	\$US 600	2006	World Bank, World Development Indicators Database
Percentage of GDP allocated to Health	5 %	2007	Selected Health Indicators, 2007 (MOPH&P), based on Central Statistic Office (CSO) information
Percentage of Government expenditure on Health	5.7 %	2007	Selected Health Indicators, 2007 (MOPH&P), based on Central Statistic Office (CSO) information

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

Please provide some additional information on the planning and budgeting context in your country:

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

- In regard to the Health Sector, the relevant guiding reference is the «Third Five Year Plan for Health Development and Poverty Reduction 2006 – 2010».

- In regard to EPI, the relevant guiding reference is the comprehensive Multi Year Plan (cMYP) for the period 2006 – 2010 Updated in September 2008.

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

The original cMYP and the updated cMYP are aligned with the “Third Five Year Plan for Health and Poverty Reduction 2006 – 2010”.

Please indicate the national planning budgeting cycle for health

It is a five-year interval (2006-2010).

Please indicate the national planning cycle for immunisation

It is a five-year interval (2006-2010).

Table 3.2: Current Vaccination Schedule: Traditional, New Vaccines and Vitamin A Supplement (refer to cMYP pages)

Vaccine (do not use trade name)	Ages of administration (by routine immunisation services)	Indicate by an "x" if given in:		Comments
		Entire country	Only part of the country	
BCG	At birth	X		
OPV	At birth,W6,W10,W14	X		
Pentavalent (DTP-HepB+Hib)	W6,W10,W14	X		Was introduced into EPI in 2005
Measles	9m , 18m	X		
TT	1 st contact, after one month, after six months, after one year, after one year	X		Targeting Women between 15-45 years of age
Vitamin A	6m,12m	x		

Table 3.3: Trends of immunisation coverage and disease burden (as per last two annual WHO/UNICEF Joint Reporting Form on Vaccine Preventable Diseases)

Trends of immunisation coverage (in percentage)					Vaccine preventable disease burden			
Vaccine		Reported		Survey		Disease	Number of reported cases	
		2006	2007	200...	200...		2006	2007
BCG		62	64			Tuberculosis*	8738	8427
DTP	DTP1	92	94			Diphtheria	36	10
	DTP3	85	87			Pertussis	3476	2760
Polio 3		85	87			Polio	1	0
Measles (first dose)		68	74			Measles	8079	13
TT2+ (Pregnant women)		20	17			NN Tetanus	101	48
Hib3		85	87			Hib **	2	0
Yellow Fever		NA	NA			Yellow fever	0	0
HepB3		85	87			hepB sero-prevalence*	ND	ND
Vit A supplement	Mothers (<6 weeks post-delivery)	ND	ND					
	Infants (>6 months)	47	61					

* If available

** Note: JRF asks for Hib meningitis

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

Table 3.4: Baseline and annual targets (refer to cMYP pages)

Number	Baseline and targets								
	2007 (as per JRF)	Base year 2008	Year 1 2009	Year 2 2010	Year 3 2011	Year 4 2012	Year 5 2013	Year 6 2014	Year 7 2015
Births	779,849	804,203	829,664	855,753	882,662	910,417	939,045	968,572	999,029
Infants' deaths	58,332	60,154	62,326	64,341	66,363	68,387	70,410	72,425	74,428
Surviving infants	721,517	744,049	767,338	791,412	816,299	842,030	868,635	896,148	924,601
Pregnant women	779,849	804,203	829,664	855,753	882,662	910,417	939,045	968,572	999,029
Target population vaccinated with BCG	495,996	603,152	663,732	684,602	750,263	773,854	845,140	871,715	899,126
BCG coverage*	64%	75%	80%	80%	85%	85%	90%	90%	90%
Target population vaccinated with OPV3	630,404	647,323	675,257	712,271	734,669	757,827	781,771	806,533	832,141
OPV3 coverage**	87%	87%	88%	90%	90%	90%	90	90	90
Target population vaccinated with DTP3***	630,404	647,323	675,257	712,271	734,669	757,827	781,771	806,533	832,141
DTP3 coverage**	87%	87%	88%	90%	90%	90%	90	90	90
Target population vaccinated with DTP1***	681,180	706,847	728,971	751,841	775,484	799,928	825,203	851,340	878,371
Wastage ¹ rate in base-year and planned thereafter	7%	10%	10%	10%	10%	10%	10%	10%	10%
Target population vaccinated with 3 rd dose of Pneumococcal	0	0	560,157	712,271	734,669	757,827	781,771	806,533	832,141
Pneumococcal Coverage**	0	0	73%	90%	90%	90%	90%	90%	90%
Target population vaccinated with 1 st dose of Pneumococcal	0	0	606,197	751,841	775,484	799,928	825,203	851,340	878,371
Wastage ¹ rate in base-year and planned thereafter	0	0	5%	5%	5%	5%	5%	5%	5%
Target population vaccinated with 1 st dose of Measles	532,757	669,644	690,604	712,271	734,669	757,827	781,771	806,533	832,141
Target population vaccinated with 2 nd dose of Measles	273,381	334,822	383,669	435,276	489,779	589,421	651,476	716,918	785,911
Measles coverage**	90%	90%	90%	90%	90%	90%	90%	90%	90%
Pregnant women vaccinated with TT+	136,377	321,681	373,349	427,876	485,464	546,250	610,379	678,001	699,320
TT+ coverage****	17%	40%	45%	50%	55%	60%	65%	70%	70%
Vit A supplement	Mothers (<6 weeks from delivery)	ND	ND	ND	ND	ND	ND	ND	ND
	Infants (>6 months)	442,184	446,429	537,137	633,129	734,669	757,827	781,771	806,533
Annual DTP Drop out rate [(DTP1-DTP3)/DTP1] x100	7%	8%	7%	5%	5%	5%	5%	5%	5%
Annual Measles Drop out rate (for countries applying for YF)									

* Number of infants vaccinated out of total births

** Number of infants vaccinated out of surviving infants

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

**** Number of pregnant women vaccinated with TT+ out of total pregnant women

Table 3.5: Summary of current and future immunisation budget:

Cost category	Estimated costs per annum in US (,000)						
	Base year 2005	Year 1 2006	Year 2 2007	Year 3 2008	Year 4 2009	Year 5 2010	Total 2006-2010
Routine Recurrent Cost							
Vaccines (routine vaccines only)	7,106,834	8,073,256	7,560,671	10,011,849	23,226,248	22,402,498	71,274,521
Traditional vaccines	766,254	819,531	941,916	990,861	837,937	895,372	4,485,617
New and underused vaccines	6,340,581	7,253,725	6,618,755	9,020,988	22,388,311	21,507,126	66,788,905
Injection supplies	708,667	799,218	900,590	980,892	1,190,481	1,302,491	5,173,671
Personnel	5,454,864	7,235,333	14,417,996	16,118,459	16,440,828	16,769,645	70,982,262
Salaries of full-time NIP health workers (immunisation specific)	4,604,160	6,168,103	12,354,958	13,659,020	13,932,201	14,210,845	60,325,127
Per-diem for outreach vaccinators / mobile teams/Per-diem for supervision and monitoring*	850,704	1,067,230	2,063,038	2,459,439	2,508,627	2,558,800	10,657,135
Transportation	678,320	793,886	1,051,621	1,153,860	1,242,843	1,258,454	5,500,663
Maintenance and overheads	3,957,997	4,062,310	4,273,050	4,480,337	4,662,330	4,270,156	21,748,183
Training	180,000	204,000	228,888	244,078	487,094	276,020	1,440,081
Social mobilisation and IEC	241,036	474,300	509,796	557,134	627,811	651,408	2,820,449
Disease surveillance	200,000	229,500	260,100	275,914	297,669	320,183	1,383,366
Program management	140,000	158,100	156,060	175,099	202,307	215,296	906,862
Other	0	0	0	0	12,989	0	12,989
Subtotal Recurrent Costs	18,667,719	22,029,903	29,358,772	33,997,623	48,390,599	47,466,151	181,243,048
Routine Capital Costs							
Vehicles	80,000	0	1,256,387	84,897	21,649	0	1,362,932
Cold chain equipment	1,154,600	405,195	435,928	348,076	30,308	70,661	1,290,168
Other capital equipment	0	9,180	331,992	212,242	232,723	220,816	1,006,952
Subtotal Capital Costs	1,234,600	414,375	2,024,306	645,214	284,680	291,477	3,660,053
Campaigns							
Polio	17,263,725	5,774,134	4,515,406	2,677,877	0	0	12,967,416
Measles	0	8,735,659	932,768	0	0	0	9,668,427
MNT campaigns (CBAW)	139,035	0	0	3,154,298	6,404,245	0	9,558,543
MR campaign	0	0	0	0	16,522,557	641,028	17,163,584
Td	0	0	0	0	0	0	0
Campaign Costs	17,402,760	14,509,792	5,448,174	5,832,175	22,926,802	641,028	49,357,971
Subtotal of Shared Health Systems Cost	48,000	48,960	70,539	71,950	73,389	74,857	339,695
GRAND TOTAL	37,353,079	37,003,031	36,901,791	40,546,962	71,675,470	48,473,512	234,600,766

* The cost of the per diem includes per diem for the outreach activities in addition to the per diem of supervision and monitoring of EPI activities. Note: The New Vaccines include, Pentavalent (DPT-HepB-Hib) for 2006-2010, Pneumococcal for 3 quarters of 2009 and all 2010, MMR for 2009 & 2010

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

Table 3.6: Summary of current and future financing and sources of funds (or refer to cMYP)

Cost category	Funding source	Estimated financing per annum in US\$ (,000)						
		Base year 2005	Year 1 2006	Year 2 2007	Year 3 2008	Year 4 2009	Year 5 2010	Total 2006-2010
Routine Recurrent Cost								
Vaccines (routine vaccines only)		7,815,502	8,872,473	8,461,261	10,992,741	22,724,891	22,064,246	80,931,113
Traditional Vaccines	GoY	766,254	819,531	941,916	990,861	837,937	895,372	5,251,870
New and underused vaccines	GoY & GAVI	6,340,581	7,253,725	6,618,755	9,020,988	20,748,202	20,171,954	70,154,204
Injection supplies	GoY, GAVI & WB	708,667	799,218	900,590	980,892	1,138,752	996,920	5,525,039
Personnel		5,454,864	7,235,333	14,287,997	15,988,458	16,300,828	16,629,645	75,897,125
Salaries of full-time NIP health workers (immunization specific)	GoY	4,604,160	6,168,103	12,354,958	13,659,020	13,932,201	14,210,845	64,929,287
Per-diems for outreach vaccinators / mobile teams/Per-diems for supervision and monitoring*	GoY, GAVI, UNICEF, WHO, WB	850,704	1,067,230	1,933,039	2,329,438	2,368,627	2,418,800	10,967,838
Transportation	GoY, GAVI, WB, UNICEF, WHO	606,560	786,787	856,962	981,737	1,112,843	620,000	4,964,889
Maintenance and overhead	GoY	3,772,417	3,873,018	4,077,944	4,283,398	4,475,111	4,180,156	24,662,044
Short-term training	GoY, GAVI, UNICEF, WHO, WB	180,000	204,000	180,000	244,078	487,094	195,000	1,490,172
IEC/social mobilization	GoY, UNICEF, WHO	241,036	474,300	350,000	355,000	627,811	410,000	2,458,147
Disease Surveillance	GoY, UNICEF, WHO	200,000	229,500	260,100	275,914	297,669	200,000	1,463,183
Programme Management	GoY, GAVI, WB, UNICEF, WHO	140,000	158,100	145,000	175,099	202,307	215,296	1,035,802
Other routine recurrent costs	GAVI	0	0	0	0	12,989	0	12,989
Routine Capital Cost								
Vehicles	GoY, WB, others	80,000	0	1,256,387	84,897	21,649	0	1,442,933
Cold chain equipment	GoY, WB, UNICEF, WHO & others	1,154,600	405,195	435,928	348,076	30,308	70,661	2,444,768
Other capital equipment	GoY, GAVI, WHO, UNICEF	0	9,180	316,386	212,242	230,486	52,148	820,442
Campaigns								
Polio	GoY, UNICEF, WHO, others	15,413,725	5,774,134	4,515,406	939,487	0	0	26,642,751
Measles	GoY, WB, UNICEF, WHO, JICA	0	8,735,659	932,768	0	0	0	9,668,427
MNT campaigns (CBAW)	GoY, UNICEF, WB	139,035	0	0	2,343,177	1,526,138	0	4,008,349
MR campaign	-	0	0	0	0	0	0	0
Td	-	0	0	0	0	0	0	0
Subtotal Optional	GoY	48,000	48,960	70,539	71,950	73,389	74,857	387,695
GRAND TOTAL		35,245,738	36,806,639	36,146,677	37,296,254	48,123,512	44,712,008	238,330,830

* The cost of the per diem includes per diem for the outreach activities in addition to the per diem of supervision and monitoring of EPI activities

Cost Category	2005								
	Available Financing	Total Probable Financing	Government	GAVI - Vaccine Fund	UNICEF	JICA	WHO	World Bank.IDA	Others (USAID-ADRA, Qatar, UAE , SA etc)
Routine Recurrent Cost	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
Vaccines (routine vaccines only)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Traditional vaccines	\$ 766,254	\$ -	\$ 766,254	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
New and underused vaccines	\$ 6,340,581	\$ -	\$ -	\$ 6,340,581	\$ -	\$ -	\$ -	\$ -	\$ -
Injection supplies	\$ 708,667	\$ -	\$ 299,900	\$ 246,664	\$ -	\$ -	\$ -	\$ 162,103	\$ -
Personnel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Salaries of full-time NIP health workers (immuniz	\$ 4,604,160	\$ -	\$ 4,604,160	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Per-diem for outreach vaccinators/mobile team	\$ 546,240	\$ -	\$ 136,240	\$ 200,000	\$ 60,000	\$ -	\$ 60,000	\$ 90,000	\$ -
Per-diem for supervision and monitoring	\$ 304,464	\$ -	\$ 224,464	\$ 40,000	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ -
Transportation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed site and vaccine delivery	\$ 104,948	\$ -	\$ 104,948	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Outreach activities	\$ 501,612	\$ -	\$ 170,612	\$ 176,000	\$ 40,000	\$ -	\$ 40,000	\$ 75,000	\$ -
Maintenance and overhead	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cold chain maintenance and overheads	\$ 337,260	\$ -	\$ 297,260	\$ 20,000	\$ 10,000	\$ -	\$ 10,000	\$ -	\$ -
Maintenance of other capital equipment	\$ 2,020	\$ -	\$ 2,020	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building overheads (electricity, water...)	\$ 3,433,137	\$ -	\$ 3,433,137	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Short-term training	\$ 180,000	\$ -	\$ 50,000	\$ 80,000	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ -
IEC/social mobilization	\$ 241,036	\$ -	\$ 76,036	\$ 60,000	\$ 90,000	\$ -	\$ 15,000	\$ -	\$ -
Disease surveillance	\$ 200,000	\$ -	\$ 60,000	\$ -	\$ 20,000	\$ -	\$ 120,000	\$ -	\$ -
Programme management	\$ 140,000	\$ -	\$ 65,000	\$ 30,000	\$ 30,000	\$ -	\$ 15,000	\$ -	\$ -
Other routine recurrent costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Recurrent Costs	\$ 18,410,379	\$ -	\$ 10,290,031	\$ 7,193,245	\$ 295,000	\$ -	\$ 305,000	\$ 327,103	\$ -
Routine Capital Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vehicles	\$ 80,000	\$ -	\$ 40,000	\$ -	\$ -	\$ 40,000	\$ -	\$ -	\$ -
Cold chain equipment	\$ 1,154,600	\$ -	\$ 650,000	\$ -	\$ 100,000	\$ -	\$ 50,000	\$ 354,600	\$ -
Other capital equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Capital Costs	\$ 1,234,600	\$ -	\$ 690,000	\$ -	\$ 100,000	\$ 40,000	\$ 50,000	\$ 354,600	\$ -
Campaigns	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Polio	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vaccines	\$ 3,763,725	\$ -	\$ -	\$ -	\$ 3,763,725	\$ -	\$ -	\$ -	\$ -
Other operational costs	\$ 11,650,000	\$ -	\$ 4,300,000	\$ -	\$ 450,000	\$ -	\$ 6,700,000	\$ -	\$ 200,000
Measles	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vaccines and supplies	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other operational costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MNT campaigns	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vaccines and supplies	\$ 34,035	\$ -	\$ 34,035	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other operational costs	\$ 105,000	\$ -	\$ 25,000	\$ -	\$ 80,000	\$ -	\$ -	\$ -	\$ -
Subtotal Campaign Costs	\$ 15,552,760	\$ -	\$ 4,359,035	\$ -	\$ 4,293,725	\$ -	\$ 6,700,000	\$ -	\$ 200,000
Other Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Shared personnel costs	\$ 48,000	\$ -	\$ 48,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Optional	\$ 48,000	\$ -	\$ 48,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GRAND TOTAL	\$ 35,245,738	\$ -	\$ 15,387,065	\$ 7,193,245	\$ 4,688,725	\$ 40,000	\$ 7,055,000	\$ 681,703	\$ 200,000
Routine Services (Fixed and Outreach)	\$ 19,692,979	\$ -	\$ 11,028,031	\$ 7,193,245	\$ 395,000	\$ 40,000	\$ 355,000	\$ 681,703	\$ -
Supplemental Immunization Activities	\$ 15,552,760	\$ -	\$ 4,359,035	\$ -	\$ 4,293,725	\$ -	\$ 6,700,000	\$ -	\$ 200,000

Cost Category	2006								
	Total Secured Financing	Total Probable Financing	Government	GAVI - Vaccine Fund	UNICEF	JICA	WHO	World Bank.IDA	Others (USAID-ADRA, Qatar, UAE , SA etc)
Routine Recurrent Cost	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
Vaccines (routine vaccines only)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Traditional vaccines	\$ 819,531	\$ -	\$ 819,531	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
New and underused vaccines	\$ 7,253,725	\$ -	\$ 725,372	\$ 6,528,352	\$ -	\$ -	\$ -	\$ -	\$ -
Injection supplies	\$ 799,218	\$ -	\$ 409,218	\$ 190,000	\$ -	\$ -	\$ -	\$ 200,000	\$ -
Personnel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Salaries of full-time NIP health workers (immuniz	\$ 6,168,103	\$ -	\$ 6,168,103	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Per-diem for outreach vaccinators/mobile team	\$ 753,005	\$ -	\$ 356,022	\$ 136,983	\$ 60,000	\$ -	\$ 70,000	\$ 130,000	\$ -
Per-diem for supervision and monitoring	\$ 314,225	\$ -	\$ 137,357	\$ 126,868	\$ 30,000	\$ -	\$ 20,000	\$ -	\$ -
Transportation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed site and vaccine delivery	\$ 173,149	\$ -	\$ 173,149	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Outreach activities	\$ 613,638	\$ -	\$ 277,874	\$ 85,764	\$ 55,000	\$ -	\$ 65,000	\$ 130,000	\$ -
Maintenance and overhead	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cold chain maintenance and overheads	\$ 368,240	\$ -	\$ 218,240	\$ 90,000	\$ 40,000	\$ -	\$ 20,000	\$ -	\$ -
Maintenance of other capital equipment	\$ 2,978	\$ -	\$ 2,978	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building overheads (electricity, water...)	\$ 3,501,800	\$ -	\$ 3,501,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Short-term training	\$ 204,000	\$ -	\$ 99,000	\$ 20,000	\$ 30,000	\$ -	\$ 20,000	\$ 35,000	\$ -
IEC/social mobilization	\$ 474,300	\$ -	\$ 354,300	\$ 55,000	\$ 50,000	\$ -	\$ 15,000	\$ -	\$ -
Disease surveillance	\$ 229,500	\$ -	\$ 64,500	\$ -	\$ 25,000	\$ -	\$ 140,000	\$ -	\$ -
Programme management	\$ 158,100	\$ -	\$ 74,000	\$ 39,100	\$ 30,000	\$ -	\$ 15,000	\$ -	\$ -
Other routine recurrent costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Recurrent Costs	\$ 21,833,512	\$ -	\$ 13,381,445	\$ 7,272,067	\$ 320,000	\$ -	\$ 365,000	\$ 495,000	\$ -
Routine Capital Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vehicles	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cold chain equipment	\$ 405,195	\$ -	\$ 105,195	\$ -	\$ -	\$ -	\$ -	\$ 300,000	\$ -
Other capital equipment	\$ 9,180	\$ -	\$ 9,180	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Capital Costs	\$ 414,375	\$ -	\$ 114,375	\$ -	\$ -	\$ -	\$ -	\$ 300,000	\$ -
Campaigns	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Polio	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vaccines	\$ 979,428	\$ -	\$ -	\$ -	\$ 979,428	\$ -	\$ -	\$ -	\$ -
Other operational costs	\$ 4,794,706	\$ -	\$ 1,200,000	\$ -	\$ -	\$ -	\$ 3,594,706	\$ -	\$ -
Measles	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vaccines and supplies	\$ 3,786,844	\$ -	\$ 1,846,844	\$ -	\$ 1,200,000	\$ 740,000	\$ -	\$ -	\$ -
Other operational costs	\$ 4,948,815	\$ -	\$ 2,368,815	\$ -	\$ 2,100,000	\$ -	\$ 80,000	\$ 400,000	\$ -
MNT campaigns	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vaccines and supplies	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other operational costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Campaign Costs	\$ 14,509,792	\$ -	\$ 5,415,659	\$ -	\$ 4,279,428	\$ 740,000	\$ 3,674,706	\$ 400,000	\$ -
Other Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Shared personnel costs	\$ 48,960	\$ -	\$ 48,960	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Optional	\$ 48,960	\$ -	\$ 48,960	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GRAND TOTAL	\$ 36,806,639	\$ -	\$ 18,960,438	\$ 7,272,067	\$ 4,599,428	\$ 740,000	\$ 4,039,706	\$ 1,195,000	\$ -
Routine Services (Fixed and Outreach)	\$ 22,296,847	\$ -	\$ 13,544,780	\$ 7,272,067	\$ 320,000	\$ -	\$ 365,000	\$ 795,000	\$ -
Supplemental Immunization Activities	\$ 14,509,792	\$ -	\$ 5,415,659	\$ -	\$ 4,279,428	\$ 740,000	\$ 3,674,706	\$ 400,000	\$ -

Cost Category	2007									
	Total Secured Financing	Total Probable Financing	Government	GAVI - Vaccine Fund	UNICEF	JICA	WHO	World Bank.IDA	Others (USAID-ADRA, Qatar, UAE, SA etc)	
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	
Routine Recurrent Cost										
Vaccines (routine vaccines only)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Traditional vaccines	\$ 941,916	\$ -	\$ 941,916	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
New and underused vaccines	\$ 6,618,755	\$ -	\$ 1,325,355	\$ 5,293,400	\$ -	\$ -	\$ -	\$ -	\$ -	
Injection supplies	\$ 900,590	\$ -	\$ 287,990	\$ 364,600	\$ -	\$ -	\$ -	\$ 248,000	\$ -	
Personnel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Salaries of full-time NIP health workers (immuniz)	\$ 12,354,958	\$ -	\$ 12,354,958	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Per-diem for outreach vaccinators/mobile team	\$ 1,421,112	\$ 130,000	\$ 1,146,112	\$ 150,000	\$ 60,000	\$ -	\$ 70,000	\$ 125,000	\$ -	
Per-diem for supervision and monitoring	\$ 511,927	\$ -	\$ 351,927	\$ 100,000	\$ 36,000	\$ -	\$ 25,000	\$ -	\$ -	
Transportation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Fixed site and vaccine delivery	\$ 235,450	\$ -	\$ 180,450	\$ 25,000	\$ 30,000	\$ -	\$ -	\$ -	\$ -	
Outreach activities	\$ 621,512	\$ 120,000	\$ 396,512	\$ 100,000	\$ 55,000	\$ -	\$ 65,000	\$ 125,000	\$ -	
Maintenance and overhead	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Cold chain maintenance and overheads	\$ 405,569	\$ -	\$ 265,569	\$ 90,000	\$ 30,000	\$ -	\$ 20,000	\$ -	\$ -	
Maintenance of other capital equipment	\$ 100,539	\$ -	\$ 100,539	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Building overheads (electricity, water...)	\$ 3,571,836	\$ -	\$ 3,571,836	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Short-term training	\$ 180,000	\$ -	\$ 100,000	\$ 30,000	\$ 30,000	\$ -	\$ 20,000	\$ -	\$ -	
IEC/social mobilization	\$ 350,000	\$ -	\$ 260,000	\$ 20,000	\$ 50,000	\$ -	\$ 20,000	\$ -	\$ -	
Disease surveillance	\$ 260,100	\$ -	\$ 100,100	\$ -	\$ 20,000	\$ -	\$ 140,000	\$ -	\$ -	
Programme management	\$ 145,000	\$ -	\$ 75,000	\$ 20,000	\$ 30,000	\$ -	\$ 20,000	\$ -	\$ -	
Other routine recurrent costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Subtotal Recurrent Costs	\$ 28,619,263	\$ 250,000	\$ 21,458,263	\$ 6,193,000	\$ 340,000	\$ -	\$ 380,000	\$ 498,000	\$ -	
Routine Capital Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Vehicles	\$ 1,256,387	\$ -	\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ 200,000	\$ 656,387	
Cold chain equipment	\$ 435,928	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 435,928	
Other capital equipment	\$ 316,386	\$ -	\$ 276,386	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ -	
Subtotal Capital Costs	\$ 2,008,701	\$ -	\$ 676,386	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ 200,000	\$ 1,092,315	
Campaigns	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Polio	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Vaccines	\$ 753,406	\$ -	\$ -	\$ -	\$ 753,406	\$ -	\$ -	\$ -	\$ -	
Other operational costs	\$ 3,762,000	\$ -	\$ 940,500	\$ -	\$ 2,821,500	\$ -	\$ -	\$ -	\$ -	
Measles	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Vaccines and supplies	\$ 399,818	\$ -	\$ 29,818	\$ -	\$ -	\$ 370,000	\$ -	\$ -	\$ -	
Other operational costs	\$ 532,950	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 532,950	\$ -	\$ -	
MNT campaigns	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Vaccines and supplies	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other operational costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Subtotal Campaign Costs	\$ 5,448,174	\$ -	\$ 970,318	\$ -	\$ 3,574,906	\$ 370,000	\$ 532,950	\$ -	\$ -	
Other Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Shared personnel costs	\$ 70,539	\$ -	\$ 70,539	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Subtotal Other Costs	\$ 70,539	\$ -	\$ 70,539	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
GRAND TOTAL	\$ 36,146,677	\$ 250,000	\$ 23,175,506	\$ 6,193,000	\$ 3,934,906	\$ 370,000	\$ 932,950	\$ 698,000	\$ 1,092,315	
Routine Services (Fixed and Outreach)	\$ 30,698,503	\$ 250,000	\$ 22,205,188	\$ 6,193,000	\$ 360,000	\$ -	\$ 400,000	\$ 698,000	\$ 1,092,315	
Supplemental Immunization Activities	\$ 5,448,174	\$ -	\$ 970,318	\$ -	\$ 3,574,906	\$ 370,000	\$ 532,950	\$ -	\$ -	

Cost Category	2008									
	Total Secured Financing	Total Probable Financing	Government	GAVI - Vaccine Fund	UNICEF	JICA	WHO	World Bank.IDA	Others (USAID-ADRA, Qatar, UAE, SA etc)	
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	
Routine Recurrent Cost										
Vaccines (routine vaccines only)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Traditional vaccines	\$ 990,861	\$ -	\$ 990,861	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
New and underused vaccines	\$ 9,020,988	\$ -	\$ 2,706,296	\$ 6,314,691	\$ -	\$ -	\$ -	\$ -	\$ -	
Injection supplies	\$ 980,892	\$ -	\$ 714,392	\$ 266,500	\$ -	\$ -	\$ -	\$ -	\$ -	
Personnel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Salaries of full-time NIP health workers (immuniz)	\$ 13,659,020	\$ -	\$ 13,659,020	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Per-diem for outreach vaccinators/mobile team	\$ 1,553,602	\$ 130,000	\$ 900,000	\$ 150,000	\$ 60,000	\$ -	\$ 70,000	\$ 503,602	\$ -	
Per-diem for supervision and monitoring	\$ 775,836	\$ -	\$ 330,000	\$ 35,000	\$ 380,836	\$ -	\$ 30,000	\$ -	\$ -	
Transportation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Fixed site and vaccine delivery	\$ 335,391	\$ -	\$ 136,361	\$ -	\$ 99,030	\$ -	\$ -	\$ 100,000	\$ -	
Outreach activities	\$ 646,346	\$ 165,000	\$ 446,346	\$ -	\$ 100,000	\$ -	\$ 65,000	\$ 200,000	\$ -	
Maintenance and overhead	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Cold chain maintenance and overheads	\$ 448,488	\$ -	\$ 448,488	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Maintenance of other capital equipment	\$ 191,638	\$ -	\$ 191,638	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Building overheads (electricity, water...)	\$ 3,643,272	\$ -	\$ 3,643,272	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Short-term training	\$ 244,078	\$ -	\$ 179,078	\$ -	\$ 35,000	\$ -	\$ 30,000	\$ -	\$ -	
IEC/social mobilization	\$ 355,000	\$ -	\$ 275,000	\$ -	\$ 60,000	\$ -	\$ 20,000	\$ -	\$ -	
Disease surveillance	\$ 275,914	\$ -	\$ 30,000	\$ -	\$ 25,000	\$ -	\$ 220,914	\$ -	\$ -	
Programme management	\$ 175,099	\$ -	\$ 110,099	\$ -	\$ 40,000	\$ -	\$ 25,000	\$ -	\$ -	
Other routine recurrent costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Subtotal Recurrent Costs	\$ 33,296,426	\$ 295,000	\$ 24,760,852	\$ 6,766,191	\$ 799,866	\$ -	\$ 460,914	\$ 803,602	\$ -	
Routine Capital Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Vehicles	\$ 84,897	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 84,897	
Cold chain equipment	\$ 348,076	\$ -	\$ 348,076	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other capital equipment	\$ 212,242	\$ -	\$ 212,242	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Subtotal Capital Costs	\$ 645,215	\$ -	\$ 212,242	\$ 348,076	\$ -	\$ -	\$ -	\$ -	\$ 84,897	
Campaigns	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Polio	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Vaccines	\$ 439,487	\$ -	\$ -	\$ -	\$ 439,487	\$ -	\$ -	\$ -	\$ -	
Other operational costs	\$ 500,000	\$ 1,738,390	\$ 1,038,390	\$ -	\$ 700,000	\$ -	\$ -	\$ 500,000	\$ -	
Measles	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Vaccines and supplies	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other operational costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
MNT campaigns	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Vaccines and supplies	\$ 763,069	\$ -	\$ 763,069	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other operational costs	\$ 1,580,108	\$ -	\$ 280,108	\$ -	\$ 500,000	\$ -	\$ -	\$ 800,000	\$ -	
Subtotal Campaign Costs	\$ 3,282,664	\$ 1,738,390	\$ 2,081,567	\$ -	\$ 1,639,487	\$ -	\$ -	\$ 1,300,000	\$ -	
Other Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Shared personnel costs	\$ 71,950	\$ -	\$ 71,950	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Subtotal Other Costs	\$ 71,950	\$ -	\$ 71,950	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
GRAND TOTAL	\$ 37,296,254	\$ 2,033,390	\$ 27,126,611	\$ 7,114,268	\$ 2,439,353	\$ -	\$ 460,914	\$ 2,103,602	\$ 84,897	
Routine Services (Fixed and Outreach)	\$ 34,013,591	\$ 295,000	\$ 25,045,044	\$ 7,114,268	\$ 799,866	\$ -	\$ 460,914	\$ 803,602	\$ 84,897	
Supplemental Immunization Activities	\$ 3,282,664	\$ 1,738,390	\$ 2,081,567	\$ -	\$ 1,639,487	\$ -	\$ -	\$ 1,300,000	\$ -	

2009										
Cost Category	Total Secured Financing	Total Probable Financing	Government	GAVI - Vaccine Fund	UNICEF	JICA	WHO	World Bank.IDA	Others (USAID-ADRA, Qatar, UAE , SA etc)	
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
Routine Recurrent Cost										
Vaccines (routine vaccines only)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Traditional vaccines	\$ 837,937	\$ -	\$ 837,937	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
New and underused vaccines	\$ 20,748,202	\$ -	\$ 4,123,534	\$ 16,624,668	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Injection supplies	\$ 1,138,752	\$ -	\$ 779,710	\$ 359,042	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Personnel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Salaries of full-time NIP health workers (immuniz	\$ 13,932,201	\$ -	\$ 13,932,201	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Per-diem for outreach vaccinators/mobile team	\$ 1,577,274	\$ 140,000	\$ 1,000,000	\$ 577,274	\$ 70,000	\$ -	\$ 70,000	\$ -	\$ -	\$ -
Per-diem for supervision and monitoring	\$ 791,353	\$ -	\$ 350,000	\$ 100,000	\$ 311,353	\$ -	\$ 30,000	\$ -	\$ -	\$ -
Transportation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed site and vaccine delivery	\$ 353,793	\$ -	\$ 135,000	\$ 25,000	\$ 193,793	\$ -	\$ -	\$ -	\$ -	\$ -
Outreach activities	\$ 759,050	\$ 130,000	\$ 407,266	\$ 351,784	\$ 65,000	\$ -	\$ 65,000	\$ -	\$ -	\$ -
Maintenance and overhead	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cold chain maintenance and overheads	\$ 558,973	\$ -	\$ 368,973	\$ 90,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance of other capital equipment	\$ 200,000	\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building overheads (electricity, water...)	\$ 3,716,138	\$ -	\$ 3,716,138	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Short-term training	\$ 487,094	\$ -	\$ 125,000	\$ 302,094	\$ 35,000	\$ -	\$ 25,000	\$ -	\$ -	\$ -
IEC/social mobilization	\$ 627,811	\$ -	\$ 300,000	\$ 247,811	\$ 60,000	\$ -	\$ 20,000	\$ -	\$ -	\$ -
Disease surveillance	\$ 297,669	\$ -	\$ 35,000	\$ 102,669	\$ 25,000	\$ -	\$ 135,000	\$ -	\$ -	\$ -
Programme management	\$ 202,307	\$ -	\$ 90,000	\$ 47,307	\$ 40,000	\$ -	\$ 25,000	\$ -	\$ -	\$ -
Other routine recurrent costs	\$ 12,989	\$ -	\$ -	\$ 12,989	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Recurrent Costs	\$ 46,241,542	\$ 270,000	\$ 26,400,758	\$ 18,840,638	\$ 900,146	\$ -	\$ 370,000	\$ -	\$ -	\$ -
Routine Capital Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vehicles	\$ 21,649	\$ -	\$ -	\$ 21,649	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cold chain equipment	\$ 30,308	\$ -	\$ 30,308	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other capital equipment	\$ 230,486	\$ -	\$ 216,486	\$ 14,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Capital Costs	\$ 282,443	\$ -	\$ 246,794	\$ 35,649	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Campaigns	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Polio	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vaccines	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other operational costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Measles	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vaccines and supplies	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other operational costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MNT campaigns	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vaccines and supplies	\$ 1,526,138	\$ -	\$ 1,526,138	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other operational costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Campaign Costs	\$ 1,526,138	\$ -	\$ 1,526,138	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Shared personnel costs	\$ 73,389	\$ -	\$ 73,389	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Optional	\$ 73,389	\$ -	\$ 73,389	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GRAND TOTAL	\$ 48,123,512	\$ 270,000	\$ 28,247,079	\$ 18,876,287	\$ 900,146	\$ -	\$ 370,000	\$ -	\$ -	\$ -
Routine Services (Fixed and Outreach Supplemental Immunization Activities)	\$ 46,597,375	\$ 270,000	\$ 26,720,942	\$ 18,876,287	\$ 900,146	\$ -	\$ 370,000	\$ -	\$ -	\$ -

2010										
Cost Category	Total Secured Financing	Total Probable Financing	Government	GAVI - Vaccine Fund	UNICEF	JICA	WHO	World Bank.IDA	Others (USAID-ADRA, Qatar, UAE , SA etc)	
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
Routine Recurrent Cost										
Vaccines (routine vaccines only)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Traditional vaccines	\$ 895,372	\$ -	\$ 895,372	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
New and underused vaccines	\$ 20,171,954	\$ -	\$ 4,238,907	\$ 15,933,047	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Injection supplies	\$ 996,920	\$ -	\$ 688,780	\$ 308,140	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Personnel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Salaries of full-time NIP health workers (immuniz	\$ 14,210,845	\$ -	\$ 14,210,845	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Per-diem for outreach vaccinators/mobile team	\$ 1,611,620	\$ 140,000	\$ 1,100,000	\$ 511,620	\$ 70,000	\$ -	\$ 70,000	\$ -	\$ -	\$ -
Per-diem for supervision and monitoring	\$ 807,180	\$ -	\$ 375,000	\$ 362,180	\$ 40,000	\$ -	\$ 30,000	\$ -	\$ -	\$ -
Transportation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed site and vaccine delivery	\$ 170,000	\$ -	\$ 170,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Outreach activities	\$ 450,000	\$ 380,000	\$ 450,000	\$ 250,000	\$ 65,000	\$ -	\$ 65,000	\$ -	\$ -	\$ -
Maintenance and overhead	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cold chain maintenance and overheads	\$ 9,323	\$ -	\$ 9,323	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance of other capital equipment	\$ 380,372	\$ -	\$ 380,372	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building overheads (electricity, water...)	\$ 3,790,461	\$ -	\$ 3,790,461	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Short-term training	\$ 195,000	\$ -	\$ 135,000	\$ -	\$ 35,000	\$ -	\$ 25,000	\$ -	\$ -	\$ -
IEC/social mobilization	\$ 410,000	\$ -	\$ 330,000	\$ -	\$ 60,000	\$ -	\$ 20,000	\$ -	\$ -	\$ -
Disease surveillance	\$ 200,000	\$ -	\$ 40,000	\$ -	\$ 25,000	\$ -	\$ 135,000	\$ -	\$ -	\$ -
Programme management	\$ 215,296	\$ -	\$ 100,000	\$ 50,296	\$ 40,000	\$ -	\$ 25,000	\$ -	\$ -	\$ -
Other routine recurrent costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Recurrent Costs	\$ 44,514,342	\$ 520,000	\$ 26,914,059	\$ 17,415,283	\$ 335,000	\$ -	\$ 370,000	\$ -	\$ -	\$ -
Routine Capital Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vehicles	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cold chain equipment	\$ 70,661	\$ -	\$ -	\$ 70,661	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other capital equipment	\$ 52,148	\$ -	\$ -	\$ 52,148	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Capital Costs	\$ 122,809	\$ -	\$ -	\$ 122,809	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Campaigns	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Polio	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vaccines	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other operational costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Measles	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vaccines and supplies	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other operational costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MNT campaigns	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vaccines and supplies	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other operational costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Campaign Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Shared personnel costs	\$ 74,857	\$ -	\$ 74,857	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Optional	\$ 74,857	\$ -	\$ 74,857	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GRAND TOTAL	\$ 44,712,008	\$ 520,000	\$ 26,988,916	\$ 17,538,092	\$ 335,000	\$ -	\$ 370,000	\$ -	\$ -	\$ -
Routine Services (Fixed and Outreach Supplemental Immunization Activities)	\$ 44,712,008	\$ 520,000	\$ 26,988,916	\$ 17,538,092	\$ 335,000	\$ -	\$ 370,000	\$ -	\$ -	\$ -

6. New and Under-Used Vaccines (NVS)

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

Government of Yemen has been fully financing the cost of traditional vaccines since 2002. The first co-financing vaccine was in 2005. The Pentavalent Vaccine has been introduced to routine EPI through GAVI support in 2005. Although MOPH&P was not required to co-finance this vaccine in the way it's done, GoY voluntarily approved co-finance policy with a gradual annual increase of 10%. The GoY annual share of co-financing has thus been incrementally increased on annual basis by 10% until it takes over the total cost. The contribution of the GoY for the year 2007 has been transferred to UNICEF- Copenhagen to cover the 30% of the total cost of the Pentavalent Vaccine.

Government interest and commitment:

National objectives of the cMYP include addition of new vaccines to EPI according to their feasibility.

The government has sent a letter of interest to GAVI to express its interest to introduce the Pneumococcal Vaccine as a 2nd co-financed vaccine. The commitment of the government will be \$ 0.15 per dose based on the co-financing policy and US\$ 0.20 per dose beyond 2010.

A separate budget line for Pneumococcal Vaccine has been created in addition to the **separate budget line for Pentavalent Vaccine**.

The introduction of the new vaccine and its financial implication has been discussed thoroughly by HSSCC and was approved accordingly. The HSSCC reviewed the IRC decision letter and participated in developing amendments to the application. The final version with the requested detailed analysis is included within the current amendments and has been approved by the committee.

Sustainability of financial plan:

The commitment of GoY for co-financing is expressed in the official instructions of the Minister of Finance to the budgetary sector in the Ministry of Finance approving the contribution and instruction to include the share in the coming years' budget.

The MOPH&P will work with the MoF on increasing the government's share through increment annual increases in allocated budgets for the newly introduced vaccine.

The introduction of the Pneumococcal Vaccine will be incorporated into the routine EPI nationwide in March 2009. GoY is also committed to undertake all preparation activities to introduce the vaccine including the cold chain expansion in a timely manner.

Justification for introduction of Pneumococcal Vaccine:

- 1- The introduction of the vaccine is in line and would assist significantly in achieving the national goals of the "Third Five Year Plan for Health Development and Poverty Reduction 2006-2010", which aim at decreasing infant and child mortality rates. ARI is considered the second cause of deaths (19%) among children.
- 2- The introduction of the Pneumococcal Vaccine would assist the ongoing efforts to board on track in achieving MDG4, which Yemen is committed to.
- 3- The high burden of Pneumonia diseases:
In 2004, MOPH&P in collaboration with WHO, established a sentinel surveillance system of 6 hospitals in order to monitor meningitis cases and identify the causes. Analysis of the lab result of CSF samples in these sites shows that 45%, 39%, 45% of the cases caused by *S. Pneumoniae* in 2005, 2006 and 2007 respectively. In average, 44% of meningitis cases were caused by *S. Pneumoniae* which indicated the high burden of the *S. Pneumoniae*. More than

33% of the cases occurred in children less than one year. Pneumonia and Sepsis have been incorporated into the sentinel system in mid 2007.

Please summarise the cold chain capacity and readiness to accommodate new vaccines, stating how the cold chain expansion (if required) will be financed, and when it will be in place. Please use attached excel annex 2a (Tab 6) on the Cold Chain. Please indicate the additional cost, if capacity is not available and the source of funding to close the gap

GoY is committed to any financial implications incurred due to expansion of the cold chain. The MOPH&P in collaboration with its development partners (UNICEF, WB, GCC countries and WHO) renewed and expanded the cold chain at all levels in 2004 through 2007. Over 1355 refrigerators of various capacities were distributed during this period. The MOPH&P now possess additional 858 new refrigerators of various types and capacities in the central stores of MOPH&P planned for the new health facilities and for the increased requirements of cold chain due to the introduction of the new vaccines.

The cold chain capacity has been reviewed and calculated at all levels. According to the national EPI's data and the vaccine management assessment conducted during the WHO mission in April 2008, additional 13 cold rooms of different sizes and a total of 288 refrigerators for different levels are required to accommodate the Pneumococcal Vaccine in PFS, as highlighted in the below table.

There are 163 districts with cold chain capacity gap which need 245 (ILRs) to close the gap. A distribution list of the refrigerators has been prepared for all these districts.

Cold chain capacity at the health facility level:

Expansion of the cold chain at the health facility level took place in the last few years when around 1355 refrigerators were distributed for the newly constructed health facilities and replacement of the old refrigerators. Nevertheless, MOPH&P completed recently an estimation of cold chain capacity at the health facility level. The estimation showed that the amount of refrigerators existing in the MOPH&P main stores will be more than enough to close any gap in the volume.

As a general rule, each health facility is supplied with at least one refrigerator for vaccine storage. The health facilities having increased client load, mainly in large cities are provided with the required number of refrigerators. The net vaccine storage volume of these refrigerators, mostly ILRs ranges from 55 Litres to 100 Litres. Based on monthly supply and one month's buffer stock, on an average each health facility requires approximately 5 litters of vaccine storage space at positive temperature even after introduction of Pneumococcal Vaccine. Therefore no shortage of vaccine storage space at health facility level is anticipated.

- Regarding the needed capacity with freezers, there is no need for any expansion.

The detailed plan for Cold Chain expansion is placed at section VI of the attached updated cMYP.

Table 6.1.N: Capacity and cost (for positive storage), at the national level.

		Formula	2009*	2010	2011	2012	2013
A	Annual positive volume requirement, including new vaccine (litres)		203,332	209,474	85,638	88,222	90,892
B	Annual positive capacity, including new vaccine (litres)	#	31,250	31,250	31,250	31,250	31,250
C	Estimated minimum number of shipments per year required for the actual cold chain capacity	A / B	6.51	6.70	2.74	2.82	2.91
D	Number of consignments / shipments per year	<i>Based on national vaccine shipment plan</i>	4	4	4	4	4
E	Gap (if any)	((A / D) - B)	19,583	21,119	- 9,840	- 9,195	- 8,527
F	Estimated cost for expansion	US \$	\$77,776				

* Despite the fact that the new vaccine will not be introduced before the 1st quarter of 2009, the mentioned figures cover both the traditional and new vaccine for a whole year. This estimation is important as a preparation for the coming years.

The following table (6.1.G) shows that there is a slight gap at the governorate level.

Table 6.1.G: Capacity and cost (for positive storage) at governorate level:

		Formula	2009	2010	2011	2012	2013
A	Annual positive volume requirement, including new vaccine (litres)		213,557	219,773	95,948	98,821	102,289
B	Annual positive capacity, including new vaccine (litres)	#	23,265	23,265	23,265	23,265	23,265
C	Estimated minimum number of shipments per year required for the actual cold chain capacity	A / B	9.18	9.45	4.12	4.25	4.40
D	Number of consignments / shipments per year	<i>Based on national vaccine shipment plan</i>	4	4	4	4	4
E	Gap (if any)	((A / D) - B)	30,124	31,678	722	1,440	2,307
F	Estimated cost for expansion	US \$	\$307,143				

		Ibb	Abyen	Sana'a city	Al_byada'a	AL_jawf	Al_Hodydah	Al_Dhale'a	Al_Mahweet	AL_Mahrah	Taiz	Hajah
A	Annual positive volume requirement, including new vaccine (litres)	22,353	4,644	20,788	5,953	4,942	23,475	5,217	5,310	1,106	25,149	15,921
B	Existing net positive cold chain capacity (litres)	1,980	990	990	660	528	1,848	2,112	1,650	660	1,848	990
C	Estimated minimum number of shipments per year required for the actual cold chain capacity	11.29	4.69	21.00	9.02	9.36	12.70	2.47	3.22	1.68	13.61	16.08
D	Number of deliveries / shipments per year	4	4	4	4	4	4	4	4	4	4	4
E	Gap in litres	3,608	171	4,207	828	707	4,021	-808	-322	-384	4,439	2,990
F	Estimated additional cost of cold chain	\$27,481	\$2,043	\$27,481	\$9,674	\$8,262	\$27,481	\$0	\$0	\$0	\$27,481	\$27,481

		Moklla	Say'on	Damar	Shabwah	Sa'adah	Sana'a Govt.	Raymah	Aden	Amaran	Lahj	Ma'areb
A	Annual positive volume requirement, including new vaccine (litres)	6,708	4,459	14,445	4,935	7,718	9,417	4,279	6,616	9,782	7,718	2,621
B	Existing net positive cold chain capacity (litres)	400	660	1,980	528	660	1,020	495	296	990	1,188	792
C	Estimated minimum number of shipments per year required for the actual cold chain capacity	16.77	6.76	7.30	9.35	11.69	9.23	8.64	22.35	9.88	6.50	3.31
D	Number of deliveries / shipments proer year	4	4	4	4	4	4	4	4	4	4	4
E	Gap in litres	1,277	455	1,631	706	1,270	1,334	575	1,358	1,456	742	-137
F	Estimated additional cost of cold chain	\$19,081	\$5,328	\$25,381	\$8,240	\$19,081	\$19,081	\$6,715	\$19,081	\$19,081	\$8,694	\$0

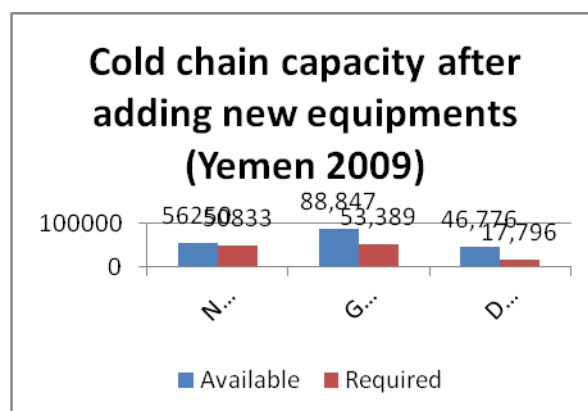
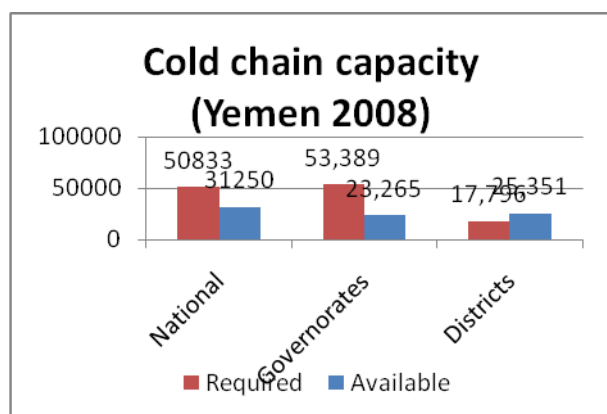
Table 6.1.D: Capacity and cost (for positive storage) at district level:

		Formula	Year 1 2009	Year 2 2010	Year 3 2011	Year 4 2012	Year 5 2013
A	Annual positive volume requirement, including new vaccine (litres)		213,557	219,773	95,948	98,821	102,289
B	Annual positive capacity, including new vaccine (litres)	#	25,351	25,351	25,351	25,351	25,351
C	Estimated minimum number of shipments per year required for the actual cold chain capacity	A / B	8.42	8.67	3.78	3.90	4.03
D	Number of consignments / shipments per year	Based on national vaccine shipment plan	12	12	12	12	12
E	Gap (if any)*	((A / D) - B)	-7,554	-7,036	-17,355	-17,115	-16,826
F	Estimated cost for expansion	US \$	\$272,647				

The current situation of storage capacity shows that there is a shortage of capacity at all levels even at the district level when individual districts are considered. See Figure (1)..

Figure (1): shows the gap due to analysis of the aggregate data of the cold chain capacity per quarter for the central and governorate level and per month for the district level:

Figure (2): shows the cold chain capacity after adding the required equipment for introduction the Pneumo vaccine:



By installing the cold rooms at the central and governorate levels and distributing the refrigerators which already existing in the main store of MOPH&P for the governorate and district level, there will be no capacity gap and Pneumo Vaccine can be efficiently accommodated. See Figure (2).

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

GoY is committed to financial sustainability of EPI and appreciates the co-financing policy of GAVI, MOPH&P arranged with the Ministry of Finance to pay the co-financing share of GoY regarding Pentavalent and Pneumococcal Vaccine in 1st quarter of 2009.

The following steps and operational procedures have been taken by GoY to introduce and sustain the availability of fund for the Pneumococcal Vaccine cost:

- 1- In 2007, MOPH&P sent a letter of interest to GAVI to introduce the Pneumococcal Vaccine into EPI program nationwide.
- 2- Soon following the letter of interest, MOPH&P started to advocate for introduction the Pneumo Vaccine and securing the required fund through a series of meetings with Ministry of Finance (MoF) and Ministry of Planning and International Cooperation (MOPIC) and through the periodic HSSCC meetings..
- 3- The draft of the updated cMYP has been shared with the MoF and MoPIC in addition to the fund required annually to be paid by the Government.
- 4- MoF approved the entire budget required annually to introduce the Pneumococcal Vaccine according to GAVI's co-finance policy.
- 5- HSSCC played an essential role through its approval and advocacy on the introduction of Pneumo Vaccine especially that MoF and MoPIC are represented in the HSSCC in addition to the development partners especially WHO as a technical partner which provides a strong justification in advocating for the new vaccine.
- 6- Using the experience of Pentavalent Vaccine, The GoY has already created a separate budget line for supporting the government's share in the Pneumococcal Vaccine's cost.
- 7- The GoY has already approved the budget for Pneumococcal and allocated the fund required for 2009 since it was planned to be introduced in 2008. Therefore, MOPH&P is now ready to pay its share of the vaccine required in 2009.

Sustainability of fund in case of GAVI support would have changed or stopped:

The GoY is giving high priority to children's health according to the national priorities of the Third Five Year Plan for Health Development and Poverty Reduction (2006-2010). Decreasing infant and child mortality and morbidity rates is a major challenge highly addressed in the political agenda. Consequently, GOY is increasing its health budget gradually. In 2007, GOY decided to add annually US\$ 10 million to health budget to cover operational costs. The GoY is committed to the current GAVI co-financing policy and will imply with the new rules which might be developed/updated after the year 2010.

For the sake of sustainability, in case of cessation of GAVI support, GoY considers the preventive health programmes as a top national priority. Despite the fact that such cessation will represent a financial burden of the government's budget it will a vital issue to cope with from the available resources. It is expected that GAVI will give enough time for the country to be prepared for any change in the co-financing policy of the new vaccine. GoY will exert all efforts to provide the fund needed to secure the whole amount of the Pneumo Vaccine's cost. GoY will mobilize as much as it can from its own resources and will accelerate all efforts to mobilize resources from the developmental partners.

Sustainability of financial plan:

In terms of self-sufficiency, the current financial situation is satisfactory. The government's contribution to EPI has been increasing over the past years and the MOPH&P together with the MoF has been able to guarantee the increased resources for EPI and its activities. The following are facts and examples of self-sufficiency actions:

- The contribution of the government to the total cost of EPI has increased by 30% in 2008. In case of the Pentavalent Vaccine, the contribution of the government has been rising over the past three years based on the 10% annual increment agreement between GAVI and the GoY. Currently the GoY share is 30% (US\$ 1,285,741.54) which has been transferred to UNICEF, Copenhagen to cover the cost of government share of Pentavalent Vaccine.(Annex 3)
- The Ministry of Public Health & Population has covered the cost of the vaccines, for the first time, for the sub-national MNT campaign held in 2008. The 1st phase of the campaign targeted more than 900.000 females between 15 and 45 years.
- The MOPH&P has also invested in capital costs of EPI. A building of three stories has been constructed with a warehouse from the government resources. The cost of the building and the construction has reached to US\$ 600,000 and the equipment costs amounted to US\$ 100.000.
- GOY increased the operational budget for health by US\$ 10 million annually. Through this budget and active participation of the communities more health posts are established which also act as a base for immunization services for the adjoining localities.

In terms of mobilization and use of adequate resources, the MOPH&P has been able to increase the resources devoted to EPI activities and efficient use of its resources. The following are facts and examples, which illustrate the MOPH&P efforts to mobilize and guarantee adequate resources:

- Due to the consistent follow up and the increasing importance of EPI activities, a budget line has been established in the annual MOPH&P budget for Pentavalent Vaccine. This line illustrates the government contribution and GAVI contribution. In addition, the overall government's budget has a specified financial allotment/contribution to the pentavalent, which illustrates the fact of the government's mobilization of resources. It is worth to mention that the annual governmental budget passes by the parliament for approval and is endorsed by a Presidential Decree in 2007.
- Another aspect of adequacy of resources is the existence of a multi-year financial plan endorsed by the HSSCC, which demonstrates the expected funds to be spent and their sources.
- The government's contribution to the Pentavalent Vaccine has been fulfilled over the past three years and 30% share amounting to US\$ 1,285,741.54 has been paid on October of 2007.
- To mobilize additional resources for the EPI, MOPH&P has applied to GAVI to receive additional funds in windows of opportunities. The applications for these resources have been successful and the MOPH&P received the approval of ISS under Phase II: US\$ 2.5 million and HSS: US\$ 6.3 million, subject to achievement of the targets.
- The recurrent costs of health facilities' budgets have greatly increased in 2007, by five-folds and in terms of operation, EPI activities constitute the major portion.
- Over the past months, there has been an increasing attention to EPI and its activities. For example, significant resources to EPI activities were allocated; US \$ 7 million from different sources including government were allocated to Measles Campaign in 2006. In addition, WB and other development partners have shown interest to contribute to a package of integrated services including EPI. The WHO continues supporting EPI

activities through its regular budget which has significantly increased in the current biennium. JICA have expressed their interest to continue supporting EPI.

- There are 858 new refrigerators in stock, which are to expand vaccine storage capacity where required and to replace the existing refrigerators when needed. MOPH&P is procuring 13 cold rooms for Central and Governorates level, to be installed in Nov 2008. GAVI support would play a vital role through the ISS reward and complemented by other resources.

In terms of reliability of resources, the MOPH&P allocated resources for EPI are guaranteed and the following are supporting evidence:

- The EPI resources are reliable and as explained above there are established budget-lines in the annual MOPH&P and the overall government budget for vaccines.
- The total recurrent EPI budget has reached in 2007 to a total of one billion and quarter YR (approx. 6.28 million US\$) . This amount does not include the capital costs.
- The annual EPI budget is part of the MOPH&P and the budget passes by the parliament for approval and is endorsed by a Presidential Decree
- As another aspect of reliability of resources, the procurement of vaccines is through international qualified agencies via the UNICEF.

GoY is committed to all preparation activities to introduce the new vaccine including:

1. Expanding the cold chain capacity as mentioned above.
2. Training of all health staff on the new vaccine: Part of the GAVI grant will be used particularly for this activity. Guidelines will be developed for this purpose.
3. The same current vaccinators will give the new vaccine in addition to the other routine vaccination. Therefore, there is no need to recruit additional staff. Moreover, most of the health staff are trained on the tasks related to introducing the new vaccine at both health facility and outreach levels.
4. Pneumococcal Vaccine will be distributed to all health facilities through the same policy of distribution of the other routine vaccines. GoY will bear the additional cost of distributing the vaccine. The current cost of distributing the vaccine is around \$ 90,000, but the GoY allocated around \$ 150,000 for vaccine distribution to all health facilities. With the current HSS activities focused on functional integration, available resources allocated for distribution will be efficiently utilized through integrated distribution and logistics.
5. GoY started the process of printing the registries, reports, tally sheets, log books and the immunization cards. All the printing materials were reviewed and amended to cope with introducing the Pneumococcal Vaccine. The cost of the printing material is around \$ 250,000 and is paid by the government from the annual operational cost of EPI.

Immunization safety and waste management:

In 2003 through 2005 all districts and HFs were provided with injection safety equipment (AD syringes, reconstitution syringes and safety boxes). GAVI supported the GoY for three years from 2002 to 2004, and then the GoY expressed its commitment to sustain securing all the safety injection equipment. GoY allocates annual budget for the routine vaccine and the injection safety equipment.

With the planned introduction of Pneumococcal Vaccine in form of Prefilled Syringe in March 2009, there is going to be tremendous increase in the volume of the injection waste. Despite that, EPI has rich experience in dealing with injection safety and waste management routinely and through big campaign as in the national measles campaign in

2006 when more than 9 million children were vaccinated in 10 days. EPI has planned to lay special emphasis on this issue during the training of the EPI staff regarding this new vaccine introduction.

The available Pneumococcal Vaccine which is in pre-filled glass syringe needs to be properly disposed of.

Currently waste management project funded by GAVI and supported by CEHA is being implemented in YEMEN with Ministry of Water and Environment and MOPH&P in seven big hospitals in seven governorates. This project is a pilot and EPI will benefit from this project to replicate or apply the recommendations which will be suitable for the other health facilities.

MOPH&P is also discussing with the partners the possibility of under taking a campaign for Pneumococcal Vaccine in late 2009 together with the planed Measles/MR campaign. EPI is also working with the national team in charge of implementing current GAVI-CEHA project on health care waste in YEMEN regarding the waste management of the proposed Pneumococcal campaign.

The issue of injection safety and waste management has been given due importance in the plan of action of introduction of Pneumococcal Vaccine according to the following activities:

- 1- Develop a national guideline on the use of the pre-filled syringe vaccine and its proper disposal.
- 2- Develop a plan for training all Health Workers and Supervisors and incinerator operators.
- 3- Tailored training undertaken for all HWs, supervisors and incinerator operators as described above.
- 4- Monitoring of injection safety and proper waste management.
- 5- Each district to develop a detailed waste management plan according to the national guideline including operationalization of the existing incinerators and construction of new ones.
- 6- Periodic monitoring and evaluation of the waste management practices at the services delivery level.

Table 6.2: Assessment of burden of relevant diseases (if available):

Disease	Title of the assessment	Date	Results
S.Pneumococcal meningitis	Sentinel sites in 7 hospitals	2006	(7) positive CSF cases out of 18 positive cases
S.Pneumococcal meningitis	Sentinel sites in 7 hospitals	2007	(21) positive CSF cases out of 26 positive case

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

Lessons Learned	Solutions / Action Points
1- In spite that cold chain capacity has been updated, some gaps appeared in few districts.	1- Net cold chain capacity calculated at all levels for each governorate and each district. Districts' staff training is ongoing to better calculate the storage capacity.
2- Rare case of accident freezing took place in some HF.	2- Training is focusing on avoiding the accidental freezing. Freeze watch to be provided in every refrigerator.
3- Only one staff in every HF was trained on the new vaccine, and some were not able to convey the information	3- Training is involving more than one staff in every HF especially with the newly started integrated training within the HSS program.
4- Some staff continued using the old reporting and registry forms after introducing the new vaccine.	4- Printing material to be completed enough time before the introduction. Training should focus on using the new forms and reports

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

- Pneumococcal 7-valent (pre-filled syringe) liquid, with 3 doses schedule.
- Pneumococcal 10-valent liquid vaccine, with 1-2 doses per vial, (ones available Yemen will shift to it).

First Preference Vaccine

As reported in the cMYP, the country plans to introduce Pneumococcal 7-valent (*antigen*) vaccinations, using Pneumococcal 7-valent vaccine in PFS , in 3 *doses per child, liquid* form, which is the only presentation available now.

Please refer to the excel spreadsheet Annex 2a or Annex 2b (for Rotavirus and Pneumo vaccines) and proceed as follows:

- Please complete the “Country Specifications” Table in Tab 1 of Annex 2a or Annex 2b, using the data available in the other Tabs: Tab 3 for the commodities price list, Tab 5 for the vaccine wastage factor and Tab 4 for the minimum co-financing levels per dose².
- Please summarise the list of specifications of the vaccines and the related vaccination programme in Table 6.3 below, using the population data (from Table 3.4 of this application) and the price list and co-financing levels (in Tables B, C, and D of Annex 2a or Annex 2b).
- Then please copy the data from Annex 2a or 2b (Tab “Support Requested”) into Tables 6.4 and 6.5 (below) to summarize the support requested, and co-financed by GAVI and by the country.
- Please submit the electronic version of the excel spreadsheets Annex 2a or 2b together with the application

Table 6.3: Specifications of vaccinations with new vaccine

Vaccine: Pneumococcal	Use data in:		Year 1 2009	Year 2 2010	Year 3 2011	Year 4 2012	Year 5 2013	Year 6 2014	Year 7 2015
Number of children to be vaccinated with the third dose	Table 3.4	#	560,157	712,271	734,669	757,827	781,771	806,533	832,141
Target immunization coverage with the third dose	Table 3.4	#	73%	90%	90%	90%	90%	90%	90%
Number of children to be vaccinated with the first dose	Table 3.4	#	606,197	751,841	775,484	799,928	825,203	851,340	878,371
Estimated vaccine wastage factor	Annex 2a or 2b Table E - tab 5	#	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Country co-financing per dose *	Annex 2a or 2b Table D - tab 4	\$	\$0.15	\$0.15	\$0.20	\$0.20	\$0.20	\$0.20	\$0.20

* Total price pre dose includes vaccine cost, plus freight, supplies, insurance, fees, etc

Table 6.4: Portion of supply to be co-financed by the country (and cost estimate, US\$)

		Year 1 2009	Year 2 2010	Year 3 2011	Year 4 2012	Year 5 2013	Year 6 2014	Year 7 2015
Number of vaccine doses	#	115,500	120,100	158,800	163,800	167,300	172,600	178,100
Number of AD syringes	#							
Number of re-constitution syringes	#							
Number of safety boxes	#	1,300	1,350	1,775	1,825	1,875	1,925	2,000
Total value to be co-financed by country	\$	358,500	372,500	492,500	508,000	524,000	540,500	558,000

² Table D1 should be used for the first vaccine, with tables D2 and D3 for the second and third vaccine co-financed by the country

Table 6.5: Portion of supply to be procured by the GAVI Alliance (and cost estimate, US\$)

		Year 1 2009	Year 2 2010	Year 3 2011	Year 4 2012	Year 5 2013	Year 6 2014	Year 7 2015
Number of vaccine doses	#	2,271,500	2,363,000	2,302,700	2,375,300	2,452,100	2,529,800	2,610,100
Number of AD syringes	#							
Number of re-constitution syringes	#							
Number of safety boxes	#	25,225	26,250	25,575	26,375	27,225	28,100	28,975
Total value to be co-financed by GAVI (Minimum)	\$	7,045,000	7,329,000	7,142,000	7,367,000	7,678,500	7,922,000	8,173,500
Total value to be co-financed by GAVI (Maximum)	\$	11,723,500	12,195,500	11,966,500	12,343,500	12,734,000	13,137,500	13,694,000

- Please refer to http://www.unicef.org/supply/index_gavi.html for the most recent GAVI Alliance Vaccine Product Selection Menu, and review the GAVI Alliance NVS Support Country Guidelines to identify the appropriate country category, and the minimum country co-financing level for each category.

Second Preference Vaccine

If the first preference of vaccine is in limited supply or currently not available, please indicate below the alternative vaccine presentation

- Though as per GAVI guidelines there is no second preference vaccine, GOY will like to swith over to PCV10 as soon as it can be provided by GAVI

- Please complete tables 6.3 – 6.4 for the new vaccine presentation
- Please complete the excel spreadsheets Annex 2a or Annex 2b for the new vaccine presentation and submit them alongside the application.

Procurement and Management of New and Under-Used Vaccines

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

The expected GAVI's support for the introduction of Pneumococcal Vaccine will be utilized to provide the needed quantities with a co-finance by the government. The operational cost to introduce the new vaccine will be covered by the government budget together with the available ISS fund in addition to the GAVI's grant for introducing the new vaccine. Development partners are also willing to assist in this regard.

Building on the current situation, Yemen will continue procuring the vaccine and the injection supplies through UNICEF including the new vaccine. Accordingly, MOPH&P will transfer its share of the cost of Pneumococcal Vaccine co-financing to UNICEF in the 1st quarter of Nov to finalize the procurement process through the WHO pre-qualified manufacturers.

GoY will identify the schedule of the shipments of the whole amount of the vaccine according to an annual forecast shared with UNICEF.

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

- Yemen will continue with the same mechanism.
- The functions of the National Regulatory Authority (as evaluated by WHO) to show they comply with WHO requirements for procurement of vaccines and supply of assured quality.

No alternate mechanism of procurement is suggested by GOY.

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

A plan of action has been prepared to introduce the vaccine smoothly: Cold chain capacity is being given high priority; therefore two cold rooms for the central stores in addition to 11 cold rooms for the governorates are being procured. The formats of EPI including the monthly reports, tally sheets and the immunization cards & registries were amended and printed. The printed materials were also distributed to the service delivery level in Apr 2008.. An advocacy central workshop will be conducted at the central level for policy makers, development partners, pediatricians to introduce the new vaccines. Another workshop for the governorate level will be conducted for the same purpose. Training courses for all vaccinators and supervisors will be conducted in one month time following the conduction of TOT at the central and governorate levels. Vaccines will be distributed to districts & HFs 15 days before the introduction date which will be decided according to the arrival of the new vaccines.

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

Only the New Vaccine introduction grant will be requested to be transferred to the national account identified in the attached banking form. While GAVI share of the cost of the vaccine is requested to be transferred to UNICEF to purchase the needed amount of doses.

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

Recently, MOPH&P received a written approval from the MoF for the co-finance according to GAVI's policy. The share of government of Yemen of the cost of Pneumococcal Vaccines will be paid to UNICEF to purchase the vaccines. MOPH&P and MoF will be responsible of transferring the money to UNICEF.

MOPH&P initiates the process through developing an annual plan for the requested vaccines for routine EPI. The UNICEF provides the MOPH&P with the total cost of the vaccines based on the current vaccine price. An official request is sent to MOF to replenish the account of MOPH&P which in its turn transfers the money to UNICEF.

Moreover, MOF is a member of the HSSCC, which endorses the annual progress report in which projection of the financing of the vaccines will be updated.

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

The coverage of the new vaccine will be monitored according to the existing system for other administered vaccines. Monthly reports are sent from the HFs to the district health office which is responsible of verifying them before they are sent to the governorate health office. The governorate health office is the official channel for approving the data before being sent to the central level. The final results according to the completeness and timeliness of reporting are monitored at all levels and issued by EPI at central level. Written feedback to the lower levels takes place at least quarterly.

New and Under-Used Vaccine Introduction Grant

Table 6.5: calculation of lump-sum

Year of New Vaccine introduction	N° of births (from table 3.4)	Share per birth in US	Total in US
2009	829,664	0.30	248,900

Please indicate in the tables below how the one-time Introduction Grant³ will be used to support the costs of vaccine introduction and critical pre-introduction activities (refer to the cMYP).

Table 6.6: Cost (and finance) to introduce the first preference vaccine (US)

Cost Category	Full needs for new vaccine introduction	Funded with new vaccine introduction grant	Source of fund to close the gap
	US	US	
Training	250,000	210,000	GoY
Social Mobilization, IEC and Advocacy	40,000	20,000	UNICEF
Cold Chain Equipment & Maintenance**	335,000	-	GAVI/ISS
Vehicles and Transportation	30,000	-	GoY
Programme Management	15,000	6,900	GoY
Surveillance and Monitoring	20,000	-	WHO
Human Resources	-	-	-
Waste Management***	25,000	12,000	GAVI/ISS
Technical assistance	-	-	-
Printing materials (EPI reports, forms and child card)**	250,000	-	GoY
Total	965,000	248,900	

**It was already done and even distributed to some field locations with considering the Pneumococcal Vaccine in August 2008. The GoY paid for it from the regular budget of EPI.

***Waste Management activities include: maintenance of the available incinerators, IEC materials for HWs and community, main topic in the training and TV spot.

➤ Please complete the banking form (annex 1) if required

Please complete a table similar to the one above for the second choice vaccine (if relevant) and title it **Table 6.7: Cost (and finance) to introduce the second preference vaccine (US)**

³ The Grant will be based on a maximum award of \$0.30 per infant in the birth cohort with a minimum starting grant award of \$100,000

7. Additional comments and recommendations from the National Coordinating Body (ICC/HSSC)

The HSSCC highly appreciates the continuous support provided by GAVI to strengthen EPI and Health systems in Yemen.

It also highly appreciates the GOY commitment to provide all the required financial support to EPI including co-financing of the Pentavalent Vaccine and readiness to co- finance Pneumococcal vaccine.

Based on the advise of the Technical Task force HSSCC strongly recommend for the introduction of Pneumococcal Vaccine into routine EPI, availing available GAVI support , according to the plan outlined in this application.

HSSCC urges EPI to make best use of GAVI support and make all efforts to achieve the laid targets. It also reiterates its support for EPI through monitoring its progress on quarterly basis and providing any needed political support and arranging any required technical support.

8. Documents required for each type of support

Type of Support	Document	DOCUMENT NUMBER	Duration *
ALL	Comprehensive Multi-Year Plan (cMYP)	1	2006-2010
ALL	WHO / UNICEF Joint Reporting Form (last two)	2	2006 & 2007
ALL	Minutes of the three most recent ICC/HSSCC meetings	3	
ALL	Plan of action for introduction of the new vaccine	4	
ALL	Endorsed minutes of the ICC/HSSCC meeting where the GAVI proposal was discussed	5	
ALL	ICC/HSSCC work plan for the forthcoming 12 months	6	
	Distribution list of cold chain equipment needed.	7 D&G	
New and Under-used Vaccines	The tool used for calculates the capacity and equipment needed for National & Governments level (EPI_Log_Forecasting_Tool_2008) and for district level (Cold_Chain_Capacity_Planning_Tool_2008).	8	

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



Banking Form

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

Name of Institution: (Account Holder)	Ministry of Public Health & Population		
Address:	Alhasabah St., Sana'a		
City – Country:	Sana'a, Republic of Yemen		
Telephone No.:	+ 967 1 252217	Fax No.:	+ 967 1 252234
Amount in USD:	(To be filled in by GAVI Secretariat)	Currency of the bank account:	US Dollars
For credit to: Bank account's title	Inter-Agency Coordination Committee (ICC)		
Bank account No.:	201234		
At: Bank's name	Cooperative & Agricultural Credit Bank (CAC)		

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

YES () NO ()

By whom is the account audited?

Ministry of Finance

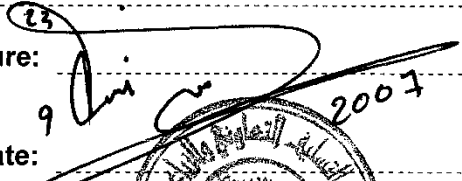
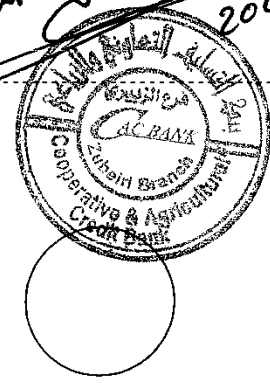
Signature of Government's authorizing official:

By signing below, the authorizing official confirms that the bank account mentioned above is known to the Ministry of Finance and is under the oversight of the Auditor General.

Name:	Dr. Magid Y. Al-Gunaid	Seal:
Title:	Deputy Minister for Primary Health Care	
Signature:		
Date:	23 September, 2007	
Address and Phone number	Ministry of Public Health & Population + 967 252243	
Fax number	+ 967 252234	
Email address:	maljonaid@hotmail.com	

FINANCIAL INSTITUTION	CORRESPONDENT BANK (In the United States)
Bank Name: Cooperative & Agricultural Credit Bank (CACBank)	The Bank Of New York New York, U.S.A
Branch Name: Zubairi Branch	Swift Code: IRVTUS3N
Address: Sana'a, Zubairi St. Close to Al-Jumhuri Hospital	
City – Country: Sana'a, Yemen	
Swift code: CACBYESA	
Telex code: 2544 CACBNKYE	
ABA No.:	
Telephone No.: +9671482781/3/4	
Fax No.: +9671298731	
Bank Contact Name and Phone Number:	

I certify that the account No. 201234 is held by *Ministry of Public Health & Population* at this banking institution.

The account is to be signed jointly by at least 2 (number of signatories) of the following authorized signatories:	Name of bank's authorizing official:
1 Name: Prof. Abdulkareem Yahia Rasea Title: Minister of Public Health & Population	Signature: 
2 Name: Dr. Maged Yahia Al-Gonaid Title: Deputy Minister for Primary Health Care	Date: 9 June 2007
3 Name: Dr. Ali Ahmed Al-Mudhwahi Title: Director General for Family Health	Seal: 
4 Name: Title:	

COVERING LETTER

(To be completed by UNICEF representative on letter-headed paper)

**TO: GAVI Alliance – Secretariat
Att. Dr Julian Lob-Levyt
Executive Secretary
C/o UNICEF
Palais des Nations
CH 1211 Geneva 10
Switzerland**

*On the I received the original of the BANKING DETAILS form,
which is attached.*

I certify that the form does bear the signatures of the following officials:

	Name	Title
Government's authorizing official
Bank's authorizing official

Signature of UNICEF Representative:

Name

Signature

Date