



Global Alliance for Vaccines and Immunisation (GAVI)

APPLICATION FORM FOR COUNTRY PROPOSALS

For Support to:

*Immunisation Services, Injection Safety
and **New and Under-Used Vaccines***

for DPT-HepB-Hib (Pentavalent) vaccine

***Submitted in Feb 2008 by MOPH Islamic Republic of Afghanistan
superseding its earlier proposal submitted in April 2007***

Format Version: Revised 15 July 2007

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.

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GAVI Application for New and Under Used Vaccines

Updating Afghanistan application for Pentavalent (DPT-HepB-Hib), February 2008

Executive Summary

Background of Pentavalent application: The MOPH and ICC in Afghanistan are determined to take all available opportunities to reduce the childhood morbidity and mortality. The availability of Hib vaccine through GAVI support for introduction into the routine EPI services in developing countries has caught the interest of both MOPH and its partners in EPI.

Based on the WHO position paper on Hib Conjugate vaccines¹ and the likely contribution of Hib diseases towards child mortality in Afghanistan, a meeting under the chairmanship of Deputy Health Minister with key MOPH decision makers and WHO and UNICEF was held on November 18, 2006. It was agreed in this meeting and the subsequent ICC meeting held on 15 April 2007 that Afghanistan should introduce the Hib vaccine in its EPI Schedule and request GAVI for provision of Hib vaccine, in the form of Pentavalent (DPT-HepB- Hib) under its window of new and underused vaccines.

MOPH Afghanistan submitted its proposal for Pentavalent (DPT-HepB-Hib) vaccine to GAVI in April 2007 with the request to waive the country share of co financing. GAVI - IRC was unable to accept the waiver request but approved the application conditionally, requesting re-working of the financial analysis with GOA co-financing share and clarification of the cold chain analysis.

MOPH Afghanistan and its partners have agreed to contribute towards country co-financing share and are submitting the new financial analysis and cold chain clarification through this new application format (version July 2007) for the GAVI support for Pentavalent (DPT-HepB-Hib) vaccine, supported by updating of the financial analysis in the cMYP. Technical assistance from WHO for the financial analysis and the cold chain analysis were assisted by a working group headed by NIP and comprising members from MOF, WHO, UNICEF and donors, who contributed information about the current situation and probable scenarios.

EPI situation: The reported number of children immunized with DPT3 in 2006 was 736,335² i.e. a little less than the 796,256³ reported number of children immunized with DPT3 in 2005. This was primarily because of security-related decline in immunization services in some areas and also because of confusion in recording by some staff when the country switched over to DPT-HepB Tetravalent vaccine in mid-2006. ICC advised a thorough EPI Review workshop in mid-2007 with both the NGO partners and the Provincial EPI staff. Immediate improvements in staffing and supervision were undertaken at the field level and micro-planning to improve access and "reach every child" was initiated. The first draft of reported immunization coverage for 2007 shows 897,345 doses of DPT-Hep B 3 were administered, covering about 83% of surviving infants.

Comprehensive Multi-Year Plan (cMYP): The cMYP was updated in beginning 2007 and aligned to be valid with current MOPH budgetary cycle of Afghan year 1386-1388, i.e upto 20 March 2010. However as the EPI reporting is undertaken on calendar year basis, the activities in the plan are therefore included till end 2010. The cMYP was further updated in January 2008 to include the latest IMR of 129/1000 LB, plan of introduction of Pentavalent (DPT-HepB-Hib) vaccine from January 2009, and revision of the financial analysis to include co-financing.

During the period 2007-2010, the coverage target for children (0-11 m) to be immunized with DPT3 has been set to achieve at least 90% national coverage and at least 80% coverage in each district by 2010.

¹ Dated 24 November 2006. <http://www.who.int/wer>

² WHO/UNICEF Joint Reporting Form 2006

³ WHO/UNICEF Joint Reporting Form 2005

Targets	2007	2008	2009	2010
DPT-HepB-3 coverage %	78	83	87	90
Total to be immunized w/ DPT-HepB-3 ⁴	846,461	950,719	1,020,453	1,080,977

Doses needed: The Pentavalent vaccine, if approved, would be introduced countrywide from 1st January 2009 and will replace Tetravalent (DPT-HepB) vaccine in the EPI schedule for infant immunization at 6, 10 and 14 weeks.

MOPH and ICC for EPI Afghanistan hereby request GAVI for **provision of 8,336,300 doses of Pentavalent (DPT-HepB-Hib) as single dose all liquid vaccine preparation along with associated AD syringes and safety boxes for the period 2009-2010** as below. Because of the operational issues related with lyophilized vaccine, EPI Afghanistan has strong preference for all liquid vaccine.

	2009	2010	2009-2010
No. of doses of Pentavalent (DPT-HepB-Hib) vaccine	4,491,200	3,845,100	8,336,300
No. of AD Syringes	4,785,800	4,055,200	8,841,000
No of safety boxes	53,125	45,050	98,175

The Government of Afghanistan (GOA) agrees to pay its share of co financing (\$0.10 per dose) as per below table⁵ on regular basis as mentioned in this application.

	2009	2010	2009-2010
Total value (Vaccine, AD Syringes, Safety boxes) (US\$)	16,748,500	12,775,000	29,523,500
GOA Co-financing Share (US\$)	449,500	384,500	834,000
GAVI contribution (US\$)	16,299,000	12,390,500	28,689,500

Cold chain: In order to ensure adequate storage at national and sub-national level, ten additional Walk-in cold rooms, each of 30 Cu M (7.1 Cu M net vaccine storage capacity), will be installed by mid-2008. Seven of these cold rooms will be installed at national/ central level, while three will be installed at sub-national (regional) level. In addition, approximately 1000 Refrigerators have been or are being procured for health facilities. The procurement process of this cold chain equipment has been initiated through UNICEF and the equipment is expected to be installed by mid-2008. A detailed assessment of cold chain capacity at all levels, including that with the likely addition of single dose Pentavalent (DPT-HepB-Hib) vaccine, has found the cold chain capacity to be sufficient at all levels, even with only two shipments a year planned at national level.

Introduction of vaccine: In addition to improving the cold chain storage capacity, a plan of action has been prepared for introduction of the Pentavalent vaccine. This includes advocacy, proper recording and reporting, and monitoring, besides training on routine EPI aspects including vaccine management and vaccine wastage reduction. These activities will cost around US\$ 404,000 and would be funded by the GAVI support for introduction of the new vaccine.

Financial sustainability: Despite the fact that GOA has planned to gradually increase its contribution towards NIP, given the current geo-political and economic condition of the country, support of EPI donors for NIP will be crucial at least for a few more years. Therefore MoPH and NIP have developed strategies to work towards financial suitability of NIP which not only target GOA but also the EPI donors. A frame work for monitoring the implementation of the financial sustainability strategies has been developed as part of the updated cMYP.

⁴ Pentavalent 3 (DPT-HepB-Hib) from 2009 onwards if introduced in the EPI schedule.

⁵ May vary depending on the actual number of doses supplied.

2. Signatures of the Government and National Coordinating Bodies

Government and the Inter-Agency Coordinating Committee for Immunisation

The Government of Islamic Republic of Afghanistan 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 **Pentavalent (DPT-HepB-Hib) vaccine along with AD syringes and safety boxes etc.**

The Government of Islamic Republic of Afghanistan 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 ...23...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 ...22...of this application shows the Government financial commitment for the procurement of this new vaccine (NVS support only).

Minister of Public Health:

Signature:

Name:

Date:

Minister of Finance:

Signature: ...See attached letter from Ministry of Finance regarding co-financing vaccine...

Name:

Date:

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

We the members of the ICC/HSCC⁶ met on the 7 February 2008 (insert date) 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
See attached		

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

Name: Dr. Aga Gul Dost...

Title: National EPI Programme Manager

Tel No.: 0093-799-814812

Address: Directorate of EPI
Ministry of Public Health

Email: nationalepi05@yahoo.com

Great Masood Circle, Wazir Akbar Khan,

⁶ Inter-agency coordinating committee or Health sector coordinating committee, whichever is applicable.

The GAVI Secretariat is unable to return documents and attachments to individual countries. Unless otherwise specified, documents may be shared with the GAVI partners and collaborators.

The Inter-Agency Coordinating Committee for Immunisation

Agencies and partners (including development partners and CSOs) supporting immunisation services are co-ordinated and organised through an inter-agency coordinating mechanism (ICC/HSCC). The ICC/HSCC are responsible for coordinating and guiding the use of the GAVI ISS and NVS support. Please provide information about the ICC/HSCC in your country in the spaces below.

Profile of the ICC/HSCC

Name of the ICC/HSCC: **National Interagency Coordination Committee for Immunization**

Date of constitution of the current ICC/HSCC: 2003

Organisational structure (e.g., sub-committee, stand-alone): Stand alone with sub committee

Frequency of meetings: at least once in a quarter

Composition:

Function	Title / Organization	Name
Chair	Deputy Minister, Technical/ MoPH	Dr. Faizullah Kakar
Secretary	National GAVI Advisor/ WHO	Dr. A. Shakoor
Members	<ul style="list-style-type: none"> • Gen Dir Policy & Planning/ MoPH • Gen Dir PHC & Preventive M /MoPH • Dir Grants & Contracts Mgmt Unit/ MoPH • GAVI HSS Coordinator/ MoPH • National EPI Program Manager • Health Sector Mgr/Ministry of Finance • Technical Officer EPI/ WHO • Chief Health or Nat'l TO Health)/ UNICEF • Health Advisor/ World Bank • Health Advisor/ USAID • Health Advisor/ EC • Health Prog Director/ IMC • Medical Coordinator/ AHDS • Health Prog Mgr/ Tech Serve <p>.....</p>	<ul style="list-style-type: none"> • (Acting) Dr. Ahmad Jan • Dr. Daim Kakar • (Deputy) Dr. Hemati • Dr. Abdul Wali • Dr. AgaGul Dost • Mr. Sayed Alam Khan • Dr. Rana Kakar • Dr. Brandao Co or Dr. Rafiqi • Dr. Sayed • Dr. Faiz Mohammed • Dr. Martine • Dr. Mushfiq • Dr. Saied • Dr. Rashidi <p>.....</p>

Major functions and responsibilities of the ICC:

ICC is a national coordination body for all immunization activities in Afghanistan provided by the MOPH and its partners. The main responsibility of ICC is to strengthen country's immunization program, including routine EPI, polio eradication initiative, and measles and NNT elimination programs through close coordination of MOPH, partners, donors and social organizations in planning, organizing, financing, implementing and monitoring the program.

The roles of ICC are:

1. **Technical:** developing of national immunization policy and guidelines, setting immunization targets; identification of program requirements and needs for technical assistance, assisting in monitoring of immunization performance and vaccine preventable disease surveillance, assisting to ensure the adherence

of national and international immunization standards, promoting immunization strategic plans of actions and supporting implementation of the plans of actions, organizing periodic in-depth assessment of national immunization program, and coordinating GAVI-related activities.

2. **Financial:** ensuring effective and efficient use of available resources and financial self sufficiency and sustainability of the immunization program, and helping in identification and mobilization of national and international resources.

3. **Political:** ICC helps to increase national commitment to immunization services through advocacy, particularly polio eradication and measles elimination activities and advocating immunization as the most cost-effective and prioritized health intervention program. ICC links immunization program into broader national health coordination forums such as CGHN and NTCC. ICC helps to raise public awareness on the importance of immunization through social mobilization activities.

4. **Capacity building:** assisting to strengthen the role and capacity of government to take ownership in management and implementation of immunization services.

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

1. Addition of new members including NGOs and other social organizations, and university staff
2. Improve sharing of information with ICC regarding other health system forums such as NTCC and CGHN to ensure coordination of activities, esp regarding GAVI-HSS
3. Monitoring of sub national EPI coverage data especially new vaccine i.e Tetravalent (DPT- Hep B) and efforts to "reach every child"

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 NUMBER2.....
- Please refer to the two most recent annual WHO/UNICEF Joint Reporting Forms on Vaccine Preventable Diseases and attach them as DOCUMENT NUMBERS1.....
- Please refer to Health Sector Strategy documents, budgetary documents, and other reports, surveys etc, as appropriate.

Table 3.1: Basic facts for the year 2006/7 (the most recent; specify dates of data provided)

	Figure	Date	Source
Total population	26,128,506	2006	UNIDATA
Infant mortality rate (per 1000)	129	2006	National Household Survey, JHU 2006
Surviving Infants*	1,085,206	2007	cMYP calculation based on UNIDATA
GNI per capita (US\$)	281	2007	Health System Profile Afghanistan, Regional Health System Observatory-EMRO
Percentage of GDP allocated to Health	4.5%	2007	MOF
Percentage of Government expenditure on Health	35.5%	2006	WHR 2006

* 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.

Five Year Strategic Health Planning Document (2006-2010)
Ministry of Public Health Strategy 2008-2013

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

The updated cMYP period for immunization is 2006-2010 and is aligned with Health Sector Strategic Plan; the cMYP includes provision of introduction of Pentavalent (DPT-HepB-Hib) vaccine in beginning 2009.

Please indicate the national planning budgeting cycle for health

- Annual plan
- Mid-term expenditure framework
- The national planning budgeting cycle for health has been every five years in the past. However four ministries in the country including MOPH have been required to prepare a three year program budget (Afghan year 1386-1388) on pilot basis to bring the normal practice of five year budget cycle to three years.

Please indicate the national planning cycle for immunisation

The planning cycle for immunization used to be every five years and updated annually. However as explained in above paragraph, it is currently for three years i.e Afghan year 1386-1388

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

Vaccine <i>(do not use trade name)</i>	Ages of administration <i>(by routine immunization services)</i>	Indicate by an "x" if given in:		Comments
		Entire country	Only part of the country	
BCG	Birth	X		
DPT-HepBV	6, 10, 14 weeks	X		
OPV	Birth, 6, 10, 14 weeks, 9 months	X		
TT	Women of 15-45 years 1st contact pregnancy +M1+M6+Y1+Y1	X		
Measles	9 months and 18 months	X		
Vitamin A		X		Twice a year during NIDs to all children under age 5

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		
		2005	2006		2005-6		2005	2006
BCG/ births		73	77		70	Tuberculosis*		
DTP / surviving infants	DTP1	88	90			Diphtheria		53
	DTP3	76	77		35	Pertussis		2515
Polio 3		76	77		70	Polio		31
Measles (first dose)		64	68		63	Measles		1990
TT2+ (Pregnant women)		51	54			NN Tetanus		33
Hib3						Hib **		
Yellow Fever						Yellow fever		
HepB3						hepB sero-prevalence*		
Vit A supplement	Mothers (<6 weeks post-delivery)				80			
	Infants (>6 months)							

* 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:

Household survey conducted by JHU for MoPH at end of 2006, reported mid-2007, reflecting on coverage of 2005. DTP3 survey coverage is highly debated at MoPH due to questionnaire bias against it, and it may be under-estimated.

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

Number	Baseline and targets					
	Base year (2006)	Year 1 2007	Year 2 2008	Year 3 2009	Year 4 2010	Year 5 2011
Births	1,254,168	1,284,268	1,315,091	1,346,653	1,378,973	1,412,068
Infants' deaths	168,961	199,062	169,647	173,718	177,887	182,157
Surviving infants	1,085,207	1,085,206	1,145,444	1,172,935	1,201,086	1,229,911
Pregnant women	1,253,047	1,284,268	1,315,091	1,346,653	1,378,973	1,412,068
Target population vaccinated with BCG	961,705	1,181,527	1,249,336	1,279,320	1,310,024	1,341,465
BCG coverage*	89%	92%	95%	95%	95%	95%
Target population vaccinated with OPV3	752,064	846,461	950,719	1,020,453	1,080,977	1,131,518

OPV3 coverage**	71%	78%	83%	87%	90%	92%
Target population vaccinated with DTP3***	736,335	846,461	950,719	1,020,453	1,080,977	1,131,518
DTP3 coverage**	69%	78%	83%	87%	90%	92%
Target population vaccinated with DTP1*** (DPT for 2006, DPT-HepB for 2007&8, DPT-HepB-Hib for 2009 onwards)	1,120,045	954,981	1,065,263	1,137,747	1,201,086	1,229,911
Wastage ⁷ rate in base-year and planned thereafter (DPT for 2006, DPT-HepB for 2007&8, DPT-HepB-Hib for 2009 onwards)	40%	25%	20%	18%	15%	15%
Target population vaccinated with 3 rd dose of Tetravalent (DPT-HepB)		846,461	950,719			
Tetravalent 3 (DPT-HepB) Coverage**		78%	83%			
Target population vaccinated with 1 st dose of Tetravalent (DPT-HepB)		954,981	1,065,263			
Wastage ¹ rate in base-year and planned thereafter		25%	20%			
Target population vaccinated with 3 rd dose of Pentavalent (DPT-HepB-Hib).....				1,020,453	1,080,977	1,131,518
Penta (DPT-HepB-Hib) Coverage**				87%	90%	92%
Target population vaccinated with 1 st dose of Pentavalent vaccine (DPT-HepB-Hib)				1,137,747	1,201,086	1,229,911
Wastage ¹ rate in base-year and planned thereafter				5%	5%	5%
Target population vaccinated with 1 st dose of Measles	725,610	813,905	973,627	1,114,288	1,141,032	1,168,415
Target population vaccinated with 2 nd dose of Measles						
Measles coverage**	68%	75%	85%	95%	95%	95%
CBA women vaccinated with TT+	681,836	3,478,227	3,561,704	3,647,185	3,734,717	3,824,350
TT+ coverage****	54%	65%	65%	65%	65%	65%
Vit A supplement						
Annual DTP Drop out rate [(DTP1-DTP3)/DTP1] x100	34%	11%	11%	10%	10%	8%

* Number of infants vaccinated out of surviving infants for 2006 but out of total births for future

** 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

⁷ The formula to calculate a vaccine wastage rate (in percentage): $[(A - B) / A] \times 100$. Whereby : A = The number of doses distributed for use according to the supply records with correction for stock balance at the end of the supply period; B = the number of vaccinations with the same vaccine in the same period. For new vaccines check **table α** after Table 7.1.

Table 3.5: Summary of current and future immunisation budget

This table corresponds with the Pentavalent Scenario of the updated cMYP Section V. There is however a 1-3% discrepancy in the totals due to different Costing Tool used.

Cost Category	2006	2007	2008	2009	2010
Routine Recurrent Cost	US\$	US\$	US\$	US\$	US\$
Vaccines (routine vaccines only)	\$5,261,406	\$8,208,047	\$5,942,088	\$19,311,811	\$15,455,487
Traditional vaccines	\$2,052,118	\$3,624,133	\$3,089,846	\$2,982,152	\$3,035,219
New and underused vaccines	\$3,209,288	\$4,583,913	\$2,852,242	\$16,329,659	\$12,420,267
Injection supplies	\$666,194	\$1,528,354	\$1,595,818	\$1,661,180	\$1,708,664
Personnel	\$4,354,388	\$4,570,057	\$4,796,711	\$4,985,259	\$5,179,431
Salaries of full-time NIP health workers (i	\$3,421,576	\$3,564,189	\$3,741,152	\$3,893,154	\$4,049,740
Per-diems for outreach vaccinators/mobil	\$580,364	\$606,807	\$634,077	\$662,194	\$691,182
Per-diems for supervision and monitoring	\$352,448	\$399,061	\$421,482	\$429,911	\$438,510
Transportation	\$176,007	\$184,504	\$226,748	\$277,880	\$325,904
Fixed site and vaccine delivery	\$106,177	\$111,410	\$136,804	\$167,005	\$195,306
Outreach activities	\$69,831	\$73,094	\$89,945	\$110,875	\$130,598
Maintenance and overhead	\$2,248,379	\$2,065,518	\$2,333,013	\$2,522,798	\$2,724,615
Cold chain maintenance and overheads	\$1,448,378	\$1,240,916	\$1,481,966	\$1,651,969	\$1,830,398
Maintenance of other capital equipment	\$4,281	\$12,968	\$23,181	\$26,404	\$32,904
Building overheads (electricity, water...)	\$795,720	\$811,634	\$827,867	\$844,424	\$861,313
Short-term training	\$342,907	\$853,337	\$1,171,714	\$1,117,704	\$1,262,722
IEC/social mobilization	\$52,366	\$173,197	\$608,668	\$655,759	\$717,900
Disease surveillance	\$103,085	\$103,568	\$529,293	\$754,966	\$845,771
Programme management	\$401,012	\$391,837	\$542,152	\$683,429	\$695,366
Other routine recurrent costs	\$9,873	\$10,200	\$11,444	\$12,734	\$14,072
Subtotal Recurrent Costs	\$13,615,617	\$18,088,619	\$17,757,650	\$31,983,518	\$28,929,933
Routine Capital Cost					
Vehicles	\$0	\$30,909	\$236,455	\$289,420	\$262,408
Cold chain equipment	\$242,000	\$818,550	\$1,655,963	\$454,197	\$456,094
Other capital equipment	\$0	\$145,595	\$162,115	\$36,866	\$96,055
Subtotal Capital Costs	\$242,000	\$995,054	\$2,054,533	\$780,484	\$814,556
Campaigns					
Polio	\$16,486,072	\$19,650,465	\$18,834,270	\$19,311,625	\$19,800,223
Vaccines	\$6,286,072	\$6,151,163	\$5,815,765	\$5,881,853	\$5,947,941
Other operational costs	\$10,200,000	\$13,499,303	\$13,018,505	\$13,429,772	\$13,852,282
Measles	\$2,575,244	\$2,211,329	\$0	\$5,228,749	\$0
Vaccines and supplies	\$755,244	\$715,511	\$0	\$1,646,840	\$0
Other operational costs	\$1,820,000	\$1,495,818	\$0	\$3,581,908	\$0
MNT campaigns	\$2,250,576	\$1,189,651	\$0	\$4,578,750	\$0
Vaccines and supplies	\$430,576	\$192,721	\$0	\$717,459	\$0
Other operational costs	\$1,820,000	\$996,930	\$0	\$3,861,291	\$0
Subtotal Campaign Costs	\$21,311,892	\$23,051,444	\$18,834,270	\$29,119,124	\$19,800,223
Other Costs					
Shared personnel costs	\$612,097	\$624,339	\$636,826	\$649,562	\$662,553
Shared transportation costs	\$0	\$0	\$0	\$0	\$0
Construction of new buildings	\$150,000	\$183,600	\$636,725	\$0	\$0
Subtotal Optional	\$762,097	\$807,939	\$1,273,550	\$649,562	\$662,553
GRAND TOTAL	\$35,931,606	\$42,943,056	\$39,920,003	\$62,532,688	\$50,207,266
Routine (Fixed Delivery)	\$8,753,665	\$12,221,280	\$13,522,530	\$20,061,221	\$18,214,836
Routine (Outreach Activities)	\$5,866,048	\$7,670,331	\$7,563,204	\$13,352,343	\$12,192,207
Campaigns	\$21,311,892	\$23,051,444	\$18,834,270	\$29,119,124	\$19,800,223

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 (a): Summary of current and future financing and sources of funds (2006)

These tables correspond with the Pentavalent Scenario of the updated cMYP Section V. There is however a 1-3% discrepancy in the totals due to different Costing Tool used.

Cost Category	2006				
	Government	GAVI	WHO	UNICEF	Others (EC,WB,USAID ,ARC , etc)
	US\$	US\$	US\$	US\$	US\$
Routine Recurrent Cost					
Vaccines (routine vaccines only)					
Traditional vaccines				\$ 2,052,118	
New and underused vaccines		\$ 3,209,288			
Injection supplies		\$ 200,000		\$ 466,194	
Personnel					
Salaries of full-time NIP health workers (immunization specific)	\$ 244,600	\$ 272,290		\$ 50,000	\$ 2,854,686
Per-diem for outreach vaccinators/mobile teams		\$ 50,000		\$ 50,000	\$ 480,364
Per-diem for supervision and monitoring		\$ 80,000		\$ 20,000	\$ 252,448
Transportation					
Fixed site and vaccine delivery		\$ 6,177		\$ 100,000	
Outreach activities					\$ 69,831
Maintenance and overhead					
Cold chain maintenance and overheads				\$ 1,448,378	
Maintenance of other capital equipment		\$ 4,281			
Building overheads (electricity, water...)	\$ 795,720				
Short-term training		\$ 19,033	\$ 13,374	\$ 135,000	\$ 175,500
IEC/social mobilization		\$ 41,866			\$ 10,500
Disease surveillance		\$ 60,000	\$ 43,085		
Programme management		\$ 82,972	\$ 540	\$ 265,000	\$ 52,500
Other routine recurrent costs		\$ 9,873			
Subtotal Recurrent Costs	\$ 1,040,320	\$ 4,035,779	\$ 56,999	\$ 4,586,690	\$ 3,895,829
Routine Capital Cost					
Vehicles					
Cold chain equipment				\$ 231,200	\$ 10,800
Other capital equipment					
Subtotal Capital Costs	\$ -	\$ -	\$ -	\$ 231,200	\$ 10,800
Campaigns					
Polio					
Vaccines					\$ 6,286,072
Other operational costs			\$ 2,550,000	\$ 7,650,000	
Measles					
Vaccines and supplies					\$ 755,244
Other operational costs		\$ 284,015	\$ 1,535,985		
Yellow Fever					
Vaccines and supplies					
Other operational costs					
MNT campaigns					
Vaccines and supplies					\$ 430,576
Other operational costs		\$ 284,015	\$ 1,535,985		
Subtotal Campaign Costs	\$ -	\$ 568,030	\$ 5,621,970	\$ 7,650,000	\$ 7,471,892
Other Costs					
Shared personnel costs	\$ 612,097				
Shared transportation costs					
Construction of new buildings				\$ 150,000	
Subtotal Optional	\$ 612,097	\$ -	\$ -	\$ 150,000	\$ -
GRAND TOTAL	\$ 1,652,417	\$ 4,603,809	\$ 5,678,969	\$ 12,617,890	\$ 11,378,521
Routine Services (Fixed and Outreach)	\$ 1,652,417	\$ 4,035,779	\$ 56,999	\$ 4,967,890	\$ 3,906,629
Supplemental Immunization Activities	\$ -	\$ 568,030	\$ 5,621,970	\$ 7,650,000	\$ 7,471,892
Total Secure Funding	\$ 1,652,417	\$ 4,603,809	\$ 5,678,969	\$ 12,617,890	\$ 11,378,521
Total Probable Funding	\$ -	\$ -	\$ -	\$ -	\$ -

Table 3.6 (b): Summary of current and future financing and sources of funds (2007)

Cost Category	2007				
	Government	GAVI	WHO	UNICEF	Others (EC,WB,USAID, ARC , etc)
	US\$	US\$	US\$	US\$	US\$
Routine Recurrent Cost					
Vaccines (routine vaccines only)					
Traditional vaccines				\$ 3,624,133	
New and underused vaccines		\$ 4,583,913			
Injection supplies		\$ 377,572		\$ 1,150,782	
Personnel					
Salaries of full-time NIP health workers (immunization)	\$ 244,600	\$ 272,290			\$ 3,047,299
Per-diems for outreach vaccinators/mobile teams		\$ 350,000			\$ 256,807
Per-diems for supervision and monitoring		\$ 300,000		\$ 20,000	\$ 79,061
Transportation					
Fixed site and vaccine delivery		\$ 11,410		\$ 100,000	
Outreach activities					\$ 73,094
Maintenance and overhead					
Cold chain maintenance and overheads			\$ 50,000	\$ 1,170,916	\$ 20,000
Maintenance of other capital equipment		\$ 5,000		\$ 7,968	
Building overheads (electricity, water...)	\$ 811,635				
Short-term training		\$ 91,936	\$ 11,470	\$ 553,200	\$ 196,732
IEC/social mobilization		\$ 48,801		\$ 110,000	\$ 14,396
Disease surveillance		\$ 17,106	\$ 86,462		
Programme management	\$ 250,000	\$ 30,573	\$ 47,582	\$ 56,000	\$ 7,683
Other routine recurrent costs		\$ 10,200			
Subtotal Recurrent Costs	\$ 1,306,235	\$ 6,098,800	\$ 195,514	\$ 6,792,999	\$ 3,695,072
Routine Capital Cost					
Vehicles					\$ 30,909
Cold chain equipment				\$ 818,550	
Other capital equipment		\$ 11,690	\$ 4,745	\$ 129,160	
Subtotal Capital Costs	\$ -	\$ 11,690	\$ 4,745	\$ 947,710	\$ 30,909
Campaigns					
Polio					
Vaccines					\$ 6,151,163
Other operational costs			\$ 3,374,825	\$ 10,124,478	
Measles					
Vaccines and supplies					\$ 715,511
Other operational costs			\$ 568,038	\$ 927,780	
Yellow Fever					
Vaccines and supplies					
Other operational costs					
MNT campaigns					
Vaccines and supplies					\$ 192,721
Other operational costs				\$ 996,930	
Subtotal Campaign Costs	\$ -	\$ -	\$ 3,942,863	\$ 12,049,188	\$ 7,059,394
Other Costs					
Shared personnel costs	\$ 624,339				
Shared transportation costs					
Construction of new buildings		\$ 183,600			
Subtotal Optional	\$ 624,339	\$ 183,600	\$ -	\$ -	\$ -
GRAND TOTAL	\$ 1,930,574	\$ 6,294,090	\$ 4,143,122	\$ 19,789,897	\$ 10,785,375
Routine Services (Fixed and Outreach)	\$ 1,930,574	\$ 6,294,090	\$ 200,259	\$ 7,740,709	\$ 3,725,981
Supplemental Immunization Activities	\$ -	\$ -	\$ 3,942,863	\$ 12,049,188	\$ 7,059,394
Total Secure Funding	\$ 1,930,574	\$ 6,294,090	\$ 4,143,122	\$ 19,789,897	\$ 10,785,375
Total Probable Funding	\$ -	\$ -	\$ -	\$ -	\$ -

Table 3.6 (c): Summary of current and future financing and sources of funds (2008)

Cost Category	2008				
	Government	GAVI	WHO	UNICEF	Others (EC, WB, USAID, ARC , etc)
	US\$	US\$	US\$	US\$	US\$
Routine Recurrent Cost					
Vaccines (routine vaccines only)					
Traditional vaccines				\$ 3,089,846	
New and underused vaccines		\$ 2,852,242			
Injection supplies		\$ 370,762		\$ 1,225,056	
Personnel					
Salaries of full-time NIP health workers (immun)	\$ 626,964	\$ 244,600	\$ 288,000		\$ 2,581,588
Per-diem for outreach vaccinators/mobile teams		\$ 100,000		\$ 50,000	\$ 484,077
Per-diem for supervision and monitoring		\$ 152,880		\$ 30,000	\$ 238,602
Transportation					
Fixed site and vaccine delivery		\$ 16,804		\$ 120,000	
Outreach activities					\$ 89,945
Maintenance and overhead					
Cold chain maintenance and overheads			\$ 25,000	\$ 500,000	\$ 500,000
Maintenance of other capital equipment		\$ 23,181			
Building overheads (electricity, water...)	\$ 827,867				
Short-term training		\$ 561,215	\$ 235,000	\$ 130,000	\$ 245,499
IEC/social mobilization		\$ 100,000	\$ 44,000	\$ 329,033	\$ 35,635
Disease surveillance			\$ 428,153		
Programme management		\$ 159,100	\$ 166,000	\$ 215,000	\$ 2,052
Other routine recurrent costs		\$ 11,444			
Subtotal Recurrent Costs	\$ 1,454,831	\$ 4,592,228	\$ 1,186,153	\$ 5,688,935	\$ 4,177,398
Routine Capital Cost					
Vehicles		\$ 150,000			
Cold chain equipment		\$ 500,000		\$ 1,155,963	
Other capital equipment		\$ 162,115			
Subtotal Capital Costs	\$ -	\$ 812,115	\$ -	\$ 1,155,963	\$ -
Campaigns					
Polio					
Vaccines					\$ 5,815,765
Other operational costs			\$ 3,254,600	\$ 9,763,905	
Measles					
Vaccines and supplies					
Other operational costs					
Yellow Fever					
Vaccines and supplies					
Other operational costs					
MNT campaigns					
Vaccines and supplies					
Other operational costs					
Subtotal Campaign Costs	\$ -	\$ -	\$ 3,254,600	\$ 9,763,905	\$ 5,815,765
Other Costs					
Shared personnel costs	\$ 636,826				
Shared transportation costs					
Construction of new buildings		\$ 636,725			
Subtotal Optional	\$ 636,826	\$ 636,725	\$ -	\$ -	\$ -
GRAND TOTAL	\$ 2,091,657	\$ 6,041,068	\$ 4,440,753	\$ 16,608,803	\$ 9,993,163
Routine Services (Fixed and Outreach)	\$ 2,091,657	\$ 6,041,068	\$ 1,186,153	\$ 6,844,898	\$ 4,177,398
Supplemental Immunization Activities	\$ -	\$ -	\$ 3,254,600	\$ 9,763,905	\$ 5,815,765
Total Secure Funding	\$ 2,091,657	\$ 6,041,068	\$ 548,000	\$ 16,608,803	\$ 9,209,977
Total Probable Funding	\$ -	\$ -	\$ 3,892,753	\$ -	\$ 783,186

Table 3.6 (d): Summary of current and future financing and sources of funds (2009)

Cost Category	2009				
	Government	GAVI	WHO	UNICEF	Others (EC, WB, USAID , ARC , etc)
Routine Recurrent Cost	US\$	US\$	US\$	US\$	US\$
Vaccines (routine vaccines only)					
Traditional vaccines				\$ 2,982,152	
New and underused vaccines	\$ 437,898	\$ 15,891,761			
Injection supplies	\$ 11,213	\$ 406,951		\$ 1,243,016	
Personnel					
Salaries of full-time NIP health workers (immunization)	\$ 269,060	\$ 689,660	\$ 520,000		\$ 2,414,434
Per-diems for outreach vaccinators/mobile teams		\$ 50,000		\$ 60,000	\$ 552,194
Per-diems for supervision and monitoring		\$ 50,000		\$ 50,000	\$ 329,911
Transportation					
Fixed site and vaccine delivery		\$ 17,005		\$ 150,000	
Outreach activities					\$ 110,875
Maintenance and overhead					
Cold chain maintenance and overheads			\$ 50,000	\$ 500,000	\$ 500,000
Maintenance of other capital equipment		\$ 26,404			
Building overheads (electricity, water...)	\$ 844,424				
Short-term training		\$ 517,337	\$ 72,900	\$ 243,000	\$ 284,467
IEC/social mobilization		\$ 100,000	\$ 21,000	\$ 381,936	\$ 52,823
Disease surveillance			\$ 643,712		
Programme management		\$ 175,010	\$ 150,500	\$ 258,500	\$ 99,419
Other routine recurrent costs		\$ 12,734			
Subtotal Recurrent Costs	\$ 1,562,595	\$ 17,936,862	\$ 1,458,112	\$ 5,868,604	\$ 4,344,123
Routine Capital Cost					
Vehicles		\$ 289,420			
Cold chain equipment		\$ 454,197			
Other capital equipment		\$ 36,867			
Subtotal Capital Costs	\$ -	\$ 780,484	\$ -	\$ -	\$ -
Campaigns					
Polio					
Vaccines					\$ 5,881,853
Other operational costs			\$ 3,250,000	\$ 10,179,772	
Measles					
Vaccines and supplies					\$ 1,646,840
Other operational costs			\$ 900,000	\$ 2,681,909	
Yellow Fever					
Vaccines and supplies					
Other operational costs					
MNT campaigns					
Vaccines and supplies					\$ 717,459
Other operational costs			\$ 950,000	\$ 2,911,291	
Subtotal Campaign Costs	\$ -	\$ -	\$ 5,100,000	\$ 15,772,972	\$ 8,246,152
Other Costs					
Shared personnel costs	\$ 649,562				
Shared transportation costs					
Construction of new buildings					
Subtotal Optional	\$ 649,562	\$ -	\$ -	\$ -	\$ -
GRAND TOTAL	\$ 2,212,157	\$ 18,717,346	\$ 6,558,112	\$ 21,641,576	\$ 12,590,275
Routine Services (Fixed and Outreach)	\$ 2,212,157	\$ 18,717,346	\$ 1,458,112	\$ 5,868,604	\$ 4,344,123
Supplemental Immunization Activities	\$ -	\$ -	\$ 5,100,000	\$ 15,772,972	\$ 8,246,152
Total Secure Funding	\$ 2,212,157	\$ 18,717,346	\$ 520,000	\$ -	\$ 3,407,414
Total Probable Funding	\$ -	\$ -	\$ 6,038,112	\$ 21,641,576	\$ 9,182,861

Table 3.6 (e): Summary of current and future financing and sources of funds (2010)

Cost Category	2010				
	Government	GAVI	WHO	UNICEF	Others (EC, WB, USAID , ARC , etc)
Routine Recurrent Cost	US\$	US\$	US\$	US\$	US\$
Vaccines (routine vaccines only)					
Traditional vaccines				\$ 3,035,219	
New and underused vaccines	\$ 373,631	\$ 12,046,636			
Injection supplies	\$ 10,659	\$ 354,325		\$ 1,343,680	
Personnel					
Salaries of full-time NIP health workers (im	\$ 295,966	\$ 558,626	\$ 572,000	\$ 50,000	\$ 2,573,148
Per-diems for outreach vaccinators/mobile teams		\$ 50,000			\$ 641,182
Per-diems for supervision and monitoring		\$ 50,000		\$ 30,000	\$ 358,510
Transportation					
Fixed site and vaccine delivery		\$ 20,306		\$ 175,000	
Outreach activities		\$ 130,598			
Maintenance and overhead					
Cold chain maintenance and overheads			\$ 50,000	\$ 550,000	\$ 500,000
Maintenance of other capital equipment		\$ 32,904			
Building overheads (electricity, water...)	\$ 861,313				
Short-term training		\$ 479,070	\$ 80,190	\$ 357,300	\$ 346,162
IEC/social mobilization		\$ 119,130	\$ 23,100	\$ 321,000	\$ 54,670
Disease surveillance			\$ 723,392		\$ 72,379
Programme management		\$ 192,511	\$ 165,550	\$ 284,350	\$ 52,955
Other routine recurrent costs		\$ 14,072			
Subtotal Recurrent Costs	\$ 1,541,569	\$ 14,048,178	\$ 1,614,232	\$ 6,146,549	\$ 4,599,006
Routine Capital Cost					
Vehicles		\$ 262,408			
Cold chain equipment		\$ 100,000		\$ 356,094	
Other capital equipment		\$ 96,055			
Subtotal Capital Costs	\$ -	\$ 458,463	\$ -	\$ 356,094	\$ -
Campaigns					
Polio					
Vaccines					\$ 5,947,941
Other operational costs			\$ 3,250,000	\$ 10,602,282	
Measles					
Vaccines and supplies					
Other operational costs					
Yellow Fever					
Vaccines and supplies					
Other operational costs					
MNT campaigns					
Vaccines and supplies					
Other operational costs					
Subtotal Campaign Costs	\$ -	\$ -	\$ 3,250,000	\$ 10,602,282	\$ 5,947,941
Other Costs					
Shared personnel costs	\$ 662,553				
Shared transportation costs					
Construction of new buildings					
Subtotal Optional	\$ 662,553	\$ -	\$ -	\$ -	\$ -
GRAND TOTAL	\$ 2,204,122	\$ 14,506,641	\$ 4,864,232	\$ 17,104,925	\$ 10,546,947
Routine Services (Fixed and Outreach)	\$ 2,204,122	\$ 14,506,641	\$ 1,614,232	\$ 6,502,643	\$ 4,599,006
Supplemental Immunization Activities	\$ -	\$ -	\$ 3,250,000	\$ 10,602,282	\$ 5,947,941

4. Immunization Services Support (ISS)

Please indicate below the total amount of funds you expect to receive through ISS:

Table 4.1: Estimate of fund expected from ISS

	Base Year*	Year 1 2007	Year 2 2008	Year 3 2009	Year 4 2010
DTP3 Coverage rate	76%	78%	83%	87%	90%
Number of infants reported / planned to be vaccinated with DTP3 (as in Table 3.4)	796,256	846,461	950,719	1,020,453	1,080,977
Number of <i>additional</i> infants that annually are reported / planned to be vaccinated with DTP3		50,205	104,257	69,735	60,523
Funds expected (\$20 per additional infant)		\$1,004,109	\$2,085,141	\$1,394,699	\$1,210,461

* Projected figures; N. B. as 2006 reported DPT3 doses were lower than 2005, the base year for ISS reward is considered to be 2005.

** As per duration of the cMYP

If you have received ISS support from GAVI in the past, please describe below any major lessons learned, and how these will affect the use of ISS funds in future.

Please state what the funds were used for, at what level, and if this was the best use of the flexible funds; mention the management and monitoring arrangements; who had responsibility for authorising payments and approving plans for expenditure; and if you will continue this in future.

Major Lessons Learned from Phase 1	Implications for Phase 2
1.	This format is being used to update our NVS application for Pentavalent. For ISS, please see ISS application of April 2007.
2.	
3.	
4.	
5.	
6.	

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):

The latest household survey in 2006 places the infant mortality rate in Afghanistan at 129/1000 live births and the under-five mortality rate at 191/1000 live births. While this is about a 25% reduction over the last 5 years, they are still among the worst in the world. The high burden of communicable diseases, especially, diarrhea, acute respiratory infection, measles and malnutrition and consequent high morbidity and mortality remains a major issue in fulfilment of a child's right to survival, growth and development. A study by Bhutta published in 2006 shows that 91% of the 1.4 million childhood deaths in the Eastern Mediterranean Region occur in just seven countries, Afghanistan included. Of these childhood deaths, about 21% are due to pneumonia which occurs after the neonatal period. About 10% of these pneumonia deaths or 2% of all childhood deaths are preventable by Hib vaccination. Thus Hib vaccination has the potential of saving annually an estimated 4,200 lives of children under age five in Afghanistan.

One of the national objectives of the immunization plan (2006-2010) is to reduce infant and childhood mortality by 20% by 2012 through strategies such as introducing new vaccines into the routine immunization services in Afghanistan. This objective will be achieved through the strategies and activities in the following four major strategic areas:

- Program management and service delivery
- Advocacy and communication
- Surveillance and data monitoring
- Vaccine supply, quality and logistics

The decision-making process to consider Pentavalent involved many parties that include:

- Technical meetings with MOPH authorities (GD of Policy & Planning, GD of Preventive Medicine & PHC, NTCC, CGHN)
- Regional and provincial review meetings by MOPH high authorities, ICC members, national EPI team, UNICEF and WHO staff, NGOS
- Meetings with Minister of Public Health
- Meetings with provincial and district governors
- Meetings with the Ministry of Finance
- Meetings with social organizations

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.

Cold chain capacity to handle introduction of Pentavalent (DPT-HepB-Hib) vaccine in EPI Afghanistan

National Level:

Current (beginning 2008) situation

The "National Cold Room" includes 2 "plus" walk-in coolers under the direct charge of the National Cold Room officer with combined shelf capacity (vaccine storage capacity) of 17.1 Cu M. Under the present EPI schedule and the types and vial size of vaccines being used, the annual volume of the vaccines being stored at positive temperature at National level is about 85.4 Cu M. (Table 6.1).

Although the annual vaccine shipment plan for Afghanistan has been for two shipments, six months apart, in practice, the annual vaccine requirement of the country has reached the National Cold Room on an average of more than 10 shipments in the year. For this reason, there has never been any problem of vaccine storage at the national level, although with reference to Table 6.1,

and with a “two shipments” annual plan, there could be a possibility of shortage of vaccine storage capacity of 25.6 Cu M at the National level.

Plan for Mid 2008

Envisaging the introduction of Pentavalent (DPT-HepB-Hib) vaccine introduction in January 2009 with the GAVI support, EPI has undertaken steps to strengthen its cold chain capacity at various levels. The process for procurement of 10 walk-in coolers (plus), each 30 Cu M, with net vaccine storage capacity of 7.1 Cu M each, has been initiated. It is anticipated that these will be installed even before mid 2008.

Five of these coolers will be installed at the premises of the National Cold Room and two more will be installed at the adjoining premises for the Central Region Store. The remaining three will be installed at the Northeast, West and South Region Stores.

With these additional 7 walk-in coolers, the net shelf capacity (vaccine storage capacity) at National level along with Central Regional level will become $17.1 + (7.1 \times 7) = 66.8$ Cu M.

Situation in beginning 2009 and onwards

According to calculations, the total annual volume of vaccine to be stored at plus temperature including Pentavalent vaccine would be 119.6 Cu M, 123.6 Cu M and 126.9 Cu M during 2009, 2010 and 2011 respectively. (See Table 6.1)

With two shipments a year plan, the maximum storage required would be $127/2 = 63.5$ Cu M which can be managed by the predicted total shelf capacity of 66.8 Cu M after installation of 7 walk-in coolers at National level.

Regional level

At present, one walk-in cooler each with net vaccine storage capacity of 6.9 Cu M is available at six out of seven regions – North, South, East, West, Northeast, and Southeast. Central Region, whose premises are adjacent to the National Cold Room, has about 7 Cu M of storage in the form of Ice-lined refrigerators.

Each region serves 4-5 provinces with a total population of 3-4 million, except Central Region serves 7 provinces with a total population of over 7 million. Shipments to the regions are planned on a quarterly basis, and regions can generally be reached within 12 hours by road, except for the Western Region (Herat) which takes 2 days by road from Kabul but can also be reached by air.

Of the 10 walk-in coolers ordered by EPI, 3 will be strategically placed in the Regions to ensure continuity of supply. One will be placed in the Western Region which is the furthest distance, as mentioned above; one for the Southern Region (Kandahar) which may be difficult to reach due to insecurity; and one for the Northern Region (Mazarisharif) which is in a central location for remote provinces in both Northern Region and Northeastern Region.

With the introduction of Pentavalent vaccine, the quarterly volume of vaccines to be stored in each Region by 2011 would be 2.7 Cu M to 5 Cu M, and the currently available vaccine storage capacity is sufficient for quarterly shipments, except for Central Region where the needed capacity would reach 9 Cu M each quarter. With the addition of a new walk-in cooler in each of the above-mentioned three regions, there would be sufficient capacity for twice yearly shipments in those vulnerable regions.

Regarding the Central Region, two new walk-in coolers (total 14.2 Cu M net vaccine storage) would be placed in the premises of the Central Region which is adjacent to the premises of the National Cold Store. Added to the existing 7 Cu M storage there, the Central Region Store would be adequate to accept their share of the twice yearly shipments of vaccine planned, up until at least 2011.

Provincial & District level

At present there is adequate vaccine storage capacity at the provincial and district level. NIP is also in the process of upgrading the provincial and district cold chain storage equipment and capacity (65 Refrigerators in 2007 - 8) which will provide adequate storage capacity at provincial and district level to accommodate the pentavalent vaccine.

Conclusions

The overall results show that with the installation of 7 new cold rooms at national and central levels and 3 cold rooms at regional level, the storage capacity is adequate to meet all requirements for introduction of pentavalent and to assure sufficient space through 2011. Presently there is adequate dry storage capacity for AD syringes and safety boxes.

Note : The details of the above referred calculations are available in the attached Forecasting Tool and illustrated in the map below.



Table 6.1: Capacity at National level (for positive storage) (Refer to Tab 6 of Annex 2a or 2b)

		Formula	2008	2009	2010	2011
A	Annual positive volume requirement, including new vaccine (specify: Pentavalent) (litres)	Sum-product of total vaccine doses multiplied by packed volume per dose	85,436 litr	119,638 litr	123,642 litr	126,858 litr
B	Existing net positive cold chain capacity (litres)	#	17,100 litr	17,100 litr	17,100 litr	17,100 litr

C	Estimated minimum number of shipments per year required for the actual cold chain capacity	<i>A/B</i>	5.00	7.00	7.23	7.42
D	Number of consignments / shipments per year	<i>Based on national vaccine shipment plan</i>	2	2	2	2
E	Gap in litres	$((A/D) - B)$	25,618 litr	42,719 litr	44,721 litr	46,329 litr
F	Planned installation of 7 new WICR to fill gap		installation	49,700 litr	49,700 litr	49,700 litr

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):

The GOA desires to achieve financial sustainability for EPI at the earliest. It plans to co-finance the new vaccine through available national resources and improve the level of co-financing and options for financial sustainability by adapting the following strategies based on the country context and also referred to in cMYP (see Annex 4):

1. Mobilize government resources for NIP

Include NIP requirement (co-financing for new vaccine) in National Development Budget.
Set target for government financial commitment to routine immunization.
Regularly update EPI five year plan and budgeting with the active participation of partners.

2. Mobilize donor funding for immunization

Monitor how BPHS fund is being used for immunization at the district level;
Advocate with donors to specify required funding for EPI from support provided for BPHS
Identify new donors for NIP through CGHN and other forums
Use different mechanisms to attract additional funding for EPI
Generate reports on expenditures in link with activities and results and share with partners
Develop proposals for new activities and present to donors for fund raising

3. Mobilize resources from private sector

Assist in developing related policy and guidelines
Identify potential private providers especially in hard to reach areas
Promote financial contribution of private sector in provision of support to different immunization initiatives such as mass campaigns

4. Ensure reliability of resources

Build financial management capacity at all levels to ensure timely report and improve planning.
Incorporate the NIP requirement in MoPH annual budget.
Review/ update NIP requirement regularly

5. Promote integration and maximize efficiency of immunization

Integrate EPI with other evidence based child survival interventions and develop integrated managerial and logistic tools;
Ensure all health facilities are providing immunization services and follow one point station service delivery approach.
Improve planning for out reach, enhance mobilization activities

<p>Shift from pulse immunization as an approach to reach underserved and hard to reach areas to sustainable outreach services (SOS). Reduce Drop-Out Rate and Missed opportunity</p> <p>6. Reduce vaccine wastage Establish vaccine wastage monitoring system Improve vaccine management at all levels Improve health workers performance and apply policy on use of multi-dose vials of DPT-HepB, OPV and TT in subsequent session in out reach</p>
--

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

Disease	Title of the assessment	Date	Results
Hib Meningitis	Meningitis Project in 4 Hospitals		This project started in Jan 2008.

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, drop out rate, wastage rate etc., and suggest solutions to address them:

Lessons Learned	Solutions / Action Points
1. Pre-introduction assessment of cold chain storage capacity	- Assessment has been carried out and the plan for increasing capacity has been prepared. The process of procurement of additional cold chain has begun and is highly likely to be completed by mid 2008.
2. Pre-introduction assessment and preparation of training materials	- Assessment of the vaccinators' knowledge on vaccine management - Training materials on vaccine management and injection safety have been prepared - Information about the disease, new vaccine and new immunization schedule will be prepared
3. Early social mobilization activities were effective in introduction of DPT-Hep B	- Preparation, printing, and distribution of the social mobilization materials - Advocacy meetings - Mass media messages - Press release about the disease and the availability of vaccine
4. Early preparation of the recording and reporting materials – During introduction of Tetravalent, recording format was incomplete. Extra columns to provide complete information about the doses administered will be added to the format.	- Preparation, printing, and distribution of the register books, vaccination cards, tally sheets, and monthly reporting forms - Training of the vaccinators in proper recording and reporting
5. Reduction of the vaccine wastage – Proper vaccine management	Refresher training for vaccinators
6. Regular monitoring and supervision	Plan for regular monitoring and supervision is in place

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

First Preference Vaccine: As reported in the cMYP, the country plans to introduce Hib (antigen) vaccine, using Pentavalent (DPT-HepB-Hib) vaccine, in single doses per vial, Liquid form.

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 dose⁸.
- 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: Pentavalent (DPT-HepB-Hib)	Use data in:		Year 1 (2009)	Year 2 (2010)	Total vaccinations
Number of children to be vaccinated with the third dose	Table 3.4	#	1,020,453	1,080,977	2,101,430
Target immunization coverage with the third dose	Table 3.4	#	87%	90%	
Number of children to be vaccinated with the first dose	Table 3.4	#	1,137,747	1,201,086	2,338,833
Estimated vaccine wastage factor	Annex 2a or 2b Table E - tab 5	#	1.05	1.05	
Country co-financing per dose *	Annex 2a or 2b Table D - tab 4	\$	0.10	0.10	
Number of vaccine doses			4,491,200	3,845,100	8,336,300
Number of AD syringes			4,785,800	4,055,200	8,841,000
Number of safety boxes			53,125	45,050	98,175
Total value (Vaccine, AD Syringes, Safety boxes)		\$	16,748,500	12,775,000	29,523,500

* Total price per 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)	Total vaccine & supplies
Number of vaccine doses	#	120,500	115,700	238,200
Number of AD syringes	#	128,400	122,000	250,400
Number of safety boxes	#	1,425	1,375	2,800
Total value to be co-financed by country (USD)	\$	449,500	384,500	834,000

⁸ 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)	Total vaccine & supplies
Number of vaccine doses	#	4,370,700	3,727,400	8,098,100
Number of AD syringes	#	4,657,400	3,933,200	8,590,600
Number of safety boxes	#	51,700	43,675	95,375
Total value to be co-financed by GAVI (USD)	\$	16,299,000	12,390,500	28,689,500

- 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

Regarding the Pentavalent (DPT-HepB-Hib) vaccine, EPI Afghanistan has a strong first preference for all liquid single dose per vial preparation.

- 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 GAVI support for introduction of the new vaccine will be managed through the same regulation as ISS funds, that is, through the Ministry of Public Health which will take complete management responsibility of the in-country transfer of funds through its existing health sector account.

- The MOPH will be responsible for managing and reporting to GAVI about the required reports on the use of funds.
- The ICC monitors the end use of supply and support.
- The new vaccine and supplies will be procured through UNICEF supply division as the existing mechanism.

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

- *Other vaccines or immunisation commodities procured by the country and description of the mechanisms used.*
- *The functions of the National Regulatory Authority (as evaluated by WHO) to show they comply with WHO requirements for procurement of vaccines and supply of assured quality.*

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

The new vaccine Pentavalent (DPT-Hep B-Hib) will be introduced into all the country at once and will be substituted for Tetravalent (DPT-Hep B) starting on January 1st, 2009, according to the current schedule i.e at age 6, 10 & 14 weeks. For example, infants due for their second or third dose of Tetravalent in January 2009 will receive Pentavalent instead. The recording formats will have separate columns for recording the number of children receiving each type of vaccine.

The preparatory steps taking place before the introduction of the new vaccine include:

- Pre-introduction assessment for evaluation of cold chain capacity
- Installation of 20 new cold rooms at National and Regional EPI Cold stores.
- Preparation, printing, and distribution of social mobilization materials and implementation of social mobilization activities
- Preparation, printing and distribution of recording and reporting materials
- Preparation and printing of the training materials
- TOT for trainers
- Training of service providers on new vaccine
- Updating of immunization guideline and inclusion of new vaccine
- Updating of checklist for monitoring and supervision
- Strengthening of AEFI surveillance through refresher training course
- Establishment of sentinel Hib meningitis surveillance

Post introduction steps will include:

- Post-introduction monitoring in addition to regular routine EPI monitoring.
- Quarterly review meetings and an evaluation in 2010
- Sharing the progress with ICC and seeking its advice if any constraints are faced

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

The GAVI fund support for introduction of new vaccine should be channelled into the country through the existing system and banking account of the ISS fund of phase 1.

Note: the details of banking form were submitted to GAVI for ISS support.

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

The co-financing amount i.e the country share will be paid to local UNICEF office on yearly basis by the Government of Afghanistan. The amount will be paid each year latest by end January. The first due amount of GOA share towards co-financing of Pentavalent (DPT-HepB-Hib) vaccine of US\$ 448,349 will therefore be paid by end January 2009.

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

1-Monitoring and supervision

- Supervisory visits will be conducted according to the plan
- Update and use of the DQA tool as a supervisory tool
- Conducting of monthly provincial and quarterly regional review/evaluation meetings on performance of the plan and feedback
- Quarterly review by ICC
- Annual review / evaluation of the plans

2. Quality of the recording and reporting system:

- The coverage of the new vaccine will be reported through the existing information system of the EPI.
- Follow up and close monitoring of all recording and reporting systems in all over the country
- Training of all staff on new recording and reporting system

New and Under-Used Vaccine Introduction Grant

Please see Document 7 – Introduction Plan.

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	1,346,653	\$ 0.30	403,996

Please indicate in the tables below how the one-time Introduction Grant⁹ 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
	US\$	US\$
Training	171816	171816
Social Mobilization, IEC and Advocacy	96265	96265
Cold Chain Equipment & Maintenance*	250000	
Vehicles and Transportation	0	
Programme Management	52000	52000
Surveillance and Monitoring**	180800	80800
Other (Misc Office Supplies)	3115	3115
Total	753996	403996

*Cold chain equipment funded with GAVI ISS

**Part of Hib meningitis surveillance project funded through WHO

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

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

⁹ 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

8. Documents required for each type of support

Type of Support	Document	DOCUMENT NUMBER	Duration *
ALL	WHO / UNICEF Joint Reporting Form (last two)	1	2005-2006
ALL	Comprehensive Multi-Year Plan (cMYP)	2	2006-2010
ALL	Endorsed minutes of the National Coordinating Body meeting where the GAVI proposal was endorsed	3	7 Feb 2008
ALL	Endorsed minutes of the ICC/HSCC meeting where the GAVI proposal was discussed	4	7 Feb 2008
ALL	Minutes of the three most recent ICC/HSCC meetings	5	2007-2008
ALL	ICC/HSCC workplan for the forthcoming 12 months	6	2007-08
Injection Safety	National Policy on Injection Safety including safe medical waste disposal (if separate from cMYP)		
Injection Safety	Action plans for improving injection safety and safe management of sharps waste (if separate from cMYP)		
Injection Safety	Evidence that alternative supplier complies with WHO requirements (if not procuring supplies from UNICEF)		
New and Under-used Vaccines	Plan for introduction of the new vaccine (if not already included in the cMYP)	7	2008-2009
	Co-financing agreement of Ministry of Finance	8	2007
	Costing analysis worksheets	9	2008
	Cold chain analysis worksheets	10	2008

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