Planning Commission Form 1 (PC-1)

Expanded Programme on Immunization (EPI)

2015-16 to 2019-20

Cost: MILLION PKR

LOCAL (PSDP)	**29,315.976**
NISP SHARE	**8,328.706**
TOTAL COST	**37,644.682**

Ministry of NHSR&C
Federal EPI Cell,
Government of Pakistan.

GOVERNMENT OF PAKISTAN
PLANNING COMMISSION

PC-1 FORM

(SOCIAL SECTORS)

1	**Name of the Project**	Expanded Programme on Immunization (EPI)
2	**Location**	All Pakistan
3	**Authorities responsible for:**	Federal Government
i.	Sponsoring	Federal Government, World Bank, GAVI and the Gates Foundation
ii.	Execution	Federal EPI Cell , the Departments of Health of the Provinces &Federating Units
iii.	Operation and maintenance	Federal EPI Cell
iv.	Concerned Federal Ministry	Ministry of National Health Services, Regulation and Coordination
4	**Plan Provision**	
	a) Plan Provision	Expanded Program on Immunization (EPI) was included in the Ten-Year Perspective Development Plan 2001-11 and Medium Term Development Framework 2005-10. In addition, this program is also identified as major health sector interventions under PRSP I and II. Government of Pakistan, being a signatory to the Millennium Declaration 2000 is also committed to meet targets set under goals 1, 4, 5 and 6. The efforts under this program will help the GoP in achieving health imperatives laid out in Vision 2025 and help meeting the SDGs targets because Routine Immunization is one of the most cost effective interventions in the health sector which addresses reduction in morbidity and mortality. It has a long term economic gain in reducing the expenditures on the government exchequer and in producing healthy generation. Government of Pakistan intends to implement the National Immunization Support Project (NISP) in the country, to support the devolved Expanded Program on Immunization (EPI) at the provincial level, with the support of World Bank, GAVI and Gates Foundation. While the provinces stand fully responsible for implementation of all activities under their individual PC-1s in the post devolution setup, the Federal Government still plays an important role, being the main channel of donor financing and coordination with the provincial units and signatory to international commitments e.g. the SDGs. Under the present arrangements; the Federal Government is responsible for provision of all required vaccines, syringes and safety boxes and capacity building for newly introduced vaccines and staff recruited, this practice shall continue through the current PC-1.
	b) If the Project is not in the Plan what warrants its inclusion in the plan	**The program is financed through the development budget (PSDP/ADPs) of the Federal and Provincial Governments. The recurrent liability is met out of the Provincial budget in addition to the funds provided through different sources ;World Bank. GAVI. Meanwhile the Federal EPI Cell has been included for funding through current expenditure Budget Book 2015-16 demand for Grants. *(Copy is Annexed at).The case would be initiated to shift the EPI operational budget from development side to the recurrent budget on the analogy of the Directorate of Malaria Control.** **The Prime Minister chaired a meeting of the National Task Force attended by the Chief Ministers and Chief Secretary where he was pleased to direct for the preparation and processing of the PC-1 for Polio and EPI. *(Copy of the**

		minutes is Annexed at)
	c) Provision in the current year PSDP and ADP.	PSDP (2015-16) allocation PKR 1859.409 Million.
5	**Project objectives and its relationship with sectoral objectives:**	
	Project objectives and its relationship with sectoral objectives:	**The objective of the program is:** **General:** • The objective is to increase the equitable coverage of services for immunization against vaccine preventable diseases (VPD), including poliomyelitis, for children between 0 and 23 months in Pakistan. • Improve immunization services through strengthening Routine Immunization and introduce Systems Strengthening approach **Specific:** Goal of the immunization program in Pakistan is to decrease VPD associated morbidity and mortality: • Measles: Reduction of measles morbidity and mortality by 50% compared to the 2012 level. (Based on the benchmark of cMYP, The achievement of the target will be reduction of measles morbidity and mortality by achieving the estimated target coverage of 90%). • Polio: Interruption of transmission of indigenous wild Poliovirus by the end of 2015 and certification of a Polio Free Pakistan by the end of 2018. • Tetanus: Elimination of Neonatal Tetanus by 2015 and maintain the elimination status till 2018. The table below depicts the targets set in the cMYP for achieving the desired objectives.

Province	**Cases of measles** per 1 million population		**Cases of Polio**		**Cases of Tetanus** per 100,000 newborns	
	From	To by 2018	From	To by 2018	From	To by 2018
Punjab	34	20	2	0	0.8	0.5
Sindh	218	55	4	0	1.8	0.5
Balochistan	225	110	4	0	0.6	0.3
KP						
AJK		<5		0		<1
CDA		<5		0		<1
FATA		<5	20	0		<1
GB		<5	1	0		<1
ICT		<5	0	0		<1

Table: 1

Further the objective of the national immunization program is to improve performance of the immunization system that is measured in terms of coverage and equity as listed below:

Indicators	2012	2015	2016	2017	2018	2019-20
1. Increase DTP3 coverage	64%	73%	77%	81%	85%	85%
2. Increase Measles 1 coverage	61%	68%	72%	76%	79%	79%
3. Increase the proportion of population protected at birth from neonatal tetanus	64%	67%	70%	74%	77%	77%
4. Increase OPV3 coverage	83%	73%	77%	81%	85%	85%
5. Increase PCV coverage	0%	73%	77%	81%	85%	85%
6. Increase IPV coverage	0%	22%	50%	61%	72%	72%
7. Increase Rota Coverage	0%	0%	33%	54%	64%	64%
8. Increase Hepatitis (birth dose) coverage	0%	29%	49%	59%	69%	69%
9. Increase the proportion of children fully immunized[1]	53%	63%	69%	73%	77%	77%
10. Improve geographical equity - % of districts that have at or above 80% DTP3 coverage	20%	41%	52%	62%	73%	73%
11. Improve socio-economic equity[2],[3]	47%	35%	30%	25%	20%	20%
12. Decrease drop-out rate - percentage point difference between DTP1 and DTP3 coverage	18%	13%	12%	10%	9%	9%
13. Increased demand - % of children whose mothers intend to vaccinate children	TBD				TBD	

Source:
*** cMYP(2014-18),EPI Reported Coverage (2014) ,PDHS (2012)**

The project aims at improvement in quality of life through enhanced immunization coverage including Preventive and curative care. This will decrease mortality and morbidity and disability in the children and women through TT.

The ultimate objective of EPI will contribute in enhanced productivity of labor through healthy human workforce

6 Description and justification and Technical Parameters

Description

The EPI aims to immunize all children below 23 months against nine vaccine preventable diseases. Children under two years of age in Pakistan are envisaged as the primary beneficiaries of NISP. In addition, children aged under 5 years will also be targeted during supplementary immunization activities (SIAs) for polio and under 10 years for measles. The children under 10 years of age are to be secondary beneficiaries of the project. The success of these activities depends substantially on

[1]% of children aged 12-23 months who receive all basic vaccinations in a country's routine immunization program
[2]DTP3 coverage in the lowest wealth quintile is +/- X % points of the coverage in the highest wealth quintile
[3] PDHS 2012-13 figure was selected as baseline, that is slightly higher than PSLM 2011-12 finding (41 per centile point)

		the presence of a strong and robust routine immunization system. Globally,Pakistan is one of the last three countries in which polio is still endemic. The eradication of this virus is heavily contingent upon an effective EPI program – particularly as Pakistan aims to introduce inactivated poliovirus vaccine (IPV) into its routine schedule in mid-2015. This project aims to strengthen EPI in Pakistan at the critical endgame stage of polio eradication. Pakistan is behind Millennium Development Goals targets , despite the success in the reduction of diarrhea incidence among children under age five and sustained decline in infant mortality and maternal mortality rates over the last two decades: In pursuance of 18th Amendment to the Constitution, health sector has been devolved to the provinces with absolute administrative and financial autonomy. Although vertical Programs in health sector have been devolved to the provinces, however, upon their request and in pursuance to the decision of CCI, funding for these vertical Programs during the course of 7th NFC Award shall be catered to by Federal Government. However, post devolution scenario, in case of vertical programmes, the provincial governments assumed the role once played by the federal government. In a recent situational analysis carried out by UNICEF[4], it was highlighted that in the immediate future, the policies and program cycles already in place will most likely continue; however the provinces may find difficulties in allocating budgets for these programs in the long-run. In the same context, some provincial governments have already raised concerns over their ability to provide budget allocations for the next year. Pakistan is a federation and comprises of four provinces and the federally administered territories. Following special campaigns for Polio Eradication, the number of polio cases decreased dramatically from 380 in year 2014 down to 41 in 2015. As per the official reports, the immunization coverage for various antigens along with dropout rates for DPT and measles. The **National Immunization Support Project (NISP)**is the result of an all-inclusive participatory strategic planning exercise for immunization carried out by the Government of Pakistan (GoP) and partners at provincial and federal levels. Designated health authorities in each federal entity conducted a series of consultations with key stakeholders and designed respective comprehensive multi-year plans (cMYP) for strengthening of routine immunization services. A “bottom-up” approach to the strategic planning for immunization ensures true local ownership and is aligned with the key principles of devolution of responsibilities for health care to federal entities as required by the 18th Amendment to the Constitution of Pakistan. Each cMYP developed by individual federal entities: • Conveys understanding of immunization related context specific to the entity

[4] UNICEF “Situational Analysis of children and women in Pakistan. National Report”, June 2012

- Reflects a vision of the sub-national authorities and partners of the developments of immunization and strategic decisions necessary to achieve immunization outcomes addressing entity specific challenges and tacking stock of past achievements
- Presents a financial framework (projections of resource requirements and financing) linking availability of resources (financial or service delivery capacity) with immunization performance targets

Sub-National cMYPs are primarily intended to inform local policy-making process being translated into respective budget planning and execution instruments as well as to guide in-country development partners, donors and non-governmental organizations in providing support for routine immunization services.

Despite the devolution of health care, the federal health authorities retain exclusive responsibilities and roles in fulfillment of national commitments of Pakistan at the global and regional levels (such as Millennium Development Goals) while supporting sub-national entities in the implementation of their respective immunization programs. Within this context, therefore, the main purpose of this national project is to provide an overall description of achievements and expected developments in immunization from a national perspective by:

- Consolidating all sub-national cMYPs into one narrative
- Highlighting immunization related challenges, expectations and intended efforts at the federal level addressing gaps/areas not covered by sub-national cMYPs.

The consolidated NISP is primarily meant for federal level policy makers to inform budgetary decisions and actions within the federal competencies as well as for international actors supporting Pakistan in fulfilling its commitments.

Finally, production of sub-national and consolidated national NISP is not the end but the beginning of an evidence-based, performance oriented and transparent strategic governance processes in immunization at federal and sub-national levels.

The Following are the major components of NISP being used as tools under cMYP to achieve the immunization targets under the proposed EPI programme:

Component 1: Increase program management performance by strengthening Management, Governance and Stewardship Functions at all levels

Component 2: Improving Performance through strengthening Service Delivery mechanisms at all levels

Component 3: Improved knowledge and practices toward VPD diseases among target populations

Component 4: Enhancing Managerial and Technical Capacities for an Effective and Sustained Immunization Response

The NISP proposed by the World Bank is a financing vehicle to coordinate resources, ensure timely availability of funds for implementation and facilitate the implementation of the cMYP.

Salient Features:

		• The Federal EPI Cell/ MoNHSRC will be responsible for coordination of development partners financing and thus will be the main agency involved in fiduciary and reporting responsibilities. • The Federal EPI cell will be responsible for delivering technical assistance to the provincial programs, as required to strengthen, implementation, monitoring, reporting and project management. • Federal EPI Cell will additionally be responsible for federally administered territories. • The NISP will therefore have five implementing agencies: ▪ ***One*** Federal EPI cell under the MONHSRC including the Federally administered Territories ▪ ***Four*** Provincial EPI cells established in the Director General Health Services (DGHS) in each province. • NISP will use the existing institutional arrangements at the federal, provincial and district levels. The implementing entities will coordinate with each Department of health (DOH), Finance Department, the Accountant General (AG) office and the concerned Audit offices. • A single financing agreement will govern all flow of funds under NISP – *the EPI unit within MONHSRC will be responsible for processing and submitting of withdrawal applications on behalf of itself and all four provinces*. • Each provincial EPI cell will be responsible for independent program implementation, with coordination being provided by the federal body. • To cater for the capacity needs of the provincial EPI cells the departments of health have to make provision for the appointment and maintenance of critical technical and fiduciary positions in addition to building and enhancement of the existent capacities. • Established Steering Committees for immunization at the Federal and Provincial levels will meet bi-annually to review physical and financial progress as well as annual work plans - including procurement and training plans. • There will be bi-annual review meetings of provincial coordination committee and monthly review meetings at district level for the purpose of monitoring, supervision, planning, reporting, data analysis, HR management, trainings, coordination and data validation (federally administered territories-in case of the Federal PC -1). • The project will employ Disbursement Linked Indicators (DLIs) to finance project results, by disbursing a portion of the total project financing once key results have been met under each component. ▪ Progress by each province will be monitored with province-specific targets for each indicator, developed and negotiated according to the province context and capacity. ▪ The DLI results will be verified by third party independent audit, . Establishment of these contracts within six months from the date of the financing agreement shall be considered essential. ▪ The reports of these audits will be reviewed by the national Immunization Coordination Committee (ICC), before forming the basis of the disbursement request made by the Federal EPI cell to the World Bank. ▪ An essential element for delivery of DLI results will be strengthened capacity at the provincial EPI cells – particularly in appropriate human resources. ▪ The financing agreement shall include that each province, no later than three months after the effective date, appoint and maintain, throughout the period of implementation of the Project, critical positions including FM, procurement, M&E, Surveillance, Data Management, Epidemiologist, with appropriate qualifications and experience.

		▪ The Federal and the Provincial EPI cells will prepare a semi-annual DLI Results Report, which will be reviewed by the national ICC and then inform the Bank's biannual implementation review and subsequent disbursement of funds provided that all results have been met.
	Technical Parameters	**Technical Parameters** The measurement of the success of meeting of the objective will be carried out through the following key program indicators: • **Program Management:** o Policy setting (NITAG) o Coordination (NICC) o Representation of the country in front of international agencies o Oversight of EPI implementation (NSC EPI) o Regulation of supply of medicines and commodities (NRA) • **Immunization service delivery** o Setting national standards for service delivery (as integral part of policy making) • **Human resource management** o Setting accreditation rules and standards o Capacity building oh HR • **Cost and Financing** o Financing of co-financing commitments (till June 2015) o Establishment of national mechanisms for fulfillment of co-financing commitments (after June 2014) o Financing vaccines and injection supplies for administrative areas o Financing of Federal level EPI activities o Mobilization of donor financings o Oversight of the implementation of provincial financial sustainability strategies • **Vaccine, cold chain and logistics** o Procurement of vaccines and injection supplies o Procurement of cold chain o Establishment and maintenance of emergency vaccine stock • **Surveillance and reporting** o Coordination ,Information collection and sharing o Provision of guidelines and SOPs o Consolidation of national reports o Assess and analyze the performance of provinces and territories on the basis of surveillance performance indicators • **Demand generation, communication and advocacy** o Organizing/conducting national KAP surveys (with partners) o Development and endorsement of national communication strategies (and guidelines) o Advocacy **Target set on the basis of these parameters are as follows**:

		• 90 % children fully immunized between 0-11 months disaggregated by gender, income, province and district • 80% revised computerized UC level micro plans available for UCs at district and provincial level by the end of first year project • 80% percent Union Councils assessed for validity are cleared (90% age appropriate vaccination) • Districts reporting on vLMIS with at least 80% timeliness & completeness • Online surveillance including zero reporting for VPD & AEFI system for 80% Health Facilities within district • Ensure that federal EPI has completed Mid-Level Managers Courses which have been attended by the Director, DHOs, MSs and MOs of every district • 90% fully functional cold chain equipment as per WHO specifications at ALL health facility levels • 80% detailed supervisory plans available within the district for all district, Tehsil and UC supervisors • 80% supervisors submitted monitoring reports online to higher level • 80% parent ensured retention of vaccination cards. • Increase in expenditure on public awareness campaigns through electronic media disaggregated by provinces • 80% parents with children under 1 year of age can state the date for next immunization.
	Existing facilities	At the primary level, one BHU is required in each union council. Almost every BHU is providing EPI services in the federating unit level. Immunization services are delivered by BHUs and RHCs. Besides this teaching, District Head Quarters and Tehsil Hospitals are also providing immunization services. Immunization services are delivered by 6,979 EPI Centers and average population served by an EPI Center amounts to 25,300 (see details in. Approximately 915 UCs throughout the country did not have EPI Centers (or 13% of all UCs) and 489 UCs are not staffed with SIS (or 7% of all UCs). Immunization services are delivered via fixed cites and outreach/mobile approaches: contribution of fixed delivery sites to the immunization service delivery varied between 20%-25% (in Punjab and Balochistan) to almost 100% in Sindh. No data was available for CDA, GB and ICT. EPI Centers provided immunization services 6 hours per day in average in all provinces (except KP where average time amounted to 8 hours per day). ***Note: The PC-1 strategizes to bring in a shift in the traditional approach by gradually increasing immunization services from outreach to fixed centers and hence incorporates in the current PC-1 of increasing the fixed centers at the territories by constructing one center per year; these will be built within the existing facilities not having a fixed immunization center.*** **Service develiry capacity by type of healthcare providers and functional status in Pakistan, public sector** **Functional Status**

Type of health facilities	Required[5]	Functional	Delivering EPI
01. Teaching Hospitals		6	6
02. DHQ	148	129	129
03. THQ	460	155	155
04. RHC	1,090	669	668
05. BHU	6,711	5,130	4,658
06. Urban Health Centers		5	5
07. Urban Health Units		16	16
08. MCH Centers & Dispensaries	210	3,450	416
09. Others	573	825	211
10. (LHW) Health House	142,175	76,171	
11. Private (obstetric service)			
12. Civil Dispensaries	598	622	117
13. First Aid Posts	90	129	2
14. Civil Hospital	45	41	40
15. Community health Centers	163	110	
Grand Total	**152,263**	**87,458**	**6,423**

Table 9

Service delivery capacity per type of healthcare professional and functionla status at the community level by typology and status in Pakistan, public sector.

Type of personnel	Functional Status		
	Required	Functional	Delivering EPI
01. LHW[6]	162,634	94,996	14,865
02. CMW		3,073	0
03. Vaccinator	14,145	10,159	10,159
04. DSV	27	27	0
05. TSV	123	123	0
06. LHV	401	2,051	59
07. LHS	2,248	1,015	0
08. CDC	3,520	1,767	0
09. Sanitary patrol	3,520	1,735	0
10. Nurses	340	256	
10. Nurses | Dispensers		33	33
Grand Total	**186,958**	**115,235**	**25,116**

Table 10

[5] For certain type of healthcare facilities ("others", First Aid Posts", "Civil Hospitals") there are no recognized norms to estimate requirements. The numbers reflect perceptions of provincial health authorities

[6] The number of required LHW differs from the number of required LHW Health Houses; some provinces stated higher requirement figures for LHW than for LHW Health Houses

Beneficiary (Male/female)

The project is targeted towards children, pregnant women and child bearing women. The total beneficiaries over the five year period are as follows:

Target	Routine/Campaigns				
	2015-16	2016-17	2017-18	2018-19	2019-20
Children	512,619	522,359	532,284	542,397	552,703
Pregnant Women	594,888	606,191	617,709	629,445	641,405
CBA	3,192,083	3,252,732	3,314,534	3,377,510	3,441,683

Address constraints to women's participation

The main issue regarding women is administering the TT injection; most of the vaccinators are male. Women in some of the areas are more reluctant to get an injection from male vaccinators.

The project will use the female workers for administering TT injection to women in the field. TT injection at static centers will be assigned to the Lady Health Visitors and Female Medical Technicians. While for outreach purposes the LHWs and CMWs will be trained to give TT shots.

Provide technical parameters and discuss technology aspect *copyabove

The immunization system, once being a vertical public health program managed from Islamabad, today represents a complex set of federal and provincial programs due to the recent devolution of healthcare functions. Therefore, the analysis of the immunization performance in Pakistan takes into account the distribution of competences between federal and provincial immunization programs. Most of EPI implementation functions have moved to provincial EPI entities and their performance is analyzed in details in respective provincial cMYPs. The present analysis of immunization system performance focuses on the federal level functions while highlighting some key performance issues at sub-national levels.

Immunization system components	Federal	Provincial
Program Management	• Policy setting (NITAG) • Coordination (NICC) • Representation of the country in front of international agencies • Oversight of EPI implementation (NSC EPI) • Regulation of supply of medicines and commodities (NRA)	• Provide policy inputs on provincial priorities (to NITAG) • Policy adjustments (PITAG) – optional • Coordination (PICC) • Implementation – EPI Cells
Immunization service delivery	• Setting national standards for service delivery (as integral part of policy making)	• Expansion and maintenance of service delivery infrastructure • Oversight of adherence to service delivery standards
Human resource management	• Setting accreditation rules and standards	• Human resource planning • Mobilization of HR • Capacity building of

		HR
Cost and Financing	• Financing of co-financing commitments (till June 2015) • Establishment of national mechanisms for fulfillment of co-financing commitments (after June 2014) • Financing vaccines and injection supplies for administrative areas • Financing of Federal level EPI activities • Mobilization of donor financings • Oversight of the implementation of provincial financial sustainability strategies	• Financing of vaccines • Co-financing of GAVI NVS vaccines (after June 2015) • Development and implementation of financial sustainability strategies
Vaccine, cold chain and logistics	• Procurement of vaccines and injection supplies • Procurement of cold chain • Establishment and maintenance of emergency vaccine stock	• Supply and storage of vaccines and injection supplies • Implementation of effective vaccine management • Implementation of vaccine safety policies
Surveillance and reporting	• Coordination ,Information collection and sharing • Provision of guidelines and SOPs • Consolidation of national reports	• Implementation of surveillance and data collection policies • Generation of provincial reports
Demand generation, communication and advocacy	• Organizing/conducting national KAP surveys (with partners) • Development and endorsement of national communication strategies (and guidelines) • Advocacy	• Implementation of communication strategies (including local context specific components developed by provinces) • Organizing targeted KAP surveys (as needed) • Advocacy

Table 12

Detailed routine EPI information will be provided during the training sessions by the provincial EPI program to the vaccinators. The training covers the basic information on the vaccines and also provides skills to the vaccinators in administering the vaccines to the target group. The target group for routine EPI vaccination for children is 0-11 months of age and pregnant women. The BCG and OPV0

		vaccination is recommended to be given to a child immediately after birth. This poses difficulty during vaccination. Most of the births are not reported within the first week as deliveries are mostly conducted at home. It is difficult for the vaccinator to get to the child at birth. The Lady Health Worker, Traditional Birth Attendant, Community Mid Wives and Health Facility looking after the mother can play a crucial role in linking the vaccinators to the births. As far as technicalities are concerned, the cold chain of the vaccines needs to be maintained from the place of manufacturer to the time the vaccine is administered to the child and their mothers. This requires proper trained and highly technical staff for maintaining proper temperature in the cold rooms and ice lined refrigerators at the provincial, district and facility store.
	Provide details of equipment and civil works etc.	The main equipment to be purchased under the project includes Cold Chain, Operational Vehicles, Office equipment and Office Furniture. Office equipment includes mainly computers (desktop and laptop), photocopiers and multimedia, vehicle, motorcycles and civil works etc. ***The fixed centers will be increased and revitalize with stronger functions to provide immunization services and bring in sustainability to the program. The increase in the fixed centers will by an annual 5% from the existing throughout the project period.***
	Indicate Governance issues and strategy to resolve them	1. The Governance Ownership and Devolution. 2. Procurement and Logistics. 3. Cold and Supply Chain Management. 4. Funds- Gavi's Co-financing. 5.Disintegration with other health programmes. 6. Monitoring & Surveillance. 7. Quality Human Resource.
	Health specific – curative and preventive, indoor etc.	The EPI services are provided through Static Centers, Outreach teams and mobile teams. These centers are located at Hospitals, Rural Health Centers, Basic Health Units, Civil Dispensaries and Maternal Child Health centers. The implementation of the program lies under control of District Health Officer (DHO).

<table>
<tr><td>7</td><td>Capital Cost Estimates of the project:</td><td>Capital expenditure was calculated on existing market rates in 3rd quarter of 2014.

The cost of establishing one fixed immunization centre per year of the 05 years of the PC-1 per Federating Unit is included - this reflects the intention to shift the focus of outreach to routine and static immunization centre approach.

The overall cost of the project for five years is

Rs.37,644.682 Million
(including partner support)

<table><tr><td>Local</td><td>Rs. 29,315.976 Million</td></tr><tr><td>FEC (NISP SHARE)</td><td>Rs. 8,328.706 Million</td></tr><tr><td>Total Project cost</td><td>Rs.37,644.682 Million</td></tr></table></td></tr>
<tr><td>8</td><td>Annual operating and maintenance cost after completion of the Project</td><td>The EPI Program has been getting continuous support from development and non-development funds and will continue in the province as immunization services are mandatory for all children of the country and it is responsibility of the Federal and Provincial/Regional Governments to provide funds.

After completion of NISP Supported activities through this PC-1, the province will take every component given in the PC-1on their strength under recurrent budget and will make sure to continue their services for sustainability of the program. In addition, a repair and maintenance cost of provincial EPI office and warehouse.

The Salary Component is only added for the first two years of the five years of project life – from there onwards this cost is proposed and expected to shift to recurrent side. Additionally, MP scales costing for the top slot positions have been added. The additional posts coming from the Technical Assistance Component are also included.</td></tr>
<tr><td>9</td><td>Demand and supply analysis</td><td>There is a significant difference in immunization coverage estimates; the resultant demand supply gap warrants the need for further support for the program to meet with the international commitments and also to eradicate the vaccine preventable diseases.

The Government of Pakistan carries out periodically two population based surveys: Pakistan Bureau of Statistics runs Pakistan Social and Living Standard Measurement Survey (PSLM) every year and National Institute of Population Studies (NISP) conducted 3 Pakistan Demographic and Health Surveys (PDHS 1990-91, 2006-07 and 2012-13). According to PSLM, the DTP3 coverage remained above 80% if record and recalled method was used for data collection, however it has not exceeded 60% if data was collected based on record alone.</td></tr>
</table>

Situational Analysis – routine immunization based on official estimates of provinces by years

Indicators	2010	2011	2012
Official Coverage Estimates			
DTP1	97%	97%	89%
DTP3	88%	87%	79%
Measles 1	82%	87%	76%
Measles 2	60%	63%	24%
OPV0	68%	65%	68%
% Fully Immunized Child (range by provinces)	46% – 94%	43% – 98%	16% – 95%
Access and demand			
% Drop Out DTP1 - DTP3	8%	10%	10%
% Drop Out DTP1 - Measles (1st dose)	14%	10%	14%
% Drop out Measles 1st and 2nd dose	23%	23%	51%
Immunization Equity			
Number and proportion of districts with DTP3 coverage > 80%	**65 (45%)**	**78 (53%)**	**46 (32%)**

Table 13

As depicted in the table above the coverage is far from the desired 80%.

Capacity of projects being implemented both in the public & private sector

The program at provincial and district level (public and private) is being implemented satisfactorily for more than thirty years (since 1978). Within current resources an execution network of services is established which exists at Provincial, District, Tehsil and Union Council level. Program still has supply gap to monitor any deficiency immediately which needs internal or external resources.

As earlier mentioned the program is under implementation since 1978, the infrastructure available is hardly catering the need of urban population the immunization services at peri-urban and field levels are negligible. The currently published PDHS survey has shown fully immunization children coverage around 54%. Through this coverage province could not reduce the burden of disease and achieve the target sets under MDG 4 and 5.

Subsequent to this project the program will be in position to design EPI Coverage Evaluation Survey (CES) to be conducted scientifically and methodically to gather authentic information to ascertain the exact coverage of different antigen at district level in the province. Cluster Sampling Technique (CST) given in the WHO manual, "*Immunization coverage cluster survey reference manual, 2004"* will be adopted for assessment of EPI coverage. This technique allows a small number of the target population to be sampled while providing data, which are statistically valid. The detail is given in **Annexure-V.**

EPI services are being provided mostly through public sector. Only a few private sector hospitals and clinics are providing EPI services mostly headquarters. Under the project the private sector will be encouraged to participate in immunization services. A proper assessment will be made and a standard MOU will be signed with private sector, where possible.

Outsourcing of services for immunization coverage is one key strategic consideration and piloting such initiative in laid in the activity matrix.

	Designed capacity & output of the proposed project	The current immunization coverage is very low. The existing EPI facilities and the human and financial resources are not adequate to meet the international and national commitments. This PC-1 will strengthen and consolidate the existing EPI sites and build up the capacity so that the program is able to meet its post 18th amendment obligations. The facilities and EPI services will probably require further scaling up at the end of the PC-1 period once the EPI system is fully operational and delivering services efficiently and cost effectively. The total cost proposed under the PC-1 is provided at appendix 2
10	**Financial Plan and mode of financing**	
		Proposed Financial Management Arrangements for NISP ***Implementing entity*:** The five implementing agencies will be Extended Program for Immunization EPI cell under MONHSRC at Federal Government level and the four provincial DOHs through EPI cells established in the office of the DGHS in each province. The implementing entities will coordinate with the Department of Planning and Development and the Finance Departments, the AG) office and the concerned offices of the Auditor General of Pakistan. At the federal level, it is envisaged that overall project management and monitoring will be the responsibility of the EPI unit within MONHSRC. Federal EPI cell will also be responsible for processing and submitting of withdrawal applications on behalf of all four provinces. Each provincial EPI cell will be responsible for independent program implementation, with coordination being provided by the federal body. ***Resources/Personnel*:** The existing financial management team at federal EPI consists of four government officials headed by account officer. The FM team will be strengthened by hiring a FM Specialist within three (3) months of effectiveness, as per TORs agreed with the Bank. At present, provincial EPI cells have limited capacity of financial planning and analysis for management decision making. The FM services are provided by the Budget and Account section of DGHS office. A dedicated FM specialist will also be hired at each provincial EPI cell to strengthen the cell's FM capacity. Accountant General at the provincial level will undertake recording, accounting and reporting functions through government's FMIS and will be responsible for budget execution and monitoring. ***Budgeting*:** The federal government will provide fund through PC-1 prepared for EPI cell under the development budget of MONHSRC. All four provinces will provide funding for the core project activities through separate PC-1 and will finance recurrent expenditure of immunization activities from non-development side allocation in the DOH budget using detailed object and functional classification prescribed in the Chart of Accounts. In case where district governments are involved, the district government will provide funds for corresponding activities from current side of the district health budget. Newly created DDO Codes/ Cost Centers for EPI will be used from the second financial year for budget preparation at the federal and provincial level. The federal and provincial governments follow a detailed budget calendar and budget call circular including detailed instructions is circulated during the year. This calendar provides deadlines for all the steps involved to ensure that there is sufficient time to receive, review, discuss, and compile the inputs from all districts. The consolidated budget is prepared by the federal finance division and provincial finance departments for submission to the legislature.

***Accounting and Financial Reporting*:** Accounting records for DLI component will be maintained using the government's FMIS and in accordance with the country accounting procedures and policies defined in the New Accounting Model (NAM). These policies and procedures are being progressively and consistently applied at the federal, provincial as well as district government levels. Use of NAM policies and procedures conforms to international standards and is acceptable to the Bank. For DA component, the Federal EPI Cell will manually maintain the following accounting records:

Cash/ Bank Book – to record all cash/ bank receipts and payments
General Ledger – to record all receipts and payments by object code
Asset Register – to maintain up to date record of assets procured
Invoice Register – to track payments
Contract Register – to record all contract payments
Vouchers for all receipts and payments

The system-generated accounting records and the manual records maintained by the Federal EPI Cell will be the basis for preparation of the EPI Budget Execution Reports, including program expenditures financed under the credit. The Project Financial Reports (interim and annual) will also be produced, showing the sources of project funds and their uses. The Project Financial Reports will take the form of biannual IFRs and Annual Financial Statements. The template for IFRs will be agreed during appraisal. Cash Basis IPAS will be used to prepare the Annual Financial Statements. Federal EPI will have primary responsibility for preparing and submitting financial reports to the Bank. IFRs will be submitted to the Bank within 45 days of the close of the six month period ending December 31 and June 30 each financial year.

***Internal Controls*:** As with other government expenditure transactions, DLI Component payments under the project will be subject to the normal pre-audit verification at accounting office's before payments from the single treasury account are approved. Federal Component funds will be managed by the EPI Cell using the Designated Accounts. Majority of the expenditure under Federal Component will constitute monitoring, supervision and consulting services for data validation and will be expended using the Bank's procurement guidelines. Internal control activities for the project will at minimum include:

Authorization and Approvals: For payments to be made from DA, the financial and administrative authority will be exercised in accordance with the approved delegation of powers.

Verifications: For each payment the FM section will review that the payment claim is appropriately supported by documents, is in compliance with approved policies and has been approved by the competent authority.

Segregation of Duties: The FM function will be independent of procurement and administration. There will be dual bank signatories, one of which will be from a unit other than FM.

Physical Controls: The Federal EPI Cell will maintain a fixed assets register for assets procured from credit and grant proceeds. All assets will be tagged and periodically verified.

Reconciliations: Expenditure reconciliation with the Accountant General and bank

		reconciliation will be carried out on a monthly basis. Any difference in the reconciliation will be reviewed and the reasons for the difference will be documented. ***Supervisory Controls:*** Monthly reconciliations with the Accountant General and the Bank, physical stock verifications reports and periodic financial reports will be reviewed by the Project Director. ***External Audit*****:** The annual financial statements of the program will be audited by the Auditor General of Pakistan (AGP). The audited financial statements will be submitted to the Bank within six months after the close of the financial year. The audit will be carried out in accordance with Financial Audit Manual (FAM), which is based on INTOSAI Auditing Standards and international best practices and is generally compliant with International Auditing Standards. The project level audit will involve multiple audit offices of the AGP and Federal EPI Cell will be responsible to coordinate with the auditors for timely initiation and completion of audit. For each financial year closing on June 30, acceptable audited financial statements of the project along with Management Letter will be submitted to the Bank by December 31, i.e. within six months of the close of the financial year. There are no overdue audit reports or unsettled ineligible expenditure in respect of the project implementing entities. For **Technical Assistance component**, two segregated Designated Account (DA) – one for IDA Credit and the other for Grant - will be established in United States Dollars at the National Bank of Pakistan at the federal level. Disbursements will be report-based where advance equivalent to six months forecast will be provided and subsequent biannual Interim Financial Reports (IFRs) will be the basis of documentation of the expenditures. Subsequent IFRs will also provide forecast for the following six months, on the basis of which the amount of funds to be disbursed will be determined. However, the use of the designated account and Advance method will be available only when the issue of Lapsed Loan in the Pakistan portfolio is fully resolved. The disbursements for Category 1 are conditional on the achievement of reform actions or results. These are identified as Disbursement Linked Indicators (DLIs). A certain amount of credit and grant proceeds has been allocated to each DLI, referred to as the DLI price, which is the amount that the government can claim as reimbursement against EEPs if that DLI has been achieved and verified. For DLI Based Disbursements, the Bank will biannually disburse funds to the Federal Government Consolidated Fund - Account No. 1 (Non-Food) and the Consolidated Fund Account No. 1 (Non-Food) of each Provincial Government, consequent to the achievement and verification of the agreed DLIs. A one-time advance of US$___ will be provided upon project effectiveness against forecasted EEPs for the next one year. The advance will be subsequently documented against relevant actual EEPs conditional on achievement of DLIs. The Bank will reimburse eligible expenditures as reported in the biannual IFRs capped to the price of DLIs achieved. Disbursement from the credit and grant proceeds in US Dollars will be translated to Pakistani Rupees by the State Bank of Pakistan, and the local currency shall form the transaction basis for the operation's accounting and reporting.

Biannually, federal EPI cell will submit a Withdrawal Application duly signed by an authorized representative of EPI cell along with IFRs and DLI results report to the Bank for disbursements and documentation of expenditure. The template of Interim Financial Reports (IFRs) will be agreed during negotiations and will be used to report advances and actual project expenditure incurred against the eligible expenditure supported by the Bank under the program.

Expenditures that the Bank will reimburse upon achievement of DLIs are referred to as EEPs and are a part of the Provinces and Districts recurrent budget of the eligible activities in respect of EPI activities. These expenditures are clearly identifiable in the government budget, FMIS and the Chart of Accounts. The Bank funds would not be separately tracked and the Bank will accommodate withdrawal applications from the Credit as long as the overall expenditures eligible under the EEPs are more than or equal to the amount to be withdrawn from the Credit. A brief description of EEPs is provided below:

Description: Pay and allowances for employees of the Health Staff working on immunization at the districts in the provinces.

Oversight: The budget for pay and allowances for health staff working on immunization within each district is assigned to each department. Direct responsibility for pay and allowances lies with the Drawing and Disbursing Officer (DDO) where expenditures are incurred. Salaries are processed through the government's FMIS and are subject to overall payroll controls which are considered adequate. Amounts are transferred by the respective District Accounts Office to the personal bank accounts of employees. Few employees receive their salaries in cash through DDOs but efforts are being made to eliminate such cases.

Procurement

Component 1, 2, and 3 of the project will be financed using a results-based DLI approach and EEPs related to 'non-procurable' expenditures and thus may not include activities that may require following a procurement process. However Component 4 of the proposed project will be carried out in accordance with the World Bank's guidelines on procurement and employment of Consultants[7], as well as the provisions stipulated in the Financing Agreement. Component 4 procurements of TA - which will support associated activities for achievement of DLIs - would largely cover the selection of consultancies, both firms and individuals, besides some goods. A detailed capacity review of Federal and provincial EPI Cells was undertaken which focused on assessment of the capacity of the agency to carry out the different phases of procurement. The assessment looked into the organizational aspects, skills of the staff, quality and adequacy of supporting and control systems, and suitability of the laws, rules and regulations applicable to the agency. As a result of the project implementation the entity shall have an extended exposure to the Bank's and other procurement systems which would in turn assist in enhancement of procurement function will result in cost savings: (i) by re-examining requirements, and where appropriate challenging demand at source, so as to avoid procurement in excess of needs; (ii) reducing end of life disposal costs; visible, efficient and trustworthy supply chain operations. The combined effect of these measures will supplement the financial sustainability of vaccine procurement. Following are the details of the assessment of the Federal EPI Cell, including a summary of the

[7] Guidelines: Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits and Grants January 2011," "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers January 2011.

		mitigation measures proposed. **The Federal Expanded Program on Immunization (EPI) Cell will be responsible for carrying out the procurements under the TA component of project**. Federal EPI is a permanent establishment working as an administrative unit of the Ministry of National Health Services, Regulations and Coordination (MONHSRC). It has a documented legacy of independently performing the procurement function for various vaccines and associated items and administrative procurement through Public Procurement Rules 2004 (PPR-2004). The National Program Manager is vested with some financial powers; delegated by the Principal Accounting Officer to perform support the functions of procurement. Presently EPI Cell has staffing capacity constraints as the key procurement staff is not on EPI's regular payroll but supported through GAVI. The EPI Cell has taken commendable steps by initiating, *inter alia,* recruitment of professional regular procurement staff in regular staff cadre. *Procurement Cycle Management:*On annual basis, the entity[8] runs a full-cycle National Competitive Bidding (NCB)for procurement of vaccines and ancillary items. Thus the entity has extensive exposure to large value and volume procurement. Based on the quality of documentation, notwithstanding the absence of a dedicated and trained procurement resource, the procurement cycle management was determined to be adequate for the purposes of procurement envisaged under NISP to be consistent with World Bank standards adequate. *Procurement Planning:* A realistic procurement plan is prepared as a matter of course in the agency based on the requirements, justifiable quantities, realistic market prices, timing of delivery, storage and approved formally by the NPM. The entity sends Procurement Plan (PP) to Public Procurement Regulatory Authority PPRA in July-Aug for publication in a freely accessible website. The PP of 2013 appeared to be free from all splitting and other violations. However there was no evidence whether the PP is also put through checks for collusion or other red flags. The World Bank could assist the entity in such reviews as the supplier base (notwithstanding other factors) has continued to remain small and has not substantively changed over a long period of time. *Advertisement, Pre-bid/proposal Conference and Bid/Proposal Submission:* Bids/proposals are consistently advertised in national daily newspapers and uploaded on PPRA websites and are easily accessible to potential bidders. The publications are in conformity with principles of the Bank's Guidelines. Timely and non-ambiguous clarifications to bidding/proposal documents are provided to all potential bidders. Mostly bidders attend in person - otherwise bidders send email/facsimiles which are responded to. The entity does not hold a pre-bid/proposal conference but involves potential suppliers at the planning stage. The bid documents are made available to all interested bidders without prescribing any pre-conditions. The number of bids received has been reasonable as compared to the number of bidding document purchased/number of pre-qualified bids and the bid sold and bid received is consistent. *Bidding Documents:* Bidding documents containing instructions to bidders, pre-qualification, shortlisting, and evaluation criteria along with a very elementary draft contract agreement were developed in 2008 and are still in use. Presently a scoring

[8] The term "entity" refers to the Federal EPI cell with MONHSRC – which is still managing procurement on behalf of subnational governments by following the procurement processes mandated by Federal Government's Public Procurement Rules which were enunciated in June 2004

		approach on a two envelope method is the main approach for procurement of syringes and vaccines. For off-the-shelf items where technical specifications and qualification criteria can be defined in most granular detail, the pass/fail criteria would ensure transparency, whereas the current scoring method with two temporally apart technical and financial proposals may compromise the integrity of process. *Evaluation and Award of Contract:* The Secretary of MONHSRC has constituted a Procurement Committee and a Technical Evaluation Committee with very clearly defined Terms of Reference. However the members are largely drawn from the ministry or its controlled subsidiaries and do not have "independent eyes and ears". The members may have acquired skills through learning but the additional presence of an area specialist would probably be helpful. Evaluations are well documented and contracts are awarded in time and are broadly consistent with the procurement guidelines. *Review of Procurement Decisions and Resolution of Complaints:* Complaints are reported to be rare however redress is provided through provisions of PPR-2004 and some guidance is also provided in Standard Bidding Document (SBD). The complaint management system appeared to be lacking a formal structure and would need some support for improvement. *Contract Management and Administration:* Adequate mechanisms are in place for procurement and/or contract monitoring. The supplies and payments generally follow the time periods agreed in contract agreement. There was no evidence of downgrading specifications, or compromise on delivery schedule or excessive changes in scope or price. *Procurement Oversight:* The procurement decisions are regularly reviewed by Auditor General of Pakistan. Various reports are regularly submitted to National Accountability Bureau and Public Procurement Regulatory Authority. Transparency International also maintains a regular horizontal fiduciary oversight. Additionally the controlling ministry, in performing the principal accounting function, incrementally reviews all procurement and contract administration decisions. It also complies with the government's regulations for Code of Conduct and Anti-Corruption. The accountability for procurement decisions is well documented in the notified instructions - however these are not freely accessible to all of the staff of EPI due to the absence of any intranet facility. However the entity could benefit from further advice from the World Bank, including relevant technical literature to further improve in this key area. *Record-keeping:* Based on a walkthrough of a completed procurement cycle it was determined that record of proceedings was available. However with an overall improvement in the procurement capacity of EPI, the completeness of procurement records and files would be better assured. In addition overall availability of data on numbers, types, values and dates of contracts awarded and names of awardees, will improve. There is an ongoing discussion with the Bill and Melinda Gates Foundation to have a partial buy down of the project on the methodology of the polio buy downs.
11	**Project benefits and Analysis**	The aim of project is to ensure the increased and sustained immunization coverage through immunization services. The Program is linked with other health sector projects under implementation in the province for improving the quality of maternal, neonatal and child health services.

		The project intends to increase the coverage ratio from 54% in 2012-13 (PDHS) to 80% by the end date of the project. The success of immunization programs depends heavily upon the high immunization coverage of the target group. The project sets coverage targets for next five years. The economic analysis is based on three scenarios of burden of disease from Vaccine Preventable Disease (VPD) for under five-year aged population. Based on analysis by Institute for Health Matrix and Evaluation (IHME) "Global Burden of Diseases, Injuries, and Risk Factors Study 1990-2010" wherein results for Pakistan were published in August 2013; this analysis assumes three scenarios with different DALYs: i) Low scenario of 39,156 DALYS per 100,000 ii) mean scenario of 56,984 DALYs and iii) high scenario of 85,229 DALYs per 100,000.9 According to the high scenario, the project will contribute to save about 1.16 million DALYs10 over the five years of the project. The minimum discounted11 economic value of this achievement is $1719 million12. The total present value of the benefits would be many times higher than the above figure as benefits will not increase only for five years. For instance, total DALYs saved over the next 16 years (till 2030) are estimated 3.34 million which would contribute, in present value terms, $5491 million. The estimated DALYs averted, according to mean scenario, are 0.4 million over the next five years and about 1.7 million by the end of 2030. The corresponding figures of economic gains are $590million and $2816 million. Finally, under the low scenario, the project is expected to save 0.27 million DALYs over the life of the project and 1.17 million by the end of 2030. The corresponding monetary gains are $405 million and $1935 million, respectively. In all scenarios, the project is economically feasible.13
	Number of Beneficiaries	Improvement in the health of children and women is an essential element to achieve the Health Sector goals for poverty reduction and related MDGs. The total number of beneficiaries is children under one year of age and pregnant women.
	Income	The project provides immunization services to the children and women. As such there is no income generated by the project. However, the project will contribute by reducing the Burden of Diseases. It will reduce the cost spent on healthcare by families if the children are fully vaccinated.
	Negative/Positive	**Environmental:** The project has been prepared, in accordance with the OP 4.01, an environmental and social management plan (ESMP) to address the potentially negative environmental and social risks and impacts of the proposed activities. A summary of the environmental and social risks identified in the ESMP and their mitigation is presented in the table below.This PC-1 has given due importance to environmental protection as mentioned below:- **Significant Environmental Aspects and Suggested Mitigation Measures**

Project Activities	**Significant Aspects**	**Mitigation Measures**

[9] http://ghdx.healthdata.org/global-burden-disease-study-2010-gbd-2010-data-downloads

[10] Calculations of DALYs are based on the project's target of 80% coverage ratio.

[11] Economic analysis assumes 3 percent discount rate.

[12] DALYs saved are multiplied by the discounted value of per capita GDP. The maximum gain can be found by multiplying DALYs saved by three times per capita GDP.

13 The analysis in main text assumed 17 percent vaccine efficacy. Nonetheless, if we assume higher vaccine efficacy then economic benefits would increase. For instance at 30 percent vaccine efficacy, above discussed high, mean, and low scenarios would yield $7432 million, $4969 million and $3414 million respectively.

		Storage, administration, constitution, reconstitution and temperature control of vaccines	Ineffective vaccines causing epidemic of the respective disease (e.g. measles, Hepatitis B), and/or increased occurrence of the disease leading to increased (child) mortality and morbidity (e.g. measles, Hepatitis B, Tetanus, TB)	Use of revised National EPI Policy and Strategic Guidelines for vaccine administration, management (including procurement, quality and supply) and storage Provision of trainings on vaccine administration and management to be provided to district health staffs including, but not limited to accredited EPI service providers including vaccinators, nurses, dispensers, Lady Health Visitors (LHVs), Medical Technicians (MT), Female Medical Technicians (FMT), mid-wives, Lady Health Workers (LHWs) and Medical Doctors	
		Use of syringes for immunization	Sharp waste (environmental hazard) generated due to immunization campaigns leading to increased risks of patient to patient infections as well as immunization staff safety	Ensure use of WHO pre-qualified Auto-Disable (AD) syringes for conducting vaccination. Using personal protective equipment (PPE) while handling sharps Provision of information posters at needle exchange places indicating safe handling Collecting the sharp waste generated during the immunization in dedicated safety boxes for safe disposal. Using pit[14] burial for all sharp waste generated	
			Lack of resources for safe disposal of sharps.	Procuring WHO pre-qualified Auto-Disable (AD) syringes and safety boxes	
			Lack of awareness on environmental and health issues hence created (project team, staff at the project facilities, project partners, NGOs, patients and others).	Providing trainings to all relevant stakeholders as per their roles and responsibilities in the process of immunization, on injection safety and disposal.	
		Medical waste generated as a result of immunization campaigns	Waste generated from the facilities at the district and sub district levels.	Use of the Hospital Waste Management Rules 2005 and National EPI Policy and Strategic Guidelines for proper waste management. Using personal protective equipment (PPE) while collecting and disposing of waste Provision of information posters at waste collection and storage sites	

[14] Pits should ideally be located at places away from the reach of general public especially children.

		indicating safe handling and disposal All containers, safety boxes, and waste bags to be collected and sent for pit burial[15]Conducting monitoring of waste handling, storage and disposal to ensure proper implementation of waste management system.
	Lack of resources for waste management.	Provision of WHO pre-qualified Auto-disable (AD) syringes, safety boxes, and other necessary equipment/materials needed for proper waste management/disposal. Construction of safe disposal burying pits
	Lack of awareness among the project staff, district health authorities and facilities staff, healthcare extension workers, and others.	Development of awareness material Conducting trainings of the project staff and district health authorities and facilities staff, healthcare extension workers on hospital waste management as per their roles and responsibilities. Ensure safe disposal by burying the waste into pits
Possible Adverse Events Following Immunization (AEFI)	Continued risk of infections, denial by communities to continue with immunization, and/or increased child morbidity	Development of efficient AEFI reporting and surveillance system, as per guidelines of the revised National EPI Policy and Strategic Guidelines, and system for recording response following an AEFI. Conducting trainings of the project staff and health care extension workers on reporting and managing AEFIs.
Capacity to minimize environmental and social risks associated with the above three activities	Untrained human resource	Providing appropriate trainings to all stakeholders congruent with their roles and responsibilities in the project with due consideration of sustainability of project components after its completion.

Table 14

Sharp waste management: This is an important component of EPI activities. The waste includes syringes and empty vaccines vials. The project will follow the ESMG guidelines shown in A**nnexure VII-** to ensure that the waste is burnt and buries in a proper manner with safety boxes under supervision of in-charge of Basic Health Unit.

[15] As per current practice, pit burning and burial may continue till the end of first year of NISP. After that the ESMP will be revisited in accordance to the recommendations of the District Action Plans for Immunization Waste Management.

	Quantifiable project outputs	An impact assessment matrix has been developed for covering all components of service delivery to the program and their indicators to be regularly monitored by the proposed impact assessment committee. The present PC1 is prepared with a view to enhance integration and coordination between various stakeholders and donors. This will require in-Depth Program Review of various aspects of the EPI including service provision, coverage, surveillance, monitoring mechanisms, inventories etc. In this regard an Impact Assessment Committee is proposed that will be responsible for carrying out the periodic monitoring the progress of the Program. The committee will be headed by the Chief Health Planning and will include members from Ministry of Health, PD-EPI, Provincial Manager of LHW program and one member each World Bank, GAVI, WHO, UNICEF and CSOs etc. The committee will meet quarterly and do the desk reviews of all the programmatic and financial reports of the program. It will also carry out field visits to various parts of the province to verify the progress and help resolve any issues if any. **Impact of Delays on Project Cost and Viability** Delay in implementation will have an adverse effect on the vaccine coverage. Many children and women will not be protected against Vaccine Preventable Diseases. This will increase burden of healthcare especially on the poor families and may lead them to further poverty. There will be additional burden on the health care services to manage the cases, which are affected due to non-vaccination. As a result the province will not meet its international and national immunization commitment to achieve the target of MDG. It will also delay in implementation of the project which will lead to lower donor financing. Grant money may be diverted by donors to other areas. The delay will further adversely affect the timely implementation of the project and increasing prices of durable goods and vaccines as well not meeting the goals of eradication and elimination and MDGs.
12	**Implementation schedule**	
	Indicate starting and completion date of the project	Project is expected to start from 1st July 2015 to 30th June 2020. (On-going)
	Item-wise/year-wise implementation schedule in line chart co-related with the phasing of physical activities.	

Components	TOTAL (Pak Rs.)
Total Programme Funding	
ESTABLISHMENT CHARGES	**1,083,125,392**
OPERATIONAL EXPENDITURE	**905,000,000**
VACCINES, SYRINGES, ORS AND VIT-A CAPSULES	**26,931,741,920**
PROG. MANAGEMENT COST	**128,817,610**
COLD CHAIN	**2,415,776,171**
OPERATIONAL VEHICLES	**201,360,000**
OFFICE EQUIPMENTS	**14,514,800**
FURNITURE	**11,325,750**

			TRAININGS	**442,190,964**
			PERFORMANCE BASED INCENTIVES	**173,751,146**
			vLMIS	**584,233,405**
			SURVEILLANCE	**128,207,100**
			PRINTING	**146,168,951**
			MONITORING & EVALUATION	**1,460,000,000**
			POLICY MEETINGS	**1,088,869,005**
			HEALTH EDUCATION AND COMMUNICATION	**976,534,601**
			PILOT VOUCHER SCHEME FOR POOR FAMILIES	**3,544,291**
			LIVE DATA TRANSMISSION	**293,438,080**
			ESTABLISMENT OF FIXED ASSET	**26,657,650**
			Contingencies (NISP)	**233,316,476**
			CONTINGENCIES (LOCAL)	**396,108,862**
			TOTAL	**37,644,682,174**
		Component wise break up is given above. However further detail can be seen in **Appendix – 2** The detail of each component covering item, cost, quantity and estimated cost may be seen at **Appendix2**		
	Result based monitoring (RBM) Indicators	A detailed result based framework has been developed for the project and placed at **Appendix 4 and** disbursement linked indicators have been agreed and placed at the **Appendix12.**		
13	**Management implementation arrangements of PC-1**	**Institutional Arrangements for the Project** Pakistan is a federal country, with responsibility for the financing and delivery of health services fully devolved to the four provinces. Provincial EPI program activities will be implemented by the provincial EPI cells. This project is also intended to support the Federal EPI cell under the MONHSRC in delivering the technical assistance to strengthen the provincial programs, monitoring, reporting and project management. The Federal EPI Cell additionally is responsible for EPI in the federally administered territories. The program will therefore have five implementing agencies *viz.*, the Federal EPI cell under the MONHSRC and the four EPI cells established in the Director General Health Services (DGHS) in each province. The program will use the existing institutional arrangements at the federal, provincial and district levels. The implementing entities will coordinate with each Department of health (DOH), Finance Department, the Accountant General (AG) office and the concerned Audit offices. A single financing agreement will govern all flow of funds under NISP – the EPI unit within MONHSRC will be responsible for processing and submitting of withdrawal applications on behalf of itself and all four provinces. Each provincial EPI cell will be responsible for independent program implementation, with coordination being provided by the federal body. The current capacity of the provincial EPI cells is noted to be limited. The project therefore includes a legal covenant for the appointment and maintenance of critical technical and fiduciary positions.		

Established Steering Committees for immunization at the Federal and Provincial levels will meet bi-annually to review physical and financial progress as well as annual work plans - including procurement and training plans. There will be bi-annual review meetings of provincial coordination committee and monthly review meetings at district level for the purpose of monitoring, supervision, planning, reporting, data analysis, HR management, trainings, coordination and data validation. The design of the program relies on district-led program implementation and regular monitoring whereby the activities are coordinated by District Health Officer (Health) – of each district. The program will support measures to improve the capacity of both provincial and district managers for effective program implementation.

The project will employ DLIs to finance project results, which will serve as an incentive to achieve these results by disbursing a portion of the total project financing only once key results have been met under each component. Progress by each province will be monitored with province-specific targets for each indicator, developed and negotiated according to the province context and capacity. The DLI results will be verified by third party independent audit, by firms contracted by the Federal EPI cell. Establishment of these contracts within six months will be a covenant of the financing agreement. The reports of these audits will be reviewed by the National Immunization Coordination Committee (ICC), before forming the basis of the disbursement request made by the Federal EPI cell to the World Bank.

An essential element for delivery of DLI results will be strengthened capacity at the provincial EPI cells – particularly in appropriate human resources. A covenant of the financing agreement will be that each province shall, by no later than three months after the effective date, appoint and maintain, throughout the period of implementation of the Project, critical positions including FM, procurement, M&E, Surveillance, Data Management, Epidemiologist, with appropriate qualifications and experience.

Results Monitoring and Evaluation

The EPI Programs at the Federal and Provincial levels face an array of challenges to fully functionalize a results-based culture, which requires an effective monitoring and evaluation (M&E) system. The key areas to strengthen M&E include: Data quality, On-line reporting, Data validation, Surveillance, LQAS, Regular dissemination of results to the public and the media for accountability, and Third Party Evaluation.

There is a need to review and revise the existing micro plans, data reporting systems and analysis of the data to ensure an acceptable level of quality within the reports generated by the EPI cells. With the assistance of technological advancements, live data will flow from the lower to the higher levels helping in timely compliance of data reporting and in efficient area mapping of the catchment area for micro-planning exercise. These tools have been successfully applied in the Polio Eradication Program and elsewhere.

An effective and sustainable vLMIS will ensure adequate quality and quantities of vaccines are available at the service delivery point and will give access to demand forecasting, capacity planning, analysis and modeling based on consumption, stock status data and real-time supply chain management capabilities.

At present there is a discrepancy in program reported data and the survey data due to lack of a functional management information system (MIS), with limited monitoring and oversight. This will be addressed through establishment of automated MIS with validation by the District Health office. Regular assessment of the data quality will be used to identify the gaps in the routine immunization data monitoring and reporting system.

The Federal and the Provincial EPI cells will prepare a semiannual DLI Results Report, which will be reviewed by the national ICC and then inform the Bank's biannual implementation review and subsequent disbursement of funds provided that all results have been met.

Sustainability

Ownership and Consensus: The emphasis of the project components on program management, performance and accountability is a reflection of the priorities reached by the Government, with the full consensus of these partners. This is reflected in the recently completed national and provincial comprehensive multi-year plans for immunization (cMYP), with which this project design is completely aligned.

Financial Sustainability: The provincial governments are the major source of finance for EPI when labor and other shared costs are included. The choice of a results-based financing model (DLI) to govern the majority of the financial support under the project was closely discussed with the provincial departments of planning and finance and with the federal Ministry of Finance. There is familiarity with this financing mechanism and appreciation for its flexibility and its effect to employ and strengthen Government Financial Management systems – thereby increasing the long-term financial sustainability of the program. Importantly, the project will incentivize movement of the funding of EPI from its current position under the development budget to the regular budget in the majority of provinces. This will be a significant step towards increasing the predictability of support for EPI in Pakistan.

Focus on Performance Management: The cost of a fully immunized child in Pakistan is estimated at US$64.2[16], and the total cost of immunization program amounted to US$ 238.7 million in 2012, including US$75.3 million on SIA activities, predominantly for polio[17]. Of this, only US$4.1 million was accounted for by EPI vaccines and no financing gap for vaccines and injection equipment is anticipated for the 2014-2018 period (when secured and probable sources of finance are considered). This project is not proposed to directly finance vaccines, operations or human resources. Instead it focuses on results - strengthening the enabling capacities of the health system – notably supporting health information and program management. The intent is to incentivize performance, build the capacities to strengthen and manage that performance, and to support the regular Government systems of planning and budgeting - to ensure that the investments made under the project result in long lasting institutional change.

The program will have five implementing Agencies: Expanded Program for Immunization (EPI) cell with responsibility for the federal territories, under Ministry of National Health Regulation, Services and Coordination (MONHSRC) at Federal Government level and four provincial EPI cells established in Director General

[16] Word Bank analysis
[17] National comprehensive multiyear plan for immunization, 2014

		Health Services (DGHS) in each province. The implementing entities will coordinate with Department of Health (DOH), Planning and Finance Departments, the Accountant General office and the concerned Audit offices. It is envisaged that overall project management and monitoring will be the responsibility of the Federal EPI Cell. **Federal Level Roles and Responsibilities**: Standard setting, Monitoring, Consolidation of: plans, reports, surveillance, Logistics data, data analysis, Vaccine reviews, Trainings (Development of updated modules/manuals, guidelines), Review meetings, Advocacy, Coordination (development partners, international and interprovincial), Technical support, Operational research, Litigations and National Coverage Surveys. **Provincial/Regional Level Roles and Responsibilities**: Monitoring, Supervision, Planning, Reporting, data analysis, surveillance, Procurement, Logistics, Financial management, Vaccine management , human resource management, Trainings, Review meetings, HE, Social mobilization, Advocacy, Coordination, Technical support, IT solutions, engagement of CSO/Private sector, Operational research and Litigations. **District Level Roles and Responsibilities**: Monitoring, Supervision, Planning, Reporting, data analysis, surveillance, Logistics, Financial management, Vaccine management, human resource management, Trainings, Review meetings, Health Education, Social mobilization, Advocacy, Coordination, engagement of CSO/Private sector and Data Validation. **Union Council Level Roles and Responsibilities**: Planning, Implementation, Supervision, Monitoring, Reporting, Logistic management, Vaccine management, Social mobilization and CSO. There are notified Steering Committees within the DOH at the Federal and Provincial level and will meet bi-annually to review the physical and financial progress as well as annual work plans including procurement and training plans. There will be bi-annual review meetings of provincial coordination committee and monthly review meetings at district level for the purpose of monitoring, supervision, planning, reporting, data analysis, human resource management, trainings, coordination, and data validation. The design of the program relies on district-led program implementation and regular monitoring where the activities are coordinated by District Health Officer of each district. Keeping in view the current implementation challenges the program will support measures to improve the capacity of both provincial and district managers for effective program implementation. The project will employ DLIs as an incentive to achieve project results by disbursing a portion of the total project financing upon achievement of key results related to the implementation of the project components. The DLI targets are critical to advancing the EPI reform process and achieving the project's development objective. DLIs include key intermediate results, implementation performance targets, and milestones for strengthening management, governance and stewardship functions. Progress by each province will be monitored with the province-specific targets for each indicator, according to the province context and capacity. The sum of individual progress will determine the total of each disbursement request. Upon the request, credit and grant disbursements will be made against selected key health budget line items, with individual transfers to each of the five entities, contingent on

their individual achievement of DLIs. The DLIs for the Federal EPI Cell and ICT, CDA, GB, AJ&K and FATA are appended at appendix 4.

The program focuses on achieving results in access to EPI services in Pakistan – along the three dimensions of service coverage, equity and quality. The program design emphasizes strengthening provincial management of EPI, focusing on building capacities for planning, management, procurement, surveillance, monitoring and reporting of EPI, and supporting federal coordination functions, including international reporting, program evaluation, surveillance and policy support.

The program is conceived as primarily responsive to a particular set of temporary requirements resulting from devolution of the federal responsibility for EPI to the provinces under the 18th amendment to the constitution. In the light of changed scenario of roles and responsibilities for the federal and provincial/regional governments after the 18th amendment, the implementation arrangements under the project have been discussed in detail and will be as follows:

National EPI Council (composition: all provincial Program Managers and Federal EPI) and functions would be: Policy setting, new vaccines, campaign planning and review, Resource mobilization. A National EPI Council which includes all Provincial Program Managers and Federal EPI Manager would have quarterly review meetings for consensus decisions on various subjects such as policy guidelines etc. Bi-annual review meetings of provincial coordination committee are also to be held chaired by Secretary health along with monthly review meetings at district level for the purpose of monitoring, supervision and data validation etc. EPI data will be reviewed at each level. They will have to be very structured and focused. A template/format will be designed for recording the discussions/decisions of the meeting so that the issues are highlighted in a very tangible and measurable manner.

The implementation of the Project will be coordinated at different levels and in respective district through different coordination committees. Similarly the status of implementation will be reviewed periodically through review and coordination committees.

Institutional arrangements for ESMP implementation.

Overall coordination and implementation of ESMP will be the responsibility of National Program Manager, EPI who will designate an ESM Focal Point (FP) to coordinate on his/her behalf. Provincial EPI Managers will also designate similar ESM Focal Points at each province level, who will provide support to the federal level ESM FP. Each partner hospital/tertiary healthcare units will also nominate a focal person to ensure implementation of ESMP.

The primary responsibilities of the national level ESM FP will be:

- Effective implementation of ESMP.
- Ensure that cold chain equipment, AD syringes, safety boxes, waste management stuff and disinfectant equipment/chemicals are being made available to the provinces
- Coordinate with focal person of partner hospital/tertiary healthcare unit to ensure implementation of ESMP.
- Conduct the monitoring tasks and maintain all reports and records.

		• Coordinate and ensure development of training material and implement of trainings sessions. • Coordinate and ensure development of awareness material • Conduct environmental compliance audit for the program • Commission annual third party validations of partner hospital/tertiary healthcare unit • Prepare Quarterly Progress Reports (QPR) for the entire project. The responsibilities of the provincial level ESM FP will be as follows: • Coordinate with focal person of partner hospital/tertiary healthcare unit to ensure implementation of ESMP. • Coordinate with focal person of partner hospital/tertiary healthcare unit to ensure availability of cold chain equipment, AD syringes, safety boxes, waste management material and disinfectant equipment/chemicals • Conduct monitoring tasks in coordination with national level FP and submit reports to National Program Manager, EPI. • Implement training sessions in provinces • Facilitate and coordinate third party validations in the province. • Prepare provincial QPRs The responsibilities of the partner hospital/tertiary healthcare unit will be as follows: • Identify a focal person to ensure implementation of ESMP • Maintain the record of use of all recommended equipment including AD syringes, safety boxes, waste management stuff and disinfectant equipment/chemicals • Prepare Monthly Immunization Waste Management Reports (MIWMR) • Tally the records with the permanent registers maintained by the vaccinators • Conduct monitoring tasks as assigned in the matrix and submit reports to relevant line authorities as per ESMP. • Ensure implementation of training session in coordination with national and provincial EPI offices. • Coordinate with relevant national and provincial managers for environmental monitoring and reporting. • Prepare QPR and MIWMR for the facility In order to ensure effective implementation of the mitigation measures tabulated above, ESMG monitoring will be carried out in accordance with the following arrangement (please see details at Annexure VII.)
	Management arrangements for EPI Program	The project will be executed by the Ministry of Health through Federal placed National Program Manager EPI Cell and with respect to the territories through the regional EPIs headed by Project Director/Manager to run the project in line with the national and international strategy. The organogram of the unit is given below: Secretary (H) Director General Health Services National/Provincial Program ManagerEPI

		<table><tr><td>M&E Section</td><td>Surveillance Section</td><td>Operation Section</td></tr><tr><td>Health Education Section</td><td>Procurement Section</td><td>Training Section</td></tr><tr><td colspan="3">Administration Section General Administration, Finance, Transport, Building repair and maintenance, store and Cold Chain Engineering</td></tr></table>
	Management structure and manpower requirements including Specialized skills during execution and operational phases	**Please see Annexure-VIII.**
	Job description, age, experience and qualification of each post	**Please see details in Appendix 13 &Annexure-XII**
14	**Additional projects decisions required to maximize socio-economic benefits from the proposed project**	a) Ensure functional linkages at district, divisional and provincial level with other health programs in relation to EPI e.g. linking Civil Sociaty Organizations, LHW and LHS to micro-planning and social mobilization. Implementation may be monitored through regular monthly indicators. b) Technical Assistance to be sought for operationalizing the pre-requisites of the PC-1 e.g. developing MIS concept, improving micro-planning, rational deployment of vaccinators, facility level logistics status, Compilation and Analysis of EPI monthly Report. c) Conduct baseline study for the results based framework. d) Huge investment in vaccines should be protected by providing adequate operational resources. e) Finalize donor's commitments. f) Timely appointment of district EPI staff. g) In the interim a basic website for EPI may be hosted and monthly EPI reports and other statistics may be uploaded. h) PC-1 should be included in the next year budget.

15. Certified that the project proposal has been prepared on the basis of instructions provided by the Planning Commission for the preparation of PC-I for Social Sector projects.

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Appendix – 1

ACTIVITY TABLE NATIONAL IMMUNIZATION SUPPORT PROJECT	
1	**Component 1: Strengthening Management, Governance and Stewardship Functions**
1.1	***Oversight, coordination and stewardship functions***
1.1.1	bi annual review meetings with participation of all provinces and territories and development partners to assess program performance against agreed milestones and targets and address vulnerable areas for improvements
	Establishment of National EPI Council including all Provincial Program Managers and the Federal EPI Manager
1.1.2	Quarterly Meeting of the National EPI Council for consensus decisions on resource allocation, policy review and setting of guidelines, decisions on new vaccine introduction (including relevant research), campaign planning & review and resource mobilization
1.1.3	Capacity building of the Federal EPI cell in development of updated modules/manuals, guidelines, conduct review meetings, technical support, operational research, respond to litigations and perform national level coverage surveys through TA component NISP support
1.2	***Robust monitoring & evaluation mechanisms***
1.2.1	Strengthening of vLMIS to ensure adequate quality and quantities of vaccines availability at the service delivery point
1.2.2	Annual independent 3rd party monitoring and evaluations by firms hired on competitive basis by federal EPI cell
1.3	***Surveillance systems***
1.3.1	strengthening of VPD reporting system 3 years including surveillance, online reporting and response mechanism
1.3.2	Conducting training of project staff, health care extension workers on reporting and managing AEFIs
2	**Improving Service Delivery Performance**
2.1	***Enhanced planning for performance***
2.1.1	Introduction of computerized micro plans based on format used by polio micro plan
2.1.2	Development of online database
2.1.3	Training of staff on database
2.1.4	Development of integrated EPI staff work plans
2.1.5	Meetings and coverage evolution surveys
2.1.6	Development of android base cell phone for life data transmission by vaccinators
2.2	***Availability and management of skilled human resources***
2.2.1	Hiring of qualified technical and managerial staff (first two years of project life - shifted recurrent budget after two years
2.2.2	hiring of vaccinators to meet to per UC as per national EPI policy guidelines
2.2.3	Capacity building of mid level managerial staff (LHWs, Vaccinators ETC)
2.2.4	Development of national training standards, Manual and guidelines by federal EPI cell
2.3	***Effective supervisory systems for EPI***
2.3.1	Establishment of an automated immunization management information system (MIS).

2.3.2	MIS data will be validated at the district level by Lot Quality Assurance Sampling (LQAS) sampling of at least 30% of the Union Councils every month.
2.3.3	Submission of online monthly monitoring reports
2.4	***Enhanced linkage to communities***
2.4.1	Developing linkages by territories EPI cells with private sector health providers and health related NGOs and CSOs
2.4.2	Developed synergies between public and private sectors through public private partnership (PPPs)
2.4.3	Developed models for engaging private sectors in Service delivery, supervision and reporting, Training, Research and Behavior Change Communication (BCC)
3	**Demand Generation**
3.1	**Social mobilization and community awareness**
3.1.1	Development of ICC material for awareness creation through electronic and print media along with radio broadcasts
3.1.2	Development of health education and communication material
3.1.3	providing supporting to CSOs to take an active role to increase LHWs/CMWs involvement provided to the community to motivate the parents to bring children and pregnant women to EPI centers (Parents, Health workers meeting, FGDs)
3.2	***Advocacy***
3.2.1	Develop a plan to sensitize political bodies and senior religious figures on the benefits of routine immunization (Federal EPI cell)
3.2.2	Development of social mobilization messaging – and raise political awareness to support these activities
3.2.3	hold annual events involving political leadership, immunization staff and local community for awareness creation
3.3	***School Curriculum***
3.3.1	Developed portion, chapter in school curriculum (secondary level) for awareness of immunization and its importance to improve child health
4	**Improving Capacity in Technical Areas for Increased Immunization Coverage**
4.1	**Health Systems Strengthening**
4.1.1	support the procurement of cold rooms, and ice lined refrigerators (ILRs)
4.1.2	Training and technical assistance
4.1.3	Expansion/maintenance of the vaccine logistics management information system (vomits)
4.2	***Capacity of Federal and Provincial EPI Cells***
4.2.1	Capacity building activities to strengthen the ability of the Federal EPI Cell in the areas of financial management, procurement, environmental and social management, and monitoring and evaluation
	Support of the National EPI Council, facilitating regular provincial program reviews, standard setting, consolidation of national data and international reporting
4.3	***Research and Evaluation***
4.3.1	Conduct operational research to develop improved measures of immunization coverage, national level surveys
4.3.2	independent third party assessment of program performance to verify achievement of DLI
4.3.3	Pilot Conditional Cash Transfer Scheme to provide incentives for accessing immunization services to mothers and health care providers (one district per territory per year

MUNIZATION PROGRAM OUTCOME INDICATORS FROM cMYPs

Appendix – 3

Immunization program outcome indicators from CMYP	AJK		BAL		CDA		FAT		GB		ICT		KP		PUN		SIN	
	2012	2018	2012	2018	2012	2018	2012	2018	2012	2018	2012	2018	2012	2018	2012	2018	2012	2018
Increase DTP3 coverage	65%	85%	27%	70%	87%	92%	44%	75%	55.3%	85%	91%	92%	70%	90%	76%	85%	39%	85%
Increase Measles 1 coverage	64.5%	82%	37%	65%	87%	90%	50%	73%	51%	80%	85%	90%	58%	80%	70%	80%	45%	80%
Increase the proportion of population protected at birth from neonatal tetanus	63.5%	80%	23%	50%	25%	55%	35%	60%	51.8%	70%	75%	80%	66%	80%	74%	85%	54%	65%
Increase OPV3 coverage	81.7%	85%	61%	70%	87%	92%	44%	75%	75.2%	85%	91%	92%	76%	95%	92%	85%	39%	85%
Increase PCV coverage	-	80%	-	70%	0%	92%	0%	75%	0%	85%	0%	92%	0%	90%		85%	0%	75%
Increase IPV coverage	-	80%	-	50%		92%	0%	75%	0%	85%	0%	92%	0%	75%		70%	0%	75%
Increase Rota coverage	-	80%	-	50%		92%	0%	75%	0%	85%	0%	85%	0%	80%		60%	0%	60%
Increase Hepatitis (birth dose) coverage			-	50%									0%	90%		70%	0	75%
Increase the proportion of fully immunized children	45.6%	70%	16	65%	75%	80%	50%	70%	47%	80%	73.9%	80%		80%	66%	77%	0%	80%
Improve geographical equity - % of districts(UC) that have at or above 80% DTP3 coverage	60%	80%	0	60%	36%	100%	7%	77%	0%	100%	100%	100%	53%	90%	--	61%	29%	75%
Improve socio-economic equity - difference in DTP3 coverage between the lowest and highest wealth quintiles	27%	10%	-	-	-	Ü25%		Ü25%	-	Ü25%	-	Ü25%	43%	15%	--	--	33%	15%
Decrease drop-out rate - percentage point difference between DTP1 and DTP3 coverage	14.8%	4%	11%	<10	12%	4%	13%	4%	7.1%	4%	10%	4%	10%	7%	11	<10	30%	8%
Increased demand - % of children whose mothers intend to vaccinate children		50%	-	50%		Û25%		Û25%		Û25%		Û25%	-	35%	-	Û2%	26%	-

Appendix – 4

Country: Pakistan
National Immunization Support Project (P132308)
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Results Framework
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Project Development Objectives

PDO Statement

The proposed development objective is to increase the equitable coverage of services for immunization against vaccine preventable diseases (VPD), including poliomyelitis, for children between 0 and 23 months in Pakistan.

To contribute to this objective, the project will focus on building capacity and systems to strengthen accountability, stewardship and performance in service delivery in the provincial Departments of Health and in the Federal Ministry of National Health Services, Regulation and Coordination.

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Project Development Objective Indicators

				Cumulative Target Values							
Indicator Name	Core	Unit of Measure	Baseline 2012	YR1 2014	YR2 2015	YR3 2016	YR4 2017	End Target 2018	Frequency	Data Source/ Methodology	Responsibility for Data Collection
Increase the proportion of children fully immunized: Percentage of children aged 12-23 months who receive all basic vaccinations in		Percentage of children	**Balochistan** 16% (PDHS 2013)	30%	40%	50%	55%	65%	Annual	PDHS (national) and Admin data (FATA) with year 3,4 and 5 Independent third party verification contracted by	Federal EPI cell
			KP 53%	60%	65%	70%	75%	80%			
			Punjab 66%	67%	69%	72%	75%	77%			

Pakistan's routine immunization program disaggregated by province **[Yr3,5 DLI 1]**			**Sindh** 29%	47%	55%	65%	73%	80%		Federal EPI cell	
			FATA 50%	55%	55%	60%	65%	70%			
			GB	60%	70%	80%	90%	95%			
			AJ&K	60%	70%	80%	90%	95%			
			ICT	60%	70%	80%	90%	95%			
			CDA	60%	70%	80%	90%	95%			
Improve geographical equity: Percentage of Districts reporting coverage of >80% age-appropriate vaccination in children between 12-23 months which have these reports validated.**[Yr3,5 DLI 3]**		Percentage of UC in each province	**Balochistan** 0	10%	25%	40%	50%	60%	Annual	75 % of fully immunized children (FIC) cMYP FIC coverage	
			KP 52%	60%	65%	75%	85%	90%			
			Punjab --	28%	33%	42%	50%	61%			
			Sindh 33%	35%	45%	55%	65%	75%			

			FATA 7%	14%	21%	35%	56%	77%			
			GB	60	70	80	90	95			
			AJ&K	60	70	80	90	95			
			ICT	60	70	80	90	95			
			CDA	60	70	80	90	95			
Decrease drop-out rate.		Percentage point difference between DTP1 and DTP3 coverage in each province	**Balochistan** 11%	<10%	<10%	<10%	<10%	<10%	Annual	PDHS	
			KP 10%	9%	9%	8%	8%	7%			
			Punjab 11%	<10%	<10%	<10%	<10%	<10%			
			Sindh 26%	23%	18%	15%	12%	8%			

			FATA 13%	12%	10%	8%	6%	4%			
			GB	-	-	-	-	<10%			
			AJ&K	-	-	-	-	<10%			
			ICT	-	-	-	-	<10%			
			CDA	-	-	-	-	<10%			
Improved socio-economic equity		DTP3 coverage in the lowest wealth quintile is +/- X % points of the coverage in the highest wealth quintile	**Balochistan** XX%	XX%	XX%	XX%	XX%	XX%	Less than Annual	Indicator is from CMYP. At appraisal establish frequency, monitoring instrument and budget.?DHS twice during project life. Note: equity of coverage a goal in new Gavi strategy	
			KP 43%	35%	30%	25%	20%	15%			
			Punjab XX%	XX%	XX%	XX%	XX%	XX%			
			Sindh 30%	28%	25%	22%	19%	15%			

			FATA Baseline is not available in the CMYP	Decrease by 5% from the baseline	Decrease by 10% from the baseline	Decrease by 15% from the baseline	Decrease by 20% from the baseline	Decrease by 25% from the baseline			
			GB	20	40	60	80	100			
			AJ&K	20	40	60	80	100			
			ICT	20	40	60	80	100			
			CDA	20	40	60	80	100			
Intermediate Results Indicators											
				Cumulative Target Values						Data Source/	Responsibility for
Indicator Name	Core	Unit of Measure	Baseline	YR1	YR2	YR3	YR4	End Target	Frequency	Methodology	Data Collection
Functional cold chain equipment in place as per specifications >95% in each tier of health system		Percentage of districts in each province	**Balochistan** XX%	>95%	>95%	>95%	>95%	>95%	Annual	i)Baseline EVM assessment. ii) UNICEF Cold chain capacity	Provincial and Federal EPI cells
			KP XX%	>95%	>95%	>95%	>95%	>95%			

(including at least 1 month buffer stock capacity at district level)			**Punjab** XX%	>95%	>95%	>95%	>95%	>95%		assessment of all districts to be completed in year one iii) Provincial EPI cell vLMIS. iv) Year 1. Independent third party verification contracted by Federal EPI cell	
			Sindh XX%	>95%	>95%	>95%	>95%	>95%			
			FATA XX%	>95%	>95%	>95%	>95%	>95%			
			GB	>95%	>95%	>95%	>95%	>95%			
			AJ&K	>95%	>95%	>95%	>95%	>95%			
			ICT	>95%	>95%	>95%	>95%	>95%			
			CDA	>95%	>95%	>95%	>95%	>95%			
Revised computerized UC level micro plans available in UCs. **[Yr2 DLI 2]**		Percentage of UC in each province	**Balochistan** NA	XX%	80%	XX%	XX%	XX%	Annual	Provincial EPI cell with year 2 Independent third party verification	Provincial EPI cells
			KP 100%	XX%	80%	XX%	XX%	XX%			

			Punjab 100%	XX%	80%	XX%	XX%	XX%		contracted by Federal EPI cell	
			Sindh 79%	XX%	80%	XX%	XX%	XX%			
			FATA 0%	XX%	80%	XX%	XX%	XX%			
			GB	35	55	65	75	95			
			AJ&K	35	55	65	75	95			
			ICT	35	55	65	75	95			
			CDA	35	55	65	75	95			
Districts submitting online routine monthly reports to provincial EPI cell by agreed		Percentage of Districts in each province	**Balochistan** 0%	XX%	XX%	XX%	XX%	XX%	6 monthly	vLMIS	Provincial EPI cells
			KP 0%	80%	100%	100%	100%	100%			

timelines **[Yr2 DLI 4]**			**Punjab** 0%	80%	100%	100%	100%	100%			
			Sindh 0%	80%	100%	100%	100%	100%			
			FATA 0%	80%	100%	100%	100%	100%			
			GB	80%	100%	100%	100%	100%			
			AJ&K	80%	100%	100%	100%	100%			
			ICT	80%	100%	100%	100%	100%			
			CDA	80%	100%	100%	100%	100%			
GPRS tracking of vaccinators, supervisors functional in districts		Percentage of Districts in each province	**Balochistan** 0%	XX%	XX%	XX%	XX%	XX%	Annual		Provincial EPI cells
			KP 0%	XX%	XX%	XX%	XX%	XX%			

			Punjab 0%	XX%	XX%	XX%	XX%	XX%			
			Sindh 0%	XX%	XX%	XX%	XX%	XX%			
			FATA XX%	XX%	XX%	XX%	XX%	XX%			
			GB	80%	100%	100%	100%	100%			
			AJ&K	80%	100%	100%	100%	100%			
			ICT	80%	100%	100%	100%	100%			
			CDA	80%	100%	100%	100%	100%			
Contracts with 3rd party for independent audit and verification of performance targets. **(Legal Covenant)**		Number of DLI targets covered by contracts in place with reports available	0	2	3	3	3	1	Annual		Federal EPI cell

Districts in which complete online surveillance including zero reporting for VPD & AEFI system is functional for 80% or more of health facilities. **[Yr4 DLI 5]**		Percentage of Districts in each province	**Balochistan** 0%	60%	65%	75%	80%	XX%	Annual		Provincial EPI cells
			KP 0%	60%	65%	75%	80%	XX%			
			Punjab 0%	60%	65%	75%	80%	XX%			
			Sindh 0%	60%	65%	75%	80%	XX%			
			FATA 0%	60%	65%	75%	80%	XX%			
			GB	60%	65%	75%	80%	90%			
			AJ&K	60%	65%	75%	80%	90%			
			ICT	60%	65%	75%	80%	90%			
			CDA	60%	65%	75%	80%	90%			

EDOs/EDO(H) s have attended MLM courses		% of total combined number of EDOs/EDO(H) s in each province	**Balochistan** 0%	25%	35%	50%	75%	XX%	Annual	Provincial EPI cell with year 3 Independent third party verification contracted by Federal EPI cell	Provincial EPI cells
			KP 0%	25%	35%	50%	75%	XX%			
			Punjab 0%	25%	35%	50%	75%	XX%			
			Sindh 0%	25%	35%	50%	75%	XX%			
			FATA 0%	25%	35%	50%	75%	XX%			
			GB		80%	100%					
			AJ&K		80%	100%					
			ICT		80%	100%					
			CDA		80%	100%					

UC with at least two skilled staff capable of providing immunization		% of UC in each province	**Balochistan** 70%	75%	80%	85%	95%	100%	Annual	Provincial EPI cell with year 3 Independent third party verification contracted by Federal EPI cell	Provincial EPI cells
			KP 91%	95%	95%	95%	95%	100%			
			Punjab 96%	98%	98%	99%	99%	100%			
			Sindh 91%	95%	95%	95%	95%	100%			
			FATA Data NA	60%	70%	80%	90%	100%			
			GB	60%	70%	80%	90%	100%			
			AJ&K	60%	70%	80%	90%	100%			
			ICT	60%	70%	80%	90%	100%			
			CDA	60%	70%	80%	90%	100%			

Absolute value of expenditure on public awareness campaigns through electronic media disaggregated by province**[Yr2 DLI 8]**		Annual expenditure in PKR	**Balochistan** Data NA	PKRXX	PKRXX	PKRXX	PKRXX	PKRXX	Annual	Provincial EPI cell with year 2 Independent third party verification contracted by Federal EPI cell	Provincial EPI cells
			KP Data NA	PKRXX	PKRXX	PKRXX	PKRXX	PKRXX			
			Punjab Data NA	PKRXX	PKRXX	PKRXX	PKRXX	PKRXX			
			Sindh Data NA	PKRXX	PKRXX	PKRXX	PKRXX	PKRXX			
			FATA Data NA	PKRXX	PKRXX	PKRXX	PKRXX	PKRXX			
			GB	PKRXX	PKRXX	PKRXX	PKRXX	PKRXX			
			AJ&K	PKRXX	PKRXX	PKRXX	PKRXX	PKRXX			
			ICT	PKRXX	PKRXX	PKRXX	PKRXX	PKRXX			
			CDA	PKRXX	PKRXX	PKRXX	PKRXX	PKRXX			

Contracts with CSOs for provision of immunization services in urban slums awarded		Number of contracts by province	**Balochistan** X	X	X	X	X	X	Annual		Provincial EPI cells
			KP X	X	X	X	X	X			
			Punjab X	X	X	X	X	X			
			Sindh X	X	X	X	X	X			
			FATA X	X	X	X	X	X			
			GB	1	1	1	1	1			
			AJ&K	1	1	1	1	1			
			ICT	1	1	1	1	1			
			CDA	1	1	1	1	1			

Districts with detailed supervision plans available and submitted to the provincial level **[Yr1 DLI 7]**		% of districts in each province	**Balochistan** 0%	80%	95%	100%	100%	100%	Annual	Provincial EPI cell with year 1 Independent third party verification contracted by Federal EPI cell	Provincial EPI cells
			KP 0%	80%	95%	100%	100%	100%			
			Punjab 0%	80%	95%	100%	100%	100%			
			Sindh 0%	80%	95%	100%	100%	100%			
			FATA 0%	80%	95%	100%	100%	100%			
			GB	80%	95%	100%	100%	100%			
			AJ&K	80%	95%	100%	100%	100%			
			ICT	80%	95%	100%	100%	100%			
			CDA	80%	95%	100%	100%	100%			

Increase in proportion of parents retaining immunization card **[Yr4 DLI 9]**		Year 3 increase in percentage of parents sampled above baseline	**Balochistan** 8% (PDHS2012-13)	15%	25%	30%	35%	50%	Years 1 and 3	Independent third party verification contracted by Federal EPI cell	Federal EPI Cell
			KP 39.7%	45%	55%	65%	75%	80%			
			Punjab 40.7%	45%	55%	65%	75%	85%			
			Sindh 25.9%	35%	45%	55%	65%	75%			
			FATA N/A	25%	35%	45%	55%	65%			
			GB	10	20	30	45	60			
			AJ&K	10	20	30	45	60			
			ICT	10	20	30	45	60			
			CDA	10	20	30	45	60			

Appendix –5
RESULT FRAMEWORKS OF FEDERAL EPI CELL & TERRITORIES

Federal EPI Cell
Results Based Framework for National Immunization Support Program

Objectives/Activity	Indicators	Baseline	Source	Target					Remarks/ Assumptions
				Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	
Goal :									
To reduce the morbidity and mortality due to Vaccine Preventable Diseases (VPD) in children under 5 years and reduction in tetanus morbidity in pregnant women	Under 5 mortality rate	89	PDHS	86	84	80	76	74	
Project Objectives:									
To strengthen and improve routine immunization coverage by supply/demand-generation activities and management reforms.	95% of children fully immunized between 12-23 months disaggregated by gender, income, province and district		PDHS/ PSLMS	60%	70%	80%	90%	95%	
Component 1: Strengthening Management, Governance and Stewardship Functions									
Output 1: Institutional capacity of federal, Provincial and District EPI cells strengthened	Revised computerized UC level micro plans for 80% of UCs at district and provincial level			35	55	65	75	95	
	80% of Union Councils assessed for validity are cleared (80% age appropriate vaccination)			60	70	80	90	95	
	95% of reported outbreaks/ notifiable diseases countered with an appropriate response by the system			70	80	90	100	100	
	Annual 3rd party monitoring and evaluation reports disseminated			1	1	1	1	1	
	Insert coordination and surveillance output								
Component 1: Strengthening Management, Governance and Stewardship Functions Activities:									
Capacity building for management of EPI	Technical framework and policy guidelines for LHWs involvement as social mobilizer and further involvement as vaccinators subject to fully trained in vaccinations and follow standards of vaccine wastage rates			x					

	CSO/Private Sector involvement notified and implemented				x				
	100% critical positions filled at provincial level by skilled staff with appropriate qualifications and experience (FM, procurement, M&E, Surveillance, Data Management, Epidemiologist)								
	100% of districts reporting at least 01 month buffer stock available within the district (source: LMIS)				x				
Strengthening Information Management and reporting system	80%age of districts submitting online routine monthly reports to provinces by agreed timelines				x				
	100% of districts receiving feedback on reports from provincial directorate			x					
	IT-based solutions (surveillance, monitoring, reporting)functional in 80% districts				x				
	GPRS tracking of vaccinators, supervisors at all levels functional in 80% of districts			x					
Strengthening Procurement and Logistics systems	Strengthening national 80% laboratory capacity for VPD and AEFI surveillance			x					
	100% quarterly meetings of the provincial vaccine management committee held (LMIS) at provincial and district levels				x				
	100% districts reporting on vLMIS with 80% timeliness & completeness				x				
Strengthening National and Provincial Coordination Mechanisms	Number of planned bi-annual meetings of provincial coordination committee held chaired by Secretary health			x					
	Evidence of Coordination mechanism and at least one indicator for measuring success of this coordination agreed with Polio Task force			x					
	No. of bi-annual review			2					

	meetings held at federal level								
	No. of quarterly review meetings held at provincial/regional level			4					
	No. of monthly review meetings held at district level			4					
Studies and Technical Assistance	No. of research projects conducted and reports available including reviews of new vaccine introduction			2					
	Sero conversion studies		x						
Performance Management Mechanism	50% number of UCs validated for immunization coverage by provincial office having more than 80% and less than 50% coverage		x						
	80% number of UCs validated by districts having less than 40% coverage			x					
	80% of districts reporting UC level verified coverage			x					
	80% of UCs within district meeting the minimum criteria for participation in competition			x					
	80% of districts competing for performance bonuses				x				
Monitoring & Evaluation	Contract with 3rd party for independent monitoring and evaluation reports available			x					
Surveillance and AEFI	% of UCs having a functional VPD surveillance system reporting online							90 %	
	Online surveillance for VPD & AEFI zero reporting system for 80% of all HF within district				x				
Component 2: Improving Service Delivery									
Output 2: Increased access and utilization of routine immunization services	80% proportion of population having access to EPI services (fixed or outreach) within 30 minutes walking distance at least once a month					x			
	80% of UC with at least 02 skilled staff capable of providing immunization					x			
	% of UCs has no vaccines					x			

	out of stock								
Component 2: Improving Service Delivery Activities									
Increasing access to routine EPI services through revisiting mix of fixed and mobile services	%age of HF without EPI centers							0%	
	% of UC without EPI centers							0%	
	Ratio of children immunized by fixed centers versus Outreach teams							50 %	
	Dropout rates: DPT3-DPT1							<10%	
	Measles 1-DPT3							<10%	
Focused service delivery for mobile/refugee population	Population uncovered by EPI services/vaccinators/EPI program							100%	
	% of population covered in collaboration with LHWs			50%					
NGOs/CSOs /Private Sector contracting in urban and hard to reach areas	% of population covered in collaboration with NGOs/CSOs			20%					
	Number of private institutions providing immunization services in urban areas			100 %					
	No. of contracts with NGOs/CSOs for provision of immunization services in urban slums awarded			1					
	% of immunization services through private sector/NGOs/CSOs by urban/rural			100 %					
Capacity building for improved service availability	% of sanctioned posts for vaccinators			50%					
	% of vaccinators(HF staff, LHWs)given refresher/technical trainings				100 %				
	% MLM courses (6) held at provincial level annually			x					
Supply Chain Management	At least 95% of functional cold chain equipment as per specifications at ALL health facility levels				x	x			
	80% of districts/tehsils having alternate electric supply available at all EPI stores				x				
Enhanced online micro plans	90% of immunization sessions held as per micro plan							x	
	90% of EPI staff working							x	

	according to the approved tour plans								
	90% of UCs with notified immunization teams in districts						x		
Integration of immunization services into regular health systems	80% of immunization staff having access to functional transport	100% vaccinators and 100% supervisors							
Adequate resources available for immunization activities in regular budget	100% of vaccination staff satisfied with workload/performance			x	x				
Supervisory systems for EPI	80% of online supervisory monitoring reports submitted to higher level					x			
	80% of districts with full complement of supervisory staff available			x					
	100% detailed supervisory plans available for all districts			x					
Component 3: Demand Generation									
Output 3: increased demand for routine immunization services, specially by the disadvantaged groups	10% increase in proportion of parents retaining immunization card				x				
	(absolute value province-wise) expenditure on public awareness campaigns through electronic media disaggregated by provinces				x				
	25% number of districts implementing immunization Voucher Scheme per province				x				
Component 3: Demand Generation Activities									
Communication for development	100% Annual review of communication strategy held at provincial level			x					
	80% of districts reporting tools/messages and printed materials available			x					
Building partnerships for immunization	Number of meetings with provincial assembly members/standing committee on education/health			2	2	2	2	2	
	Number of meetings with			2	2	2	2	2	

	Line departments especially education								
	Notification of EPI text to be included in curriculum				x				
Garnering support of all strata of society					x				
Implementing demand side interventions	% of UCs within district meeting the minimum criteria for participation in voucher scheme			25%	50%	75%	85%	95 %	
	Child voucher			x					
	% of the poorest quintile enrolled in the voucher scheme			20	40	60	80	10 0	
	% of parents having knowledge of the voucher scheme			20	40	60	80	10 0	
Advocacy	Briefing notes prepared for provincial assembly members			X					
	No. of talk shows held			2	2	2	2	2	
	Notification of President Pediatric Association provincial as member of provincial coordination committee			x					
	No. of advocacy sessions conducted with policy makers by private sector/CSOs			2	2	2	2	2	
Social Mobilization	90% of parents with children under 1 year of age who can state the date for next immunization			40%	60%	80%	90%	95 %	
Grievance Re-dressed Mechanism				x					

Appendix-6

Azad Jammu & Kashmir (AJ&K)
Results Based Framework for National Immunization Support Program

Objectives/Activity	Indicators	Baseline	Source	Target					Remarks/ Assumptions
				Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	
Goal :									
To reduce the morbidity and mortality due to Vaccine Preventable Diseases (VPD) in children under 5 years and reduction in tetanus morbidity in pregnant women	Under 5 mortality rate	89	PDHS	86	84	80	76	74	
Project Objectives:									
To strengthen and improve routine immunization coverage by supply/demand-generation activities and management reforms.	95% of children fully immunized between 12-23 months disaggregated by gender, income, province and district		PDHS/ PSLMS	60%	70%	80%	90%	95%	
Component 1: Strengthening Management, Governance and Stewardship Functions									
Output 1: Institutional capacity of federal, Provincial and District EPI cells strengthened	Revised computerized UC level micro plans for 80% of UCs at district and provincial level			35	55	65	75	95	
	80% of Union Councils assessed for validity are cleared (80% age appropriate vaccination)			60	70	80	90	95	
	95% of reported outbreaks/ notifiable diseases countered with an appropriate response by the system			70	80	90	100	100	
	Annual 3rd party monitoring and evaluation reports disseminated			1	1	1	1	1	
	Insert coordination and surveillance output								
Component 1: Strengthening Management, Governance and Stewardship Functions Activities:									
Capacity building for management of EPI	Technical framework and policy guidelines for LHWs involvement as social mobilizer and further involvement as vaccinators subject to fully trained in vaccinations and follow standards of vaccine wastage rates			x					
	CSO/Private Sector involvement notified and implemented				x				
	100% critical positions								

	filled at provincial level by skilled staff with appropriate qualifications and experience (FM, procurement, M&E, Surveillance, Data Management, Epidemiologist)								
	100% of districts reporting at least 01 month buffer stock available within the district (source: LMIS)				x				
Strengthening Information Management and reporting system	80%age of districts submitting online routine monthly reports to provinces by agreed timelines				x				
	100% of districts receiving feedback on reports from provincial directorate			x					
	IT-based solutions (surveillance, monitoring, reporting)functional in 80% districts				x				
	GPRS tracking of vaccinators, supervisors at all levels functional in 80% of districts			x					
Strengthening Procurement and Logistics systems	Strengthening national 80% laboratory capacity for VPD and AEFI surveillance			x					
	100% quarterly meetings of the provincial vaccine management committee held (LMIS) at provincial and district levels				x				
	100% districts reporting on vLMIS with 80% timeliness & completeness				x				
Strengthening National and Provincial Coordination Mechanisms	Number of planned bi-annual meetings of provincial coordination committee held chaired by Secretary health			x					
	Evidence of Coordination mechanism and at least one indicator for measuring success of this coordination agreed with Polio Task force			x					
	No. of bi-annual review meetings held at federal level			2					
	No. of quarterly review meetings held at provincial/regional level			4					
	No. of monthly review meetings held at district			4					

	level								
Studies and Technical Assistance	No. of research projects conducted and reports available including reviews of new vaccine introduction			2					
	Sero conversion studies		x						
Performance Management Mechanism	50% number of UCs validated for immunization coverage by provincial office having more than 80% and less than 50% coverage		x						
	80% number of UCs validated by districts having less than 40% coverage			x					
	80% of districts reporting UC level verified coverage			x					
	80% of UCs within district meeting the minimum criteria for participation in competition			x					
	80% of districts competing for performance bonuses				x				
Monitoring & Evaluation	Contract with 3rd party for independent monitoring and evaluation reports available			x					
Surveillance and AEFI	% of UCs having a functional VPD surveillance system reporting online							90 %	
	Online surveillance for VPD & AEFI zero reporting system for 80% of all HF within district				x				
Component 2: Improving Service Delivery									
Output 2: Increased access and utilization of routine immunization services	80% proportion of population having access to EPI services (fixed or outreach) within 30 minutes walking distance at least once a month					x			
	80% of UC with at least 02 skilled staff capable of providing immunization					x			
	% of UCs has no vaccines out of stock					x			
Component 2: Improving Service Delivery Activities									
Increasing access to routine EPI services through revisiting mix of fixed and mobile services	%age of HF without EPI centers							0%	
	% of UC without EPI centers							0%	
	Ratio of children immunized by fixed centers versus Outreach teams							50 %	
	Dropout rates: DPT3-DPT1							<10 %	
	Measles 1-DPT3							<10 %	

Focused service delivery for mobile/refugee population	Population uncovered by EPI services/vaccinators/EPI program							100 %	
	% of population covered in collaboration with LHWs			50%					
NGOs/CSOs /Private Sector contracting in urban and hard to reach areas	% of population covered in collaboration with NGOs/CSOs			20%					
	Number of private institutions providing immunization services in urban areas			100 %					
	No. of contracts with NGOs/CSOs for provision of immunization services in urban slums awarded			1					
	% of immunization services through private sector/NGOs/CSOs by urban/rural			100 %					
Capacity building for improved service availability	% of sanctioned posts for vaccinators			50%					
	% of vaccinators(HF staff, LHWs)given refresher/technical trainings				100 %				
	% MLM courses (6) held at provincial level annually			x					
Supply Chain Management	At least 95% of functional cold chain equipment as per specifications at ALL health facility levels				x	x			
	80% of districts/tehsils having alternate electric supply available at all EPI stores				x				
Enhanced online micro plans	90% of immunization sessions held as per micro plan							x	
	90% of EPI staff working according to the approved tour plans							x	
	90% of UCs with notified immunization teams in districts						x		
Integration of immunization services into regular health systems	80% of immunization staff having access to functional transport	100% vaccinators and 100% supervisors							
Adequate resources available for immunization activities in regular budget	100% of vaccination staff satisfied with workload/performance			x	x				
Supervisory	80% of online supervisory					x			

systems for EPI	monitoring reports submitted to higher level								
	80% of districts with full complement of supervisory staff available			x					
	100% detailed supervisory plans available for all districts			x					
Component 3: Demand Generation									
Output 3: increased demand for routine immunization services, specially by the disadvantaged groups	10% increase in proportion of parents retaining immunization card				x				
	(absolute value province-wise) expenditure on public awareness campaigns through electronic media disaggregated by provinces				x				
	25% number of districts implementing immunization Voucher Scheme per province				x				
Component 3: Demand Generation Activities									
Communication for development	100% Annual review of communication strategy held at provincial level			x					
	80% of districts reporting tools/messages and printed materials available			x					
Building partnerships for immunization	Number of meetings with provincial assembly members/standing committee on education/health			2	2	2	2	2	
	Number of meetings with Line departments especially education			2	2	2	2	2	
	Notification of EPI text to be included in curriculum				x				
Garnering support of all strata of society					x				
Implementing demand side interventions	% of UCs within district meeting the minimum criteria for participation in voucher scheme			25%	50%	75%	85%	95 %	
	Child voucher			x					
	% of the poorest quintile enrolled in the voucher scheme			20	40	60	80	100	
	% of parents having knowledge of the voucher scheme			20	40	60	80	100	
Advocacy	Briefing notes prepared for provincial assembly members			X					
	No. of talk shows held			2	2	2	2	2	

	Notification of President Pediatric Association provincial as member of provincial coordination committee			x					
	No. of advocacy sessions conducted with policy makers by private sector/CSOs			2	2	2	2	2	
Social Mobilization	90% of parents with children under 1 year of age who can state the date for next immunization			40%	60%	80%	90%	95 %	
Grievance Re-dressed Mechanism				x					

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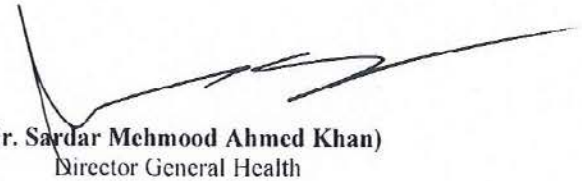

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Appendix –7
Federally Administered Tribal Areas (FATA)
Results Based Framework for National Immunization Support Program

Objectives/Activity	Indicators	Baseline	Source	Target					Remarks/ Assumptions
				Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	
Goal :									
To reduce the morbidity and mortality due to Vaccine Preventable Diseases (VPD) in children under 5 years and reduction in tetanus morbidity in pregnant women	Under 5 mortality rate	89	PDHS	86	84	80	76	74	
Project Objectives:									
To strengthen and improve routine immunization coverage by supply/demand-generation activities and management reforms.	95% of children fully immunized between 12-23 months disaggregated by gender, income, province and district		PDHS/ PSLMS	60%	70%	80%	90%	95%	
Component 1: Strengthening Management, Governance and Stewardship Functions									
Output 1: Institutional capacity of federal, Provincial and District EPI cells strengthened	Revised computerized UC level micro plans for 80% of UCs at district and provincial level			35	55	65	75	95	
	80% of Union Councils assessed for validity are cleared (80% age appropriate vaccination)			60	70	80	90	95	
	95% of reported outbreaks/ notifiable diseases countered with an appropriate response by the system			70	80	90	100	100	
	Annual 3rd party monitoring and evaluation reports disseminated			1	1	1	1	1	
	Insert coordination and surveillance output								
Component 1: Strengthening Management, Governance and Stewardship Functions Activities:									
Capacity building for management of EPI	Technical framework and policy guidelines for LHWs involvement as social mobilizer and further involvement as vaccinators subject to fully trained in vaccinations and follow standards of vaccine wastage rates			x					
	CSO/Private Sector involvement notified and implemented				x				
	100% critical positions filled at provincial level by skilled staff with								

	appropriate qualifications and experience (FM, procurement, M&E, Surveillance, Data Management, Epidemiologist)								
	100% of districts reporting at least 01 month buffer stock available within the district (source: LMIS)				x				
Strengthening Information Management and reporting system	80%age of districts submitting online routine monthly reports to provinces by agreed timelines				x				
	100% of districts receiving feedback on reports from provincial directorate			x					
	IT-based solutions (surveillance, monitoring, reporting)functional in 80% districts				x				
	GPRS tracking of vaccinators, supervisors at all levels functional in 80% of districts			x					
Strengthening Procurement and Logistics systems	Strengthening national 80% laboratory capacity for VPD and AEFI surveillance			x					
	100% quarterly meetings of the provincial vaccine management committee held (LMIS) at provincial and district levels				x				
	100% districts reporting on vLMIS with 80% timeliness & completeness				x				
Strengthening National and Provincial Coordination Mechanisms	Number of planned bi-annual meetings of provincial coordination committee held chaired by Secretary health			x					
	Evidence of Coordination mechanism and at least one indicator for measuring success of this coordination agreed with Polio Task force			x					
	No. of bi-annual review meetings held at federal level			2					
	No. of quarterly review meetings held at provincial/regional level			4					
	No. of monthly review meetings held at district level			4					
Studies and Technical	No. of research projects			2					

Assistance	conducted and reports available including reviews of new vaccine introduction								
	Sero conversion studies		x						
Performance Management Mechanism	50% number of UCs validated for immunization coverage by provincial office having more than 80% and less than 50% coverage		x						
	80% number of UCs validated by districts having less than 40% coverage			x					
	80% of districts reporting UC level verified coverage			x					
	80% of UCs within district meeting the minimum criteria for participation in competition			x					
	80% of districts competing for performance bonuses				x				
Monitoring & Evaluation	Contract with 3rd party for independent monitoring and evaluation reports available			x					
Surveillance and AEFI	% of UCs having a functional VPD surveillance system reporting online							90 %	
	Online surveillance for VPD & AEFI zero reporting system for 80% of all HF within district				x				
Component 2: Improving Service Delivery									
Output 2: Increased access and utilization of routine immunization services	80% proportion of population having access to EPI services (fixed or outreach) within 30 minutes walking distance at least once a month					x			
	80% of UC with at least 02 skilled staff capable of providing immunization					x			
	% of UCs has no vaccines out of stock					x			
Component 2: Improving Service Delivery Activities									
Increasing access to routine EPI services through revisiting mix of fixed and mobile services	%age of HF without EPI centers							0%	
	% of UC without EPI centers							0%	
	Ratio of children immunized by fixed centers versus Outreach teams							50 %	
	Dropout rates: DPT3-DPT1							<10 %	
	Measles 1-DPT3							<10 %	
Focused service delivery for	Population uncovered by EPI							100 %	

mobile/refugee population	services/vaccinators/EPI program								
	% of population covered in collaboration with LHWs			50%					
NGOs/CSOs /Private Sector contracting in urban and hard to reach areas	% of population covered in collaboration with NGOs/CSOs			20%					
	Number of private institutions providing immunization services in urban areas			100 %					
	No. of contracts with NGOs/CSOs for provision of immunization services in urban slums awarded			1					
	% of immunization services through private sector/NGOs/CSOs by urban/rural			100 %					
Capacity building for improved service availability	% of sanctioned posts for vaccinators			50%					
	% of vaccinators(HF staff, LHWs)given refresher/technical trainings				100 %				
	% MLM courses (6) held at provincial level annually			x					
Supply Chain Management	At least 95% of functional cold chain equipment as per specifications at ALL health facility levels				x	x			
	80% of districts/tehsils having alternate electric supply available at all EPI stores				x				
Enhanced online micro plans	90% of immunization sessions held as per micro plan							x	
	90% of EPI staff working according to the approved tour plans							x	
	90% of UCs with notified immunization teams in districts						x		
Integration of immunization services into regular health systems	80% of immunization staff having access to functional transport	100% vaccinators and 100% supervisors							
Adequate resources available for immunization activities in regular budget	100% of vaccination staff satisfied with workload/performance			x	x				
Supervisory systems for EPI	80% of online supervisory monitoring reports submitted to higher level					x			

	80% of districts with full complement of supervisory staff available			x					
	100% detailed supervisory plans available for all districts			x					
Component 3: Demand Generation									
Output 3: increased demand for routine immunization services, specially by the disadvantaged groups	10% increase in proportion of parents retaining immunization card				x				
	(absolute value province-wise) expenditure on public awareness campaigns through electronic media disaggregated by provinces				x				
	25% number of districts implementing immunization Voucher Scheme per province				x				
Component 3: Demand Generation Activities									
Communication for development	100% Annual review of communication strategy held at provincial level			x					
	80% of districts reporting tools/messages and printed materials available			x					
Building partnerships for immunization	Number of meetings with provincial assembly members/standing committee on education/health			2	2	2	2	2	
	Number of meetings with Line departments especially education			2	2	2	2	2	
	Notification of EPI text to be included in curriculum				x				
Garnering support of all strata of society					x				
Implementing demand side interventions	% of UCs within district meeting the minimum criteria for participation in voucher scheme			25%	50%	75%	85%	95 %	
	Child voucher			x					
	% of the poorest quintile enrolled in the voucher scheme			20	40	60	80	100	
	% of parents having knowledge of the voucher scheme			20	40	60	80	100	
Advocacy	Briefing notes prepared for provincial assembly members			X					
	No. of talk shows held			2	2	2	2	2	
	Notification of President Pediatric Association			x					

	provincial as member of provincial coordination committee								
	No. of advocacy sessions conducted with policy makers by private sector/CSOs			2	2	2	2	2	
Social Mobilization	90% of parents with children under 1 year of age who can state the date for next immunization			40%	60%	80%	90%	95 %	
Grievance Re-dressed Mechanism				x					

Appendix –8
Gilgit Baltistan (GB)
Results Based Framework for National Immunization Support Program

Objectives/Activity	Indicators	Baseline	Source	Target					Remarks/ Assumptions
				Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	
Goal :									
To reduce the morbidity and mortality due to Vaccine Preventable Diseases (VPD) in children under 5 years and reduction in tetanus morbidity in pregnant women	Under 5 mortality rate	89p	PDHS	86	84	80	76	74	
Project Objectives:									
To strengthen and improve routine immunization coverage by supply/demand-generation activities and management reforms.	95% of children fully immunized between 12-23 months disaggregated by gender, income, province and district		PDHS/ PSLMS	60%	70%	80%	90%	95%	
Component 1: Strengthening Management, Governance and Stewardship Functions									
Output 1: Institutional capacity of federal, Provincial and District EPI cells strengthened	Revised computerized UC level micro plans for 80% of UCs at district and provincial level			35	55	65	75	95	
	80% of Union Councils assessed for validity are cleared (80% age appropriate vaccination)			60	70	80	90	95	
	95% of reported outbreaks/ notifiable diseases countered with an appropriate response by the system			70	80	90	100	100	
	Annual 3rd party monitoring and evaluation reports disseminated			1	1	1	1	1	
	Insert coordination and surveillance output								
Component 1: Strengthening Management, Governance and Stewardship Functions Activities:									
Capacity building for management of EPI	Technical framework and policy guidelines for LHWs involvement as social mobilizer and further involvement as vaccinators subject to fully trained in vaccinations and follow standards of vaccine wastage rates			x					
	CSO/Private Sector involvement notified and implemented				x				
	100% critical positions								

	filled at provincial level by skilled staff with appropriate qualifications and experience (FM, procurement, M&E, Surveillance, Data Management, Epidemiologist)								
	100% of districts reporting at least 01 month buffer stock available within the district (source: LMIS)				x				
Strengthening Information Management and reporting system	80%age of districts submitting online routine monthly reports to provinces by agreed timelines				x				
	100% of districts receiving feedback on reports from provincial directorate			x					
	IT-based solutions (surveillance, monitoring, reporting)functional in 80% districts				x				
	GPRS tracking of vaccinators, supervisors at all levels functional in 80% of districts			x					
Strengthening Procurement and Logistics systems	Strengthening national 80% laboratory capacity for VPD and AEFI surveillance			x					
	100% quarterly meetings of the provincial vaccine management committee held (LMIS) at provincial and district levels				x				
	100% districts reporting on vLMIS with 80% timeliness & completeness				x				
Strengthening National and Provincial Coordination Mechanisms	Number of planned bi-annual meetings of provincial coordination committee held chaired by Secretary health			x					
	Evidence of Coordination mechanism and at least one indicator for measuring success of this coordination agreed with Polio Task force			x					
	No. of bi-annual review meetings held at federal level			2					
	No. of quarterly review meetings held at provincial/regional level			4					
	No. of monthly review meetings held at district level			4					

Studies and Technical Assistance	No. of research projects conducted and reports available including reviews of new vaccine introduction			2					
	Sero conversion studies		x						
Performance Management Mechanism	50% number of UCs validated for immunization coverage by provincial office having more than 80% and less than 50% coverage		x						
	80% number of UCs validated by districts having less than 40% coverage			x					
	80% of districts reporting UC level verified coverage			x					
	80% of UCs within district meeting the minimum criteria for participation in competition			x					
	80% of districts competing for performance bonuses				x				
Monitoring & Evaluation	Contract with 3rd party for independent monitoring and evaluation reports available			x					
Surveillance and AEFI	% of UCs having a functional VPD surveillance system reporting online							90 %	
	Online surveillance for VPD & AEFI zero reporting system for 80% of all HF within district				x				
Component 2: Improving Service Delivery									
Output 2: Increased access and utilization of routine immunization services	80% proportion of population having access to EPI services (fixed or outreach) within 30 minutes walking distance at least once a month					x			
	80% of UC with at least 02 skilled staff capable of providing immunization					x			
	% of UCs has no vaccines out of stock					x			
Component 2: Improving Service Delivery Activities									
Increasing access to routine EPI services through revisiting mix of fixed and mobile services	%age of HF without EPI centers							0%	
	% of UC without EPI centers							0%	
	Ratio of children immunized by fixed centers versus Outreach teams							50 %	
	Dropout rates: DPT3-DPT1							<10 %	
	Measles 1-DPT3							<10 %	
Focused service	Population uncovered by							100	

delivery for mobile/refugee population	EPI services/vaccinators/EPI program							%	
	% of population covered in collaboration with LHWs			50%					
NGOs/CSOs /Private Sector contracting in urban and hard to reach areas	% of population covered in collaboration with NGOs/CSOs			20%					
	Number of private institutions providing immunization services in urban areas			100 %					
	No. of contracts with NGOs/CSOs for provision of immunization services in urban slums awarded			1					
	% of immunization services through private sector/NGOs/CSOs by urban/rural			100 %					
Capacity building for improved service availability	% of sanctioned posts for vaccinators			50%					
	% of vaccinators(HF staff, LHWs)given refresher/technical trainings				100 %				
	% MLM courses (6) held at provincial level annually			x					
Supply Chain Management	At least 95% of functional cold chain equipment as per specifications at ALL health facility levels				x	x			
	80% of districts/tehsils having alternate electric supply available at all EPI stores				x				
Enhanced online micro plans	90% of immunization sessions held as per micro plan							x	
	90% of EPI staff working according to the approved tour plans							x	
	90% of UCs with notified immunization teams in districts						x		
Integration of immunization services into regular health systems	80% of immunization staff having access to functional transport	100% vaccinators and 100% supervisors							
Adequate resources available for immunization activities in regular budget	100% of vaccination staff satisfied with workload/performance			x	x				
Supervisory	80% of online supervisory monitoring reports					x			

systems for EPI	submitted to higher level								
	80% of districts with full complement of supervisory staff available			x					
	100% detailed supervisory plans available for all districts			x					
Component 3: Demand Generation									
Output 3: increased demand for routine immunization services, specially by the disadvantaged groups	10% increase in proportion of parents retaining immunization card				x				
	(absolute value province-wise) expenditure on public awareness campaigns through electronic media disaggregated by provinces				x				
	25% number of districts implementing immunization Voucher Scheme per province				x				
Component 3: Demand Generation Activities									
Communication for development	100% Annual review of communication strategy held at provincial level			x					
	80% of districts reporting tools/messages and printed materials available			x					
Building partnerships for immunization	Number of meetings with provincial assembly members/standing committee on education/health			2	2	2	2	2	
	Number of meetings with Line departments especially education			2	2	2	2	2	
	Notification of EPI text to be included in curriculum				x				
Garnering support of all strata of society					x				
Implementing demand side interventions	% of UCs within district meeting the minimum criteria for participation in voucher scheme			25%	50%	75%	85%	95 %	
	Child voucher			x					
	% of the poorest quintile enrolled in the voucher scheme			20	40	60	80	100	
	% of parents having knowledge of the voucher scheme			20	40	60	80	100	
Advocacy	Briefing notes prepared for provincial assembly members			X					
	No. of talk shows held			2	2	2	2	2	
	Notification of President			x					

	Pediatric Association provincial as member of provincial coordination committee								
	No. of advocacy sessions conducted with policy makers by private sector/CSOs			2	2	2	2	2	
Social Mobilization	90% of parents with children under 1 year of age who can state the date for next immunization			40%	60%	80%	90%	95 %	
Grievance Re-dressed Mechanism				x					

Appendix –9
Capital Development Authority (CDA)
Results Based Framework for National Immunization Support Program

Objectives/Activity	Indicators	Baseline	Source	Target					Remarks/ Assumptions
				Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	
Goal :									
To reduce the morbidity and mortality due to Vaccine Preventable Diseases (VPD) in children under 5 years and reduction in tetanus morbidity in pregnant women	Under 5 mortality rate	89	PDHS	86	84	80	76	74	
Project Objectives:									
To strengthen and improve routine immunization coverage by supply/demand-generation activities and management reforms.	95% of children fully immunized between 12-23 months disaggregated by gender, income, province and district		PDHS/ PSLMS	60%	70%	80%	90%	95%	
Component 1: Strengthening Management, Governance and Stewardship Functions									
Output 1: Institutional capacity of federal, Provincial and District EPI cells strengthened	Revised computerized UC level micro plans for 80% of UCs at district and provincial level			35	55	65	75	95	
	80% of Union Councils assessed for validity are cleared (80% age appropriate vaccination)			60	70	80	90	95	
	95% of reported outbreaks/ notifiable diseases countered with an appropriate response by the system			70	80	90	100	100	
	Annual 3rd party monitoring and evaluation reports disseminated			1	1	1	1	1	
	Insert coordination and surveillance output								
Component 1: Strengthening Management, Governance and Stewardship Functions Activities:									
Capacity building for management of EPI	Technical framework and policy guidelines for LHWs involvement as social mobilizer and further involvement as vaccinators subject to fully trained in vaccinations and follow standards of vaccine wastage rates			x					
	CSO/Private Sector involvement notified and implemented				x				
	100% critical positions filled at provincial level by skilled staff with appropriate								

	qualifications and experience (FM, procurement, M&E, Surveillance, Data Management, Epidemiologist)								
	100% of districts reporting at least 01 month buffer stock available within the district (source: LMIS)				x				
Strengthening Information Management and reporting system	80%age of districts submitting online routine monthly reports to provinces by agreed timelines				x				
	100% of districts receiving feedback on reports from provincial directorate			x					
	IT-based solutions (surveillance, monitoring, reporting)functional in 80% districts				x				
	GPRS tracking of vaccinators, supervisors at all levels functional in 80% of districts			x					
Strengthening Procurement and Logistics systems	Strengthening national 80% laboratory capacity for VPD and AEFI surveillance			x					
	100% quarterly meetings of the provincial vaccine management committee held (LMIS) at provincial and district levels				x				
	100% districts reporting on vLMIS with 80% timeliness & completeness				x				
Strengthening National and Provincial Coordination Mechanisms	Number of planned bi-annual meetings of provincial coordination committee held chaired by Secretary health			x					
	Evidence of Coordination mechanism and at least one indicator for measuring success of this coordination agreed with Polio Task force			x					
	No. of bi-annual review meetings held at federal level			2					
	No. of quarterly review meetings held at provincial/regional level			4					
	No. of monthly review meetings held at district level			4					
Studies and Technical Assistance	No. of research projects conducted and reports available including reviews			2					

	of new vaccine introduction								
	Sero conversion studies		x						
Performance Management Mechanism	50% number of UCs validated for immunization coverage by provincial office having more than 80% and less than 50% coverage		x						
	80% number of UCs validated by districts having less than 40% coverage			x					
	80% of districts reporting UC level verified coverage			x					
	80% of UCs within district meeting the minimum criteria for participation in competition			x					
	80% of districts competing for performance bonuses				x				
Monitoring & Evaluation	Contract with 3rd party for independent monitoring and evaluation reports available			x					
Surveillance and AEFI	% of UCs having a functional VPD surveillance system reporting online							90 %	
	Online surveillance for VPD & AEFI zero reporting system for 80% of all HF within district				x				
Component 2: Improving Service Delivery									
Output 2: Increased access and utilization of routine immunization services	80% proportion of population having access to EPI services (fixed or outreach) within 30 minutes walking distance at least once a month					x			
	80% of UC with at least 02 skilled staff capable of providing immunization					x			
	% of UCs has no vaccines out of stock					x			
Component 2: Improving Service Delivery Activities									
Increasing access to routine EPI services through revisiting mix of fixed and mobile services	%age of HF without EPI centers							0%	
	% of UC without EPI centers							0%	
	Ratio of children immunized by fixed centers versus Outreach teams							50 %	
	Dropout rates: DPT3-DPT1							<10 %	
	Measles 1-DPT3							<10 %	
Focused service delivery for mobile/refugee population	Population uncovered by EPI services/vaccinators/EPI program							100 %	

	% of population covered in collaboration with LHWs			50%					
NGOs/CSOs /Private Sector contracting in urban and hard to reach areas	% of population covered in collaboration with NGOs/CSOs			20%					
	Number of private institutions providing immunization services in urban areas			100 %					
	No. of contracts with NGOs/CSOs for provision of immunization services in urban slums awarded			1					
	% of immunization services through private sector/NGOs/CSOs by urban/rural			100 %					
Capacity building for improved service availability	% of sanctioned posts for vaccinators			50%					
	% of vaccinators(HF staff, LHWs)given refresher/technical trainings				100 %				
	% MLM courses (6) held at provincial level annually			x					
Supply Chain Management	At least 95% of functional cold chain equipment as per specifications at ALL health facility levels				x	x			
	80% of districts/tehsils having alternate electric supply available at all EPI stores				x				
Enhanced online micro plans	90% of immunization sessions held as per micro plan							x	
	90% of EPI staff working according to the approved tour plans							x	
	90% of UCs with notified immunization teams in districts						x		
Integration of immunization services into regular health systems	80% of immunization staff having access to functional transport	100% vaccinators and 100% supervisors							
Adequate resources available for immunization activities in regular budget	100% of vaccination staff satisfied with workload/performance			x	x				
Supervisory systems for EPI	80% of online supervisory monitoring reports submitted to higher level					x			
	80% of districts with full complement of supervisory			x					

	staff available								
	100% detailed supervisory plans available for all districts			x					
Component 3: Demand Generation									
Output 3: increased demand for routine immunization services, specially by the disadvantaged groups	10% increase in proportion of parents retaining immunization card				x				
	(absolute value province-wise) expenditure on public awareness campaigns through electronic media disaggregated by provinces				x				
	25% number of districts implementing immunization Voucher Scheme per province				x				
Component 3: Demand Generation Activities									
Communication for development	100% Annual review of communication strategy held at provincial level			x					
	80% of districts reporting tools/messages and printed materials available			x					
Building partnerships for immunization	Number of meetings with provincial assembly members/standing committee on education/health			2	2	2	2	2	
	Number of meetings with Line departments especially education			2	2	2	2	2	
	Notification of EPI text to be included in curriculum				x				
Garnering support of all strata of society					x				
Implementing demand side interventions	% of UCs within district meeting the minimum criteria for participation in voucher scheme			25%	50%	75%	85%	95 %	
	Child voucher			x					
	% of the poorest quintile enrolled in the voucher scheme			20	40	60	80	100	
	% of parents having knowledge of the voucher scheme			20	40	60	80	100	
Advocacy	Briefing notes prepared for provincial assembly members			X					
	No. of talk shows held			2	2	2	2	2	
	Notification of President Pediatric Association provincial as member of provincial coordination			x					

	committee								
	No. of advocacy sessions conducted with policy makers by private sector/CSOs			2	2	2	2	2	
Social Mobilization	90% of parents with children under 1 year of age who can state the date for next immunization			40%	60%	80%	90%	95 %	
Grievance Re-dressed Mechanism				x					

Federal PC-1

National Immunization Support Program (EPI)

2015-16 to 2019-20

Directorate of Health Services CDA Islamabad

Jointly Prepared by

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Appendix –10
Islamabad Capital Territory (ICT)
Results Based Framework for National Immunization Support Program

Objectives/Activity	Indicators	Baseline	Source	Target					Remarks/ Assumptions
				Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	
Goal :									
To reduce the morbidity and mortality due to Vaccine Preventable Diseases (VPD) in children under 5 years and reduction in tetanus morbidity in pregnant women	Under 5 mortality rate	89	PDHS	86	84	80	76	74	
Project Objectives:									
To strengthen and improve routine immunization coverage by supply/demand-generation activities and management reforms.	95% of children fully immunized between 12-23 months disaggregated by gender, income, province and district		PDHS/ PSLMS	60%	70%	80%	90%	95%	
Component 1: Strengthening Management, Governance and Stewardship Functions									
Output 1: Institutional capacity of federal, Provincial and District EPI cells strengthened	Revised computerized UC level micro plans for 80% of UCs at district and provincial level			35	55	65	75	95	
	80% of Union Councils assessed for validity are cleared (80% age appropriate vaccination)			60	70	80	90	95	
	95% of reported outbreaks/ notifiable diseases countered with an appropriate response by the system			70	80	90	100	100	
	Annual 3rd party monitoring and evaluation reports disseminated			1	1	1	1	1	
	Insert coordination and surveillance output								
Component 1: Strengthening Management, Governance and Stewardship Functions Activities:									
Capacity building for management of EPI	Technical framework and policy guidelines for LHWs involvement as social mobilizer and further involvement as vaccinators subject to fully trained in vaccinations and follow standards of vaccine wastage rates			x					
	CSO/Private Sector involvement notified and implemented				x				
	100% critical positions filled at provincial level by skilled staff with appropriate qualifications and experience (FM,								

	procurement, M&E, Surveillance, Data Management, Epidemiologist)								
	100% of districts reporting at least 01 month buffer stock available within the district (source: LMIS)				x				
Strengthening Information Management and reporting system	80%age of districts submitting online routine monthly reports to provinces by agreed timelines				x				
	100% of districts receiving feedback on reports from provincial directorate			x					
	IT-based solutions (surveillance, monitoring, reporting)functional in 80% districts				x				
	GPRS tracking of vaccinators, supervisors at all levels functional in 80% of districts			x					
Strengthening Procurement and Logistics systems	Strengthening national 80% laboratory capacity for VPD and AEFI surveillance			x					
	100% quarterly meetings of the provincial vaccine management committee held (LMIS) at provincial and district levels				x				
	100% districts reporting on vLMIS with 80% timeliness & completeness				x				
Strengthening National and Provincial Coordination Mechanisms	Number of planned bi-annual meetings of provincial coordination committee held chaired by Secretary health			x					
	Evidence of Coordination mechanism and at least one indicator for measuring success of this coordination agreed with Polio Task force			x					
	No. of bi-annual review meetings held at federal level			2					
	No. of quarterly review meetings held at provincial/regional level			4					
	No. of monthly review meetings held at district level			4					
Studies and Technical Assistance	No. of research projects conducted and reports available including reviews of new vaccine introduction			2					
	Sero conversion studies		x						

Performance Management Mechanism	50% number of UCs validated for immunization coverage by provincial office having more than 80% and less than 50% coverage		x						
	80% number of UCs validated by districts having less than 40% coverage			x					
	80% of districts reporting UC level verified coverage			x					
	80% of UCs within district meeting the minimum criteria for participation in competition			x					
	80% of districts competing for performance bonuses				x				
Monitoring & Evaluation	Contract with 3rd party for independent monitoring and evaluation reports available			x					
Surveillance and AEFI	% of UCs having a functional VPD surveillance system reporting online							90 %	
	Online surveillance for VPD & AEFI zero reporting system for 80% of all HF within district				x				
Component 2: Improving Service Delivery									
Output 2: Increased access and utilization of routine immunization services	80% proportion of population having access to EPI services (fixed or outreach) within 30 minutes walking distance at least once a month					x			
	80% of UC with at least 02 skilled staff capable of providing immunization					x			
	% of UCs has no vaccines out of stock					x			
Component 2: Improving Service Delivery Activities									
Increasing access to routine EPI services through revisiting mix of fixed and mobile services	%age of HF without EPI centers							0%	
	% of UC without EPI centers							0%	
	Ratio of children immunized by fixed centers versus Outreach teams							50 %	
	Dropout rates: DPT3-DPT1							<10 %	
	Measles 1-DPT3							<10 %	
Focused service delivery for mobile/refugee population	Population uncovered by EPI services/vaccinators/EPI program							100 %	
	% of population covered in collaboration with LHWs			50%					

NGOs/CSOs /Private Sector contracting in urban and hard to reach areas	% of population covered in collaboration with NGOs/CSOs			20%					
	Number of private institutions providing immunization services in urban areas			100 %					
	No. of contracts with NGOs/CSOs for provision of immunization services in urban slums awarded			1					
	% of immunization services through private sector/NGOs/CSOs by urban/rural			100 %					
Capacity building for improved service availability	% of sanctioned posts for vaccinators			50%					
	% of vaccinators(HF staff, LHWs)given refresher/technical trainings				100 %				
	% MLM courses (6) held at provincial level annually			x					
Supply Chain Management	At least 95% of functional cold chain equipment as per specifications at ALL health facility levels				x	x			
	80% of districts/tehsils having alternate electric supply available at all EPI stores				x				
Enhanced online micro plans	90% of immunization sessions held as per micro plan							x	
	90% of EPI staff working according to the approved tour plans							x	
	90% of UCs with notified immunization teams in districts						x		
Integration of immunization services into regular health systems	80% of immunization staff having access to functional transport	100% vaccinators and 100% supervisors							
Adequate resources available for immunization activities in regular budget	100% of vaccination staff satisfied with workload/performance			x	x				
Supervisory systems for EPI	80% of online supervisory monitoring reports submitted to higher level					x			
	80% of districts with full complement of supervisory staff available			x					
	100% detailed supervisory			x					

	plans available for all districts								
Component 3: Demand Generation									
Output 3: increased demand for routine immunization services, specially by the disadvantaged groups	10% increase in proportion of parents retaining immunization card				x				
	(absolute value province-wise) expenditure on public awareness campaigns through electronic media disaggregated by provinces				x				
	25% number of districts implementing immunization Voucher Scheme per province				x				
Component 3: Demand Generation Activities									
Communication for development	100% Annual review of communication strategy held at provincial level			x					
	80% of districts reporting tools/messages and printed materials available			x					
Building partnerships for immunization	Number of meetings with provincial assembly members/standing committee on education/health			2	2	2	2	2	
	Number of meetings with Line departments especially education			2	2	2	2	2	
	Notification of EPI text to be included in curriculum				x				
Garnering support of all strata of society					x				
Implementing demand side interventions	% of UCs within district meeting the minimum criteria for participation in voucher scheme			25%	50%	75%	85%	95 %	
	Child voucher			x					
	% of the poorest quintile enrolled in the voucher scheme			20	40	60	80	100	
	% of parents having knowledge of the voucher scheme			20	40	60	80	100	
Advocacy	Briefing notes prepared for provincial assembly members			X					
	No. of talk shows held			2	2	2	2	2	
	Notification of President Pediatric Association provincial as member of provincial coordination committee			x					
	No. of advocacy sessions			2	2	2	2	2	

	conducted with policy makers by private sector/CSOs								
Social Mobilization	90% of parents with children under 1 year of age who can state the date for next immunization			40%	60%	80%	90%	95 %	
Grievance Re-dressed Mechanism				x					

Appendix - 11

National Immunization Support Project (P132308)
Disbursement Linked Indicators Schedule

Component	Indicator	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Overall	**1.** Percent of children aged between 12-23 months in the province or territory who are fully immunized			**X**		**X**	**2**
Component 1. Strengthening Management, Governance and Stewardship Functions	**2.** Percent of Union Councils (UCs) for which revised computerized UC level micro plans are in functional use at district and provincial levels		**X**				**5**
	3. Percent of UCs reporting at least 80% coverage of full immunization in children between 12-23 months, which have these reports validated by independent TPV			**X**		**X**	
	4. Percentage of districts with at least 80% timeliness & completeness reporting on vLMIS		**X**				
	5. Percent of districts with their recognized surveillance sites having functional online surveillance for Vaccine Preventable Diseases (VPD) & Adverse Events Following Immunization (AEFI)				**X**		
Component 2. Improving Service Delivery	**6.** At least 80% score will be achieved in all components in the effective vaccine management (EVM) assessment at provincial level		**X**				**2**
	7. Percent of detailed UC supervisory plans available for all district supervisors to all provincial supervisor officers	**X**					
Component 3. Demand Generation	**8.** Level of expenditures incurred by the respective DoHs and MONHSRC spent on public awareness campaigns for immunization through print and electronic media				**X**		**2**
	9. Percent of children under two years of age with vaccination card available				**X**		
Fiduciary	**10.** Budget allocations for immunization are continuous, adequate and can be easily tracked within the government financial management information system		**X**	**X**			**2**
		1	**4**	**3**	**3**	**2**	**13**

Appendix - 12

National Immunization Support Project (P132308)
Disbursement Linked Indicators Protocols

<table>
<tr><th>DLI</th><th>Indicative timingofcompletion</th><th>Target</th><th>SourceofData</th><th>Verification</th></tr>
<tr>
<td>DLI 1: Percent of children aged between 12-23 months in the province or territory who are fully immunized</td>
<td>June 30, 2018 (Yr 3)
June 30, 2020 (Yr 5)</td>
<td>
<table>
<tr><th></th><th>Baseline</th><th>Yr 3</th><th>Yr 5</th></tr>
<tr><td>Balochistan</td><td></td><td></td><td></td></tr>
<tr><td>KP</td><td></td><td></td><td></td></tr>
<tr><td>Punjab</td><td></td><td></td><td></td></tr>
<tr><td>Sindh</td><td></td><td></td><td></td></tr>
<tr><td>Other areas</td><td></td><td></td><td></td></tr>
</table>
</td>
<td>• Baseline: PDHS 2012-13 (provinces) and admin data (other areas)
• Source of data: EPI Program Report, with national demographic estimates (projections of the 1998 Census</td>
<td>(1) PDHS, (2) if PDHS is not available, then independent third party verification (TPV) contracted by Federal EPI cell and reviewed by the joint World Bank/GAVI Alliance/Gates Foundation team</td>
</tr>
<tr>
<td colspan="5">Definitions/Details
• “Percent of children” is calculated as the number of those documented to have received the services according to the survey divided by the estimated size of the provincial age cohort according to projections of the latest census report.
• Record and recall basis
• Definition of “fully immunized”: Children are considered fully immunized when they have received one dose of the vaccine against tuberculosis (BCG); three doses of the vaccine against diphtheria, pertussis, tetanus, HiB, Hepatitis B (Pentavalent) and three doses of PCV 10; three doses of oral polio vaccine (excluding polio vaccine given at birth); and one dose of measles vaccine. All children should receive the suggested number of doses of BCG, Pentavalent, OPV, and measles vaccines during their first year of life. BCG is given at birth or at first clinical contact; DPT and polio require three doses at approximately age 6, 10, and 14 weeks; and measles vaccine is given soon after age 9 months. All of the vaccines in the routine immunization schedule are provided free of cost in all public health facilities in Pakistan.
• Denominator: The figure used in the EPI Program Report</td>
</tr>
</table>

<table>
<tr>
<td>DLI 2: Percent of Union Councils (UCs) for which revised computerized UC level micro plans are in functional use at district and provincial levels</td>
<td>June 30, 2017 (Yr 2)</td>
<td>
<table>
<tr><th></th><th>Baseline</th><th>Yr 2</th></tr>
<tr><td>Balochistan</td><td></td><td></td></tr>
<tr><td>KP</td><td></td><td>60%</td></tr>
<tr><td>Punjab</td><td></td><td>80%</td></tr>
<tr><td>Sindh</td><td></td><td>100%</td></tr>
<tr><td>Other areas</td><td></td><td></td></tr>
</table>
</td>
<td>Provincial and Federal EPI cell</td>
<td>Independent third party verification (TPV) contracted by Federal EPI cell and reviewed by the joint World Bank/GAVI Alliance/Gates Foundation team</td>
</tr>
<tr>
<td colspan="5">Definitions/Details
• “Revised computerized micro plans” are the lowest level i.e. UC level plans including all the villages based upon a local situation analysis through the RED/REUC approach which involves every health facility and through them the community that they serve. The plan lists all required resources including vaccination teams, by team area, vaccination points and the days of the calendar, transport, supervision. The micro plans that are currently being used for Polio/measles SIA will be used with additional information for routine immunization and these plans will be automated from the lowest level.
• “Functional use” is defined as the micro plans are found to be populated with current (annual) data and their outputs are documented to be used in defining vaccinator work plans and allocation of resources at district and provincial levels.
• Percent of UCs is calculated as the number of UCs with a revised computerized micro plan in functional use divided by the total number of UCs in the province or territory.</td>
</tr>
<tr>
<td>DLI 3: Percent of UCs reporting at least 80% coverage offull immunization in children between 12-23 months, which have these reports validated by independent TPV</td>
<td>June 30, 2018 (Yr 3)
June 30, 2020 (Yr 5)</td>
<td>
<table>
<tr><th></th><th>Baseline</th><th>Yr 3</th><th>Yr 5</th></tr>
<tr><td>Balochistan</td><td></td><td></td><td></td></tr>
<tr><td>KP</td><td></td><td>40</td><td>60</td></tr>
<tr><td>Punjab</td><td></td><td>75</td><td>80</td></tr>
<tr><td>Sindh</td><td></td><td>70</td><td>80</td></tr>
<tr><td>Other areas</td><td></td><td></td><td></td></tr>
</table>
</td>
<td>District level reported data and cluster sampling by district and provincial supervisors</td>
<td>Independent third party verification (TPV) contracted by Federal EPI cell and reviewed by the joint World Bank/GAVI Alliance/Gates Foundation team</td>
</tr>
<tr>
<td colspan="5">Definitions/Details
• “Full immunization” is defined under DLI 1.
• “Coverage of full immunization” is calculated as the number of those children aged between 12 to 23 months documented to have received the services according to number of children immunized according to the Program data (permanent register) divided by the estimated size of the UC age cohort according to the population estimates submitted by provinces/territories during the 1st year of the project
• Percent of UCs is calculated as the number of UCs with at least 80% coverage of full immunization divided by the total number of UCs in the province or territory.</td>
</tr>
</table>

<table>
<tr>
<td>DLI 4: Percentage of with at least 80% timeliness & completeness districts reporting on vLMIS</td>
<td>June 30, 2017 (Yr 2)</td>
<td>
<table>
<tr><td></td><td>Baseline</td><td>Yr 2</td></tr>
<tr><td>Balochistan</td><td></td><td></td></tr>
<tr><td>KP</td><td></td><td>5/25➔10/25</td></tr>
<tr><td>Punjab</td><td></td><td>13/36 ➔ 36/36</td></tr>
<tr><td>Sindh</td><td></td><td>11/28 ➔ 20/28</td></tr>
<tr><td>Other areas</td><td></td><td></td></tr>
</table>
</td>
<td>vLMIS website as monitored by provincial and federal EPI cell</td>
<td>Independent third party verification (TPV) contracted by Federal EPI cell and reviewed by the joint World Bank/GAVI Alliance/Gates Foundation team</td>
</tr>
<tr>
<td colspan="5">Definitions/Details
• “vLMIS” is the Vaccines Logistics Management Information System implemented as described in the cMYP (Comprehensive multiyear plan).
• According to the cMYP, the roll-out of vLMIS shall be done by 2016.
• “Timely and complete” reporting is calculated as the number of data points in the districts where vLMIS is operational for the last three months submitted on time (timeliness) which are available (completeness) on inspection at the provincial level, divided by the total number of potential data points.</td>
</tr>
<tr>
<td>DLI 5: Percent of districts with their recognized surveillance sites having functional online surveillance for Vaccine Preventable Diseases (VPD) & Adverse Events Following Immunization (AEFI)</td>
<td>June 30, 2019 (Yr 4)</td>
<td>
<table>
<tr><td></td><td>Baseline</td><td>Yr4</td></tr>
<tr><td>Balochistan</td><td></td><td></td></tr>
<tr><td>KP</td><td>40%</td><td></td></tr>
<tr><td>Punjab</td><td>80%</td><td></td></tr>
<tr><td>Sindh</td><td>70%</td><td></td></tr>
<tr><td>Other areas</td><td></td><td></td></tr>
</table>
</td>
<td>Provincial DG office</td>
<td>Independent TPV contracted by Federal EPI cell and reviewed by the joint World Bank/GAVI Alliance/Gates Foundation team</td>
</tr>
<tr>
<td colspan="5">Definitions/Details
• “Functional online surveillance” is defined as current (last three months) reporting data (including reports of zero events) available from a surveillance site upon inspection at the provincial level.
• Percent of districts is calculated as the number of districts having 90% of recognized surveillance sites with functional online surveillance data, divided by the total number of districts.</td>
</tr>
</table>

<table>
<tr>
<td>DLI 6: At least 80% score will be achieved in all components in the effective vaccine management (EVM) assessment at provincial level</td>
<td>June 30, 2017 (Yr 2)</td>
<td>
<table>
<tr><td></td><td>Baseline</td><td>Yr2</td></tr>
<tr><td>Balochistan</td><td></td><td>Yes</td></tr>
<tr><td>KP</td><td></td><td>Yes</td></tr>
<tr><td>Punjab</td><td></td><td>Yes</td></tr>
<tr><td>Sindh</td><td></td><td>Yes</td></tr>
<tr><td>Other areas</td><td></td><td></td></tr>
</table>
</td>
<td>(1) Effective Vaccine Management (EVM) assessment.
(2) EPI program data (system to conduct EVM annual basis within the Program required)</td>
<td>Independent TPV contracted by Federal EPI cell and reviewed by the joint World Bank/GAVI Alliance/Gates Foundation team</td>
</tr>
<tr>
<td colspan="5">Definitions/Details
• EVMwill be done using the standard WHO/UNICEF EVM assessment tool.</td>
</tr>
<tr>
<td>DLI 7: Percent of detailed UC supervisory plansavailable for all district supervisors to all provincial supervisor officers</td>
<td>June 30, 2016 (Yr 1)</td>
<td>
<table>
<tr><td></td><td>Baseline</td><td>Yr1</td></tr>
<tr><td>Balochistan</td><td></td><td></td></tr>
<tr><td>KP</td><td></td><td>0% ➔ 50%</td></tr>
<tr><td>Punjab</td><td></td><td>80%</td></tr>
<tr><td>Sindh</td><td></td><td>80%</td></tr>
<tr><td>Other areas</td><td></td><td></td></tr>
</table>
</td>
<td>Web based</td>
<td>Independent TPV contracted by Federal EPI cell and reviewed by the joint World Bank/GAVI Alliance/Gates Foundation team</td>
</tr>
<tr>
<td colspan="5">Definitions/Details
• “A Detailed supervisory plan” is defined as a current (month of inspection) plan on a monthly basis (for 15 working days per month at the district and tehsil level) indicating field visits to vaccination sites including community, issues to be addressed and weak areas including means of transportation and on aggregate covering at least every UC at least once in 3 calendar months.
• “Availability” is defined as accessible on inspection at the provincial EPI cell.
• “District supervisors” are defined as District Officers including EDOH/EDO(H) , and their assignees for EPI monitoring and supervision</td>
</tr>
<tr>
<td>DLI 8: Level of expenditures incurred by the respective DoHs and MONHSRC spent on public awareness campaigns through print and electronic media</td>
<td>June 30, 2019 (Yr 2)</td>
<td>
<table>
<tr><td></td><td>Baseline</td><td>Yr4</td></tr>
<tr><td>Balochistan</td><td></td><td>Rs. 75 mil</td></tr>
<tr><td>KP</td><td></td><td>Rs. 50 mil</td></tr>
<tr><td>Punjab</td><td></td><td></td></tr>
<tr><td>Sindh</td><td></td><td>Rs. 70 mil</td></tr>
<tr><td>Other areas</td><td></td><td></td></tr>
</table>
</td>
<td>District & Provincial records</td>
<td>Independent TPV contracted by Federal EPI cell and reviewed by the joint World Bank/GAVI Alliance/Gates Foundation team</td>
</tr>
</table>

Definitions/Details

- "Expenditure" means the absolute value in PKR allocated to public awareness campaigns on immunization documented by province.
- "Electronic media" includes television, radio, internet or cell-based advertising.
- "Print media" includes newspapers, brochures, magazines.

DLI 9: Percent of children under two years of age with vaccination cards available	June 30, 2019 (Yr 4)		Surveys	Independent TPV contracted by Federal EPI cell and reviewed by the joint World Bank/GAVI Alliance/Gates Foundation team

	Baseline	Yr4
Balochistan		
KP		40%➔55%
Punjab		41%➔50%
Sindh		26%➔60%
Other areas		

Definitions/Details

- "Percent of children" is calculated as the number of those documented according to the survey whose primary caregiver can produce their vaccination card for inspection on interview at their household divided by the estimated size of the provincial age cohort according to projections of the latest census report.

DLI 10: Budget allocations for immunization are continuous, adequate and can be easily tracked within the government financial management information system	June 30, 2017 (Yr 2)June 30, 2018 (Yr 3)		District & Provincial budgets	Independent TPV contracted by Federal EPI cell and reviewed by the joint World Bank/GAVI Alliance/Gates Foundation team

	Baseline	Yr2	Yr3
Balochistan			
KP			
Punjab			
Sindh			

Definitions/Details

- Year 2: EPI budget for FY 2017-18 allocated on the current side using newly created specific cost centres/DDO codes.
- Year 3: EPI budget for FY 2018-19 include provision for operating costs as per the notified standards.

Appendix – 13
JOB DESCRIPTIONS

Federal EPI Cell

Statement Showing Posts, Basic Scale, Requisite Qualifications, Experience and Job Description

S.No	Name of Post	BPS	No. of Post	Qualification/Experience for Post	Job Description
1.	National Programme Manger	BS-20	01	• MBBS or equivalent qualification recognized by the PMDC. • Master of Science in Public Health (MSPH) or 2 years post graduate degree in public health from chartered university or equivalent qualification recognized by PMDC • 12 Years' experience in B-18 or 5 years in B-19 in public health programs preferably EPI. • At least 5 years exclusive experience on senior position in Public Health Program at central level • Computer skills.	• To assist Ministry of NHSR&C in management of Expanded Programme on Immunization. • To act as head/controlling officer of Expanded Programme on Immunization. • To supervise working of all components of Federal EPI • To plan, develop, implement and achieve targets of EPI fixed by the Government. • To coordinate with provincial health departments & programmes for implementation of EPI activities. • To liaison with international agencies and donor partners for implementation of multidimensional interventions of EPI. • To deal with other vertical health programmes for collaboration in EPI activities. • To exercise all administrative and financial powers delegated by the Ministry of NHSR&C Any other duty assigned by the Ministry of NHSR&C.
2.	Deputy National Programme Manger	BS-19	02	• MBBS or equivalent qualification recognized by the PMDC. • MSPH or 2 years post graduate degree in public health from chartered university or equivalent qualification recognized by PMDC • 12 Years' experience in BS 17 and above or 7 Years in B-18 in public health programs or equivalent experience in reputable private sector/ UN organization • Computer skills.	**Deputy NPM (Operation)** • To assist the NPM in over all management of Expanded Programme on Immunization and also:- o Planning and development matters o Implementation of EPI strategies. o Liaison with international agencies and donor partners. o Coordination provincial health and related departments o Administrative and financial matters o Evolve mechanism for improvement in programme management through pointing out bottlenecks • Any other duty assigned by the NPM. **Deputy NPM (Operation)** • To assist NPM in operational management of Expanded Programme on Immunization and also:- o Implementation of Operational Plan of EPI o Preparation of country demand for all components of EPI

					o Coordination with provinces for collection of demand for EPI activities. o Liaison with International agencies for operational activities of EPI. o Provision of logistic support to provincial health and related departments for operational activities of EPI o Evolve mechanism for improvement in operational management of EPI by pointing out bottlenecks; and Any other duty assigned by the NPM EPI.
3.	Deputy Director, Monitoring & Evaluation	18	01	• MBBS • MSPH or equivalent recognized qualification by PMDC • 5 Years' experience in BS-17 in public health programs. • Computer skills.	• To work under direct supervision of NPM EPI and assist him/her and Director Monitoring & Evaluation EPI by providing assistance in carrying out all activities mentioned in job description of Director Monitoring & Evaluation EPI as above. • Any other duty assigned by NPM EPI.
4.	Dy. Director (Operation)	18	01	• MBBS M.Phil in biosciences and Postgraduate qualification in Public Health such as MSPH recognized by PMDC or post graduate in biosciences. • 5 Years' experience in BS-17 in public health programs/vaccine management or senior level position in reputable organizations • Computer skills.	• To work under supervision of National and Deputy National Programme Manager (Operation) to assist him/her in carrying out the duties mentioned in his/her job description. • Any other duty assigned by NPM EPI.
5.	Deputy Director Administration	18	01	• Master degree with five Years' experience in BS-17 or Graduate with seven years' experience in BS-17 of working in the managerial/ administrative cadre of health institution/ program. • Computer skills	• To work under direct supervision of NPM EPI and assist him/her for:- o Supervision of Administration Department o Supervision of Accounts, Transport, Maintenance and Security Section. o Dealing with all administrative matters. o Supervision of maintenance of personal files/record of officers/officials of EPI. o Convening of program meetings, workshops and seminars. o Preparation of minutes/proceedings of meetings, workshops and seminars. o Logistic arrangements in convening National/ International meetings, workshops and seminars held by EPI in collaboration with donor partners. o Dealing with audit teams during the Program's audit with the assistance of

					staff of all concerned sections. Any other duty assigned by NPM EPI.
6.	Health Education Officer	18	01	• Master Degree in Journalism or Mass Media or equivalent qualification recognized by HEC. • 5 years' experience in relevant field • Computer skill.	• To work under supervision of NPM EPI and assist him to:- 1. Plan Health Education of general masses and public for motivation to EPI activities. 2. Conduct training of health personnel and paramedics. 3. Create health awareness amongst general public through all components of media. Any other duty assigned by NPM EPI.
7.	Deputy Director Trainings	18	01	• MBBS and Postgraduate qualification in Public Health such as MPH recognized by PMDC • 5 Years' experience in BS-17 in public health programs or senior level position in reputable organizations • Computer skills.	• To work under supervision of National and Deputy National Programme Manager (training) to assist him/her in carrying out the duties mentioned in his/her job description. • Any other duty assigned by NPM EPI.
8.	Assistant Director (Operations)	17	02	• MBBS, or equivalent degree recognized by PMDC. • 5 Years' experience in BS-17 in public health programmes or senior level position in reputable organizations. • Computer skills.	• To work under supervision of Deputy National Programme Manager and Dy. Director (Operation) to assist him/her in carrying out the duties mentioned in his/her job description. • Any other duty assigned by NPM/ Dy. NPM EPI.
9.	Software Engineer	17	01	• MSc/BS (CS) in software Engineering or Computer Science • Experience in Health Programme.	• To work under the supervision of Deputy Director Admin. • Install all new hardware, systems, and software for networks • Install, configure and maintain network services, equipment and devices, including windows. • Support administration of Windows. • Perform troubleshooting analysis workstations and associated systems. • Manage user accounts, permissions, email, anti-virus, anti-spam, AD,DNS . • Installing, configuring, and troubleshooting Internet connections. • Maintenance of the Computer Hardware. • Maintenance of the Network Cabling and network trouble shooting. • Maintenance of the plant automation infra-structure cabling and switches.
10.	Assistant Director Surveillance	17	02	• MBBS/MPH or equivalent qualification	• To work under supervision of Deputy Director Operation and assist him/her for carrying out assigned duties under his/her job description.

				recognized by PMDC. • Experience in disease Surveillance experience will be preferred. • Computer skills.	Any other duty assigned by NPM EPI.
11.	Assistant Director (Training)	17	01	• MBBS or equivalent qualification recognized by PMDC. • Extra qualification and experience in capacity building of workers will be preferred. • Computer skills.	• To work under supervision of Deputy Director Training and assist him for carrying out assigned duties under his/her job description. Any other duty assigned by NPM EPI.
12.	Administrative Officer	17	01	• Master Degree with 5 years' experience in administration as Admin Assistant OR Graduate with 7 years' experience in BS-16 in administration as Superintendent preferably in public health Programs. • Computer skills.	• To work under direct supervision of Deputy Director Admin and assist him in carrying out assigned duties pertaining to Administration Section of Programme. • Any other duty assigned by NPM EPI.
13.	Procurement & Logistics Officer	17	01	• Master. • Five years' experience in BS-16 relating to procurement and stores matters in health program /Institution or equivalent experience in reputable private sector/ UN organization • Computer skills.	• To work under direct supervision of Deputy Director Procurement and Logistic and assist in carrying out his/her assigned duties pertaining to procurement of logistics for EPI. Any other duty assigned by NPM EPI.
14.	Refrigeration Engineer	17	01	• B.E (Electrical/Mechanical) or equivalent qualification recognized by HEC. • Three years experience in the relevant field. • Computer Skill	• To work under supervision of Dy. Director Admin • Responsible for maintenance of EPI Cold Room refrigerators and Cold Chain Equipments. • Prepare periodic maintenance plan • Any other duty assigned by NPM-EPI
15.	Refrigeration Engineer	17	01	• B.E (Electrical /Mechanical) or equivalent qualification	• To work under supervision of Deputy Director Admin. • Responsible for maintenance of EPI Cold Rooms, Refrigerators and Cold Chain Equipment.

				recognized by HEC. • Three years' experience in the relevant field. • Computer skills.	• Prepare periodic maintenance plan. • Any other duty assigned by NPM EPI.
16.	Accounts Officer	17	01	• M.Com or MBA Finance with three years or B.com/ BBA with five years' experience in account matters in BPS-16 in health program /institution. • 3 years' experience in relevant field • Computer skill. • After shifting on re-current cost, the post will be upgraded to BS-18 along with the incumbents	• To work under direct supervision of Deputy Director Admin and assist him/ her in carrying out assigned duties pertaining to Accounts Section of programme and:- • Prepare budget, cash plan in consultation with the Program Management) • Deal with all budgetary matters including reconciliation, releases and expenditures • Examination of all financial claims before submission for approval by the Competent Authority. • Preparation of replies to audit observations. • Maintenance of Cash Books in accordance with the rules, regulations and procedures of the Government of Pakistan and Donor Agencies so that financial monitoring reports are easily prepared from the accounts record. • Liaison with AGPR for early settlement of claims and payments of bills. Any other duty assigned by NPM EPI.
17.	Assistant Administrative Officer	16	01	• Graduate with 5 years' experience in Administration as Assistant. • Preferably in Public Health Program. • Computer skills.	I. To work under toe supervision of Deputy Director Admin and Admin Officer. II. Maintenance of whole service record of all officers/ staff of EPI. III. Dealing with all Administrative matters of officers/ staff of EPI including recruitment, retirement, promotion, demotion disciplinary action and advances etc. IV. Preparation and submission of all information/ reports as and when required by higher authorities. V. Dealing of all matter relating to General Administration.
18.	Assistant Refrigeration Engineer	16	01	• Matric. • 03 years Diploma form Polytechnic Institute with 5 years' experience in maintenance and repairing of Refrigeration. • Computer skills.	I. To work under the direct supervision of Refrigeration Engineer. II. Keeping the cold stores/ refrigerators and cold chain equipment in working condition without any chance of faults. III. Supervision of Refrigeration staff. IV. All other duties assigned by higher officers from time to time.
19.	Assistant Account Officer	16	02	• Graduation. • With 05 years' experience as Senior Accountant. • Computer skill.	I. Providing all support to Accounts officer and working under the direct supervision of Accounts officer. II. Checking of Accounts book maintained by Accountant/ Cashier. III. Checking of all bills and submitting to AGPR, Islamabad with the approval of higher authorities. IV. Reconciliation of accounts with concerned authorities under the supervision of higher authorities.

					V. All other duties assigned by higher officers from time to time
20.	Stenographer/ P.A	16	01	• B.A with Shorthand speed of 100 words p.m. and typing speed 50 words p.m. • Computer skills.	I. Responsible for all tying work and taking dictation from higher officers. II. Maintenance of record of all visitors of NPM/Dy.NPM on other higher officer to whom he is attached. III. Maintenance of record of all incoming and outgoing calls of officer to whom he is attached. IV. Maintenance of record of all files/receipts/case received in the office and dispatched from the office. V. Maintenance of record of all suspense files/ cases.
21.	Sub Engineer(Civil)	14	01	• Metric with Science • 03 years Diploma form Polytechnic Institute with 05 years' Experience in Civil Work. • Computer skills.	I. To work under the supervision of Deputy Director Admin. II. Coordination with PWD regarding all buildings of EPI. III. Maintenance of civil work in all buildings of EPI. IV. Maintenance of record of buildings of EPI.
22.	Data Assistant	14	02	• Graduate in computer sciences or BCS with 05 years' experience in relevant field. • Computer skills.	I. Collection and computerization of all data received from various offices/ departments concerned with EPI. II. Preparation of returns /report as required by higher officer from time to time. III. All other duties assigned by higher officer from time to time.
23.	I.T Assistant	14	01	• BCs with 05 years' experience in relevant field. • Computer skills.	I. To assist Software Engineer in discharging of his all duties. II. Any other duties assigned to him by the higher officers form time to time.
24.	Statistical Assistant	14	02	• BSc /B.A (Statistics/Economics) • Experience in public health Program • Computer skill.	To work under the supervision of Statistical Investigator. Collection and compilation of Statistical data received from various relevant offices/ department regarding polio eradication. Maintenance of whole record regarding Immunization and Polio cases. Presentation of statistical data to higher authority on printed shape as well as on software programmes.
25.	Admin Assistant	14	02	• Graduate or UDC with 5 years' experience in dealing with administrative work • Computer skill.	I. To work under the supervision of Admin Officer and Assistant Admin Officer. II. Keeping the service record of all officers/ officials in safe custody being custodian of record. III. Opening of all new files and putting up to assistant admin officer/ admin officer with previous references if any. IV. Putting up of all files relating to service matters of all officers/ officials of EPI

					with previous references if any. V. Assisting the Admin Officer/Assistant Admin Officer in all cases of General Administration. VI. All other duties assigned from time to time by senior officers.
26.	Security Supervisor	14	01	• Retired JCO from Armed Forces with exemplary Character.	I. To work under the supervision of Deputy Director Admin. II. Responsible for all security matters of whole premises of EPI. III. Responsible for attendance of all Security Guards and discharging of proper duties by Security Guards. IV. Responsible for maintenance of record/ data of all visitors entering in EPI premises. V. Responsible for maintaining record/ data of all vehicles/ motorcycles entering in EPI premises.
27.	Supervisor Horticulture	14	01	• Metric Science with diploma certificate in Horticulture	I. To work under the supervision of Dy. Director Admin II. Supervision of all gardeners including punctuality of their attendance III. Up keeping of plants/flowers/gross in premises of EPI IV. Responsibility of new plantation in EPI premises
28.	Transport Assistant	14	01	• Graduate having 2 years relevant experience in the transport management of the public health programs. • Computer skill.	I. To work under the supervision of Deputy Director Admin. II. Keeping of proper record of all vehicles of EPI. III. Maintenance of movement register/ log books of all vehicles of EPI. IV. Managing of repair work of all vehicles of EPI with the prior approval of competent authority. V. Issuance of fuel to vehicles and maintenance of its record.
29.	Sub Engineer (Electric)	14	01	• Diploma Associate Engineering (Refrigeration) • Computer Skills.	I. To work under the supervision of Deputy Director Admin or other officer. II. Overseeing the electrical system / appliances installed in EPI premises. III. Supervision of subordinate staff concerning with electric system/ appliances. IV. All other relevant duties assigned from time to time.
30.	Communicati on Assistant	14	01	• BCS with 05 years' experience in relevant field.	I. To work under the supervision Deputy Director Admin or other Officers.

				• Computer skills.	II. Responsible of all inward and outward communication regarding EPI through electronic as well as manual system. III. Maintenance of all communications received in EPI and sent from EPI. IV. All other relevant duties assigned from time to time.
31.	Cashier	14	01	• B.Com or UDC with 5 years' experience in dealing and cash handling. • Computer skills.	I. To work under the supervision of Account Officer. II. Preparation of all bills of payments to be received from AGPR, Islamabad and maintenance of record thereto. III. Collection of all cheques from AGPR, Islamabad and disbursement to concerned persons.
32.	Computer Operator	12	02	• Intermediate with Diploma in Computer Science with five years' experience as computer operator. • Computer skills.	I. All typing work of office along with all other duties assigned from time to time by higher authorities.
33.	Accountant	12	01	• B.Com or UDC with 5 years' experience in dealing with cash matters. • Computer skills.	I. Preparation of all accounts of EPI under the supervision of Assistant Account Officer and Account Officer. II. Providing full support to AAO/AO and DDO for reconciliation of accounts of EPI. With concerned authorities including all other duties assigned form time to time.
34.	Receptionist	12	01	• BA/BSC • 3 Years' Experience and fluent in English • Computer skills.	I. Providing all guidance/ authorized information to visitors of EPI. I.Attendance of phone call regarding EPI. i. Maintenance of record of visitors of EPI. II.All other duties assigned from time to time.
35.	Assistant Supervisor Vaccination	11	03	• Metric with Science • Female would be preferable	I. To vaccinate children/ pregnant ladies in EPI Center & catchment population fixed. II. To compile vaccine date. III. To evaluate vaccination coverage against EPI target disease. IV. Checking of EPI centre/mobile vaccinator units. V. Random checking of vaccine vials for their efficacy VI. To facilitate the printing of health education material awareness of public. VII. Supervisor of Vaccination staff all duties assigned from time to time.

36.	Storekeeper	11	02	• Graduate and 5 years' experience in store keeping in public health programme. • Computer skills.	I. Completely responsible for upkeeping of store items of EPI in safe custody. II. Maintenance of record of store items under the supervision of ASO. III. All other relevant duties assigned from time to time.
37.	Telephone Operator	07	01	• Matric • Skilled in telephone operator work and • 02 years practical experience of telephone operator. • Computer skills.	I. All duties relating to telephone exchange and repair of internal telephone lines.
38.	Drivers	05	10	• Middle with 5 years' experience. • Must have valid public service • LTV License Holder.	Driving of vehicles/ motorcycles on the order of officer Incharge.
39..	Daftri	02	01	• Middle • Persons office experience would be preferred.	Keeping the office record in good condition and all other duties assigned by the officer in-charge from time to time.
40.	NaibQasid	02	10	• Middle • Experience in office work will be preferable	Carrying of files/ letters from office to office and all other duties assigned by officer in-charge.
41.	Cleaners	02	04	• Fit for Cleanliness work.	Cleaning of premises of EPI and working under the supervision of Deputy Director Admin or other officers.
42.	Gardner	02	01	• Should know gardening	Watering, grassing and plantation in the premises of EPI and all other duties assigned by Supervisor Horticulture or other senior officers.
43.	Labourer	02	04	• Healthy & Fit for manual work.	All duties on the orders of officer Incharge.
44.	Helper	02	01	• Healthy & Fit for manual work	All duties on the orders of officer Incharge.

GILGIT BALTISTAN (GB)

STATEMENT SHOWING POSTS, BASIC SCALE, REQUISITE QUALIFICATIONS, EXPERIENCE AND JOB DESCRIPTION

S.N	Name of Post	No. of Posts	Qualification/Experience for Post	Job Description
1	Director EPI (BPS-19)	1	▪ MBBS or equivalent qualification recognized by the PMDC ▪ MPH/DPH or equivalent qualification recognized by the PMDC. ▪ 12 years experience in BPS-17 or 05 year in BPS-18 in Public Health Program or equivalent experience.	▪ To assist the Secretary Health and overall management of Expanded Programme on Immunization. ▪ Planning and development matters. Implementation of EPI strategies. ▪ Liaison with international agencies and donor partners Coordination provincial health and related departments. ▪ Administrative and financial matters. Evolve mechanism for improvement in programme management. ▪ Rough pointing out bottlenecks. Any other duty assigned by the Secretary Health.
2	M&E Officer (BS-17)	1	▪ MBBS or equivalent qualification recognized by the PMDC OR ▪ Master's Degree preferably in statistics with at least 3 Years' experience in public or private health sector in the relevant field. ▪ Computer Skills.	▪ Plan and implement M&E activities ▪ Develop all kind of tools for M&E ▪ Coordinate with provinces and districts ▪ Compilation of data and its distribution to the concerned quarters ▪ Feedback to the districts on data analysis ▪ To work under direct supervision Deputy Director
3	District EPI Coordinator (BS-17)	10	▪ MBBS or equivalent qualification recognized by PMDC. OR ▪ Master's Degree preferably in Statistics with at least 3 years experience in preventive health programs preferably in EPI ▪ Computer skills	▪ To work under supervision of Provincial and Districts Managers. ▪ She/he will assist them for carrying out assigned duties under his/her job description and will also take part in other programme related activities at field level as and when required by the Provincial Manager ▪ He/She will act as a representative of Director EPI in their assigned districts
4	Surveillance Coordinator	1	▪ MBBS or equivalent qualification recognized by	▪ Plan and implement Surveillance activities

	(BS-17)		PMDC or ▪ M.Sc. Statistics, MPH degree holders will be given preference. ▪ 3Years experience in relevant field. ▪ Computer Skills.	▪ Develop all kind of tools for Surveillance ▪ Coordinate with provinces and districts ▪ Compilation of data and its distribution to the concerned quarters ▪ Feedback to the districts on data analysis ▪ To work under direct supervision of Director EPI
5	Training Coordinator /Provincial Technical Officer (BPS-17)	1	▪ MBBS degree recognized by PMDC OR ▪ Master's Degree with at least 5 years experience as master trainer/Technical person in public health preventive programs preferably in EPI	▪ To work under supervision of Director EPI and assist him carrying out the assigned duties under his job description. ▪ Any other duty assigned by the Director EPI.
6	Health Education Officer (BPS-17)	1	▪ Master's Degree in Social Sciences ▪ 05 years experience in Public or Private health sector in preventive health care program ▪ Computer skills	To work under direct supervision of Director EPI to:- • Plan Health Education of general masses and public for motivation to EPI activities. • Conduct training of health personnel and paramedics. • Create health awareness amongst general public through all components of media. • Any other duty assigned by Provincial Manager EPI.
7	Statistical Officer (BS-17)	1	▪ M.Sc. Statistics ▪ At least three years experience in public health programs especially in EPI. ▪ Experience in data collection, analysis and compilation ▪ Compulsory Computer skills	▪ Under direct supervision of Director EPI. ▪ He/She will assist M&E section in compilation of reports of routine immunization, Vaccine Preventable Surveillance, Bacterial Meningitis, Rotavirus and AEFI surveillance. ▪ He will also assist his Supervisors and get in touch with the district EPI Coordinator for timely collection and compilation of data relating to Routine immunization and Surveillance.
8	Accounts Officer (BS-17)	1	▪ M.Com or MBA Finance with three years or B.com/ BBA with five years' experience in account matters preferably in EPI. ▪ Computer skills .	▪ To work under direct supervision of Provincial Manager and assist him/ her in carrying out assigned duties pertaining to Accounts Section of programme. ▪ Prepare budget, cash plan in consultation with the Program

				Management) ▪ Deal with all budgetary matters including reconciliation, releases and expenditures ▪ Examination of all financial claims before submission for approval by the Competent Authority. ▪ Preparation of replies to audit observations. ▪ Maintenance of Cash Books in accordance with the rules, regulations and procedures of the Government of Pakistan and Donor Agencies so that financial monitoring reports are easily prepared from the accounts record. ▪ Liaison with AGPR for early settlement of claims and payments of bills. ▪ Any other duty assigned by Provincial Manager EPI.
9	Store Officer (BS-17)	1	▪ Masters Degree or Graduate with Five years' experience of handling stores and procurement services of the health institution or equivalent experience in reputable private sector/ UN organization ▪ Compulsory Computer skills	▪ To work under direct supervision of Director EPI to assist in carrying out his/her assigned duties pertaining to stores of EPI as under. ▪ Update on stock position of vaccines and logistics needed by the Program. ▪ Ensure proper vaccine management and avoid wastage at all levels through close coordination with In-Charges of District Stores. ▪ Responsible for all matters related to the Store and maintain liaison with his/her District counterparts. ▪ Ensure timely supplies of vaccines and logistics in accordance with the agreed quarterly plan. ▪ Assist district stores in getting certification. ▪ Develop work plan for the districts. ▪ Keep in touch with the Provincial Technical Officer and inform him of the availability of storage space for vaccines and other logistics. ▪ Any other duty assigned by Provincial Manager EPI

10	Administrative Officer (BS-17)	1	▪ Master degree with five years' experience or Graduate with seven years' experience of working in the managerial/ administrative cadre of health institution/ programme. ▪ Computer skills will be preferred	▪ To work under direct supervision of Director EPI and assist him for. ▪ Supervision of Administration Department ▪ Supervision of Accounts, Transport, Maintenance and Security Section. ▪ Dealing with all administrative matters. ▪ Supervision of maintenance of personal files/record of officers/officials of EPI. ▪ Convening of program meetings, workshops and seminars. ▪ Preparation of minutes/proceedings of meetings, workshops and seminars. ▪ Dealing with audit teams during the Program's audit with the assistance of staff of all concerned sections. ▪ Any other duty assigned by Provincial Manager EPI.
11	Media Production Specialist (BS-17)	1	▪ Master degree in Journalism or Mass Media or equivalent qualification recognized by HEC ▪ 3 years' experience in relevant field ▪ Computer skill preferable.	▪ To work under supervision Director EPI and assist him to. ▪ Plans for preparation of media programmes and print material on EPI activities. ▪ Writing of small stories for public in the press. ▪ Preparation of jingle on EPI. ▪ Health Education of general masses and public for motivation to EPI activities. ▪ Conduct training of health personnel and paramedics. ▪ Training to medial on EPI. ▪ Any other duty assigned by Provincial Manager EPI.
12	Transport Superintendent (BPS-16)	1	▪ Graduate with three years' experience as Transport Supervisor	▪ Assist Administrative Officer in detainment of vehicles within and outstation movements. ▪ Will be responsible for repair and maintenance of all kind of vehicles ▪ Will maintain log books, movement registers and Pol of all vehicles and motorbikes ▪ Any other transport related activity assigned by director EPI
13	Data Managers (BS-14)	10	▪ Graduate ▪ Diploma (Computer) or equivalent qualification	▪ He/she will assist Deputy Directors M&E, Surveillance and Administrative Officer.

			recognized by HEC. ▪ Three years' experience in maintenance of office data.	▪ She/he will be responsible for compilation of reports of immunization performance, BMS, Rotavirus and AEFI. ▪ He will also assist his Supervisors and get in touch with the provinces for timely collection and compilation of data relating to Vaccine Preventable Diseases (VPD).
14	Store Keeper (BS-11)	1	▪ Graduate with 3 years working experience in stores preferably in EPI or health sector	▪ Store Keeper will assist the Store Officer in obtaining clearance and transportation of vaccine and logistics from the ports of entry. ▪ He will keep the Store Officer and the Assistant Store Officer informed of the availability of space in the Stores for vaccines and other logistics. ▪ He/she will also be responsible for all matters concerning the Store and the supply of vaccines and other logistics to the Provinces/Areas.
15	UDC/Cashier (BS-9)	1	▪ Intermediate with three years' experience in relevant field	▪ He/she will maintain books of accounts of EPI and prepare financial monitoring reports, including budgets, reconciliation of expenditure and submit the same to Ministry of Health and Accountant General (AGP) with the approval of the Accounts Officer and Provincial Program Manager. ▪ He will maintain and ensure financial discipline.
16	Vaccinators (BS-9)	105	▪ He/she must have a minimum of 10 years of schooling, be more than 18 years of age. ▪ Nursing Assistant Diploma holders will be preferred. ▪ He/She must be permanent residents of the areas of posting from same union council.	▪ Vaccinators will be recruited with the target of having at least two vaccinators for every union council. ▪ Newly recruited vaccinators will undergo for on job training for six months before administration of EPI injections, ▪ He/she will work under direct supervision of District EPI coordinator and DHO concerned.
17	Driver (BS-5)	6	▪ Middle pass holding required driving license. Three year driving experience	▪ Will work under supervision of Transport Superintendent
18	Generator Operator	2	▪ Primary pass	▪ To work under the supervision

	(BPS-03)		▪ Certified electrician	of Director EPI. ▪ Responsible for maintenance of electrical equipments. ▪ Any other duty assigned by the Director EPI.
19	Packer (BPS-03)	2	▪ Primary pass	▪ To work under the supervision of Director EPI. ▪ Responsible for all kind packing. ▪ Any other duty assigned by the Director EPI.
20	Helper (BPS-3)	2	▪ Healthy & Fit for manual work.	▪ All duties on the orders of ▪ officer Incharge
21	Chowkidar (BPS-3)	2	▪ Middle Pass and local incumbent	▪ All duties on the orders of officer Incharge

Azad Jammu & Kashmir (AJ&K)

Statement Showing Posts, Basic Scale, Requisite Qualifications, Experience and Job Description

S.N	Name of Post	No. of Posts	Qualification/Experience for Post	Job Description
1.	Deputy Director Monitoring & Evaluation (BS-18)	01	• MBBS • MSPH or equivalent recognized qualification by PMDC • 5 Years' experience in BS-17 in public health programs. Computer skills.	Head of the M&E Department Plan and implement M&E activities Develop all kind of tools for M&E Coordinate with provinces and districts Compilation of data and its distribution to the concerned quarters Feedback to the districts on data analysis To work under direct supervision of Provincial Manager EPI
2.	Assistant Director M&E (BS-17)	08	MBBS or equivalent degree recognized by PMDC or Experience in monitoring and evaluation of health programmes will be preferred.	Plan and implement M&E activities Develop all kind of tools for M&E Coordinate with provinces and districts Compilation of data and its distribution to the concerned quarters Feedback to the districts on data analysis To work under direct supervision Deputy Director
3.	EPI Coordinator/ Epidemiologist (BS-17)	12	MBBS or equivalent qualification recognized by PMDC. Experience in preventive programs will be preferred.	To work under supervision of Provincial and Districts Managers. She/he will assist them for carrying out assigned duties under his/her job description and will also take part in other programme related activities at field level as and when required by the Provincial Manager
4.	Provincial Superintendent Vaccination. (BS-17)	02	Bachelor or intermediate with 10 years working experience in EPI. He/she will be promoted on performance basis from already working District Superintendent	He/she will provide technical assistance and guidance to the District EPI Cells in order to train them to establish proper supervision, monitoring and

			Vaccination	reporting system. He/she will also train district staff for planning vaccination sessions at union council level in accordance with Reach Every District approach (RED). She/he will work under the direct supervision of the Provincial Manager.
5.	District Superintendent Vaccination (BS-16)	5	Degree either Bachelor or intermediate with 5-10 years working experience as Tehsil/Taluka Superintendent Vaccination or according to the needs/requirements of the post. He/she will be promoted on performance basis from already working Taluka Superintendent Vaccination	He/she will assist Distinct Officer Health in planning vaccination sessions at union council level and assist his supervisors in compilation of reports of vaccination performance and disease surveillance for onward submission to provincial and federal levels. He/she will also monitor performance of his supervisors and field staff on up raising the immunization coverage more than 90% at every union council level and even for other field related activities as and when required basis.
6.	Vaccinators (BS-6)	100	He/she must have a minimum of 10 years of schooling, be more than 18 years of age. All recruited vaccinators must be permanent residents of the areas of posting from same union council.	Vaccinators will be recruited with the target of having at least two vaccinators for every union council. Newly recruited vaccinators will undergo for on job training for six months before administration of EPI injections,
7.	Dy. Director (Surveillance) (BS-18)	01	M.Sc. Statistics MPH or equivalent qualification recognized by PMDC 5 years' experience in BPS-17 in public health Programme or equivalent experience in reputable private sector/ UN organization Experience in disease Surveillance will be preferred.	Head of the Surveillance Department Plan and implement surveillance activities Develop all kind of tools for surveillance Coordinate with provinces and districts Compilation of data and its distribution to the concerned quarters Feedback to the districts on data analysis Any other duty assigned by Provincial Managers EPI.
8.	Assistant Director Surveillance (BS-17)	10	M.Sc. Statistics or Economics MPH or equivalent recognized qualification by PMDC 5 Years' experience in BS-17 in	Plan and implement Surveillance activities Develop all kind of tools for Surveillance

			public health programmes. Computer Skills will be Preferred.	Coordinate with provinces and districts Compilation of data and its distribution to the concerned quarters Feedback to the districts on data analysis To work under direct supervision Deputy Director
9.	Dy. Director (Training) (BS-18)	01	M.Sc. Statistics MPH or equivalent qualification recognized by PMDC 7years' experience in BPS-17 in public health Programme or equivalent experience in reputable private sector/ UN organization	Head of the Training Department Plan and implement capacity building activities in the province Coordinate with provinces and districts for need assessment Any other duty assigned by Provincial Manager EPI.
10.	Assistant Director (Training) (BS-17)	11	MBBS or equivalent qualification in Social Sciences recognized by PMDC. Extra qualification and experience in capacity building of workers will be preferred.	To work under supervision of Deputy Director Training and assist him for carrying out assigned duties under his/her job description. Any other duty assigned by Deputy director.
11.	Administrative Officer (BS-17)	01	Master degree with five years' experience in BS-17 or Graduate with seven years' experience in BS-17 of working in the managerial/ administrative cadre of health institution/ programme. Computer skills will be preferred	To work under direct supervision of Federal and Provincial Managers EPI and assist them for:- Supervision of Administration Department Supervision of Accounts, Transport, Maintenance and Security Section. Dealing with all administrative matters. Supervision of maintenance of personal files/record of officers/officials of EPI. Convening of program meetings, workshops and seminars. Preparation of minutes/proceedings of meetings, workshops and seminars. Dealing with audit teams during the Program's audit with the assistance of staff of all concerned sections. Any other duty assigned by Provincial Manager EPI.
12.	Assistant Administrative Officer (BS-16)	02	Graduate. Three years' experience as	To work under supervision of Administrative Officer to assist

			Assistant of any Ministry	him/her in administrative and account matters of the department.
13.	Data Managers (BS-14)	12	Diploma (Computer) or equivalent qualification recognized by HEC. Three years' experience in maintenance of office data.	He/she will assist Deputy Directors M&E, Surveillance and Administrative Officer. She/he will be responsible for compilation of reports of immunization performance, BMS, Rotavirus and AEFI. He will also assist his Supervisors and get in touch with the provinces for timely collection and compilation of data relating to Vaccine Preventable Diseases (VPD). He/she will be promoted on performance basis among already working as post of Statistical Assistant or its equivalent.
15.	Transport Supervisor (BS-11)	02	Intermediate. Three years' experience in vehicle detainment	Will assist Transport Superintendent in clearance of vehicle documents, detainment and repair and maintenance of vehicles
16.	Mechanics (BS-11)	02	Intermediate with Diploma in Motor Mechanics. Three years' experience preferable	Will assist Transport Superintendent in repair and maintenance of vehicles
17.	Driver (BS-5)	10	Middle pass holding required driving license. Three year driving experience	Will work under supervision of Transport Superintendent
20.	Accounts Officer (BS-17)	01	M.Com or MBA Finance with three years or B.com/ BBA with five years' experience in account matters in BPS-16 in health programme /institution. 3 years' experience in relevant field Computer skills preferable.	To work under direct supervision of Provincial Manager and assist him/ her in carrying out assigned duties pertaining to Accounts Section of programme and:- Prepare budget, cash plan in consultation with the Program Management) Deal with all budgetary matters including reconciliation, releases and expenditures Examination of all financial claims before submission for approval by the Competent Authority. Preparation of replies to audit observations. Maintenance of Cash Books in accordance with the rules, regulations and procedures of the Government of Pakistan

				and Donor Agencies so that financial monitoring reports are easily prepared from the accounts record. Liaison with AGPR for early settlement of claims and payments of bills. Any other duty assigned by Provincial Manager EPI.
21.	Assistant Accounts Officer (BS-16)	03	Graduate or Intermediate with three years' experience in handling accounts of public and private departments	He/she will assist account officer in maintaining the books of accounts of EPI and prepare financial monitoring reports, including budgets, reconciliation of expenditure and submit the same to the Department of Health and Accountant General of Punjab (AGP) with the approval of the Accounts Officer (DDO) and Project Director. He will maintain and ensure financial discipline.
22.	Cashier (BS-14)	01	Intermediate with three years' experience in relevant field	He/she will maintain books of accounts of EPI and prepare financial monitoring reports, including budgets, reconciliation of expenditure and submit the same to Ministry of Health and Accountant General of KPK (AGP) with the approval of the Accounts Officer (DDO) and Provincial Program Manager. He will maintain and ensure financial discipline.
23.	Procurement Officer (BS-17)	01	Master degree with five years' experience in BS-17 or Graduate with seven years' experience in BS-17 of working in the managerial, administrative, purchase and procurement cadre health institution/ programme. Experience in purchase and procurement of health institution/ programme or equivalent experience in reputable private sector/ UN organization Computer skills will be preferred	To work under direct supervision of Federal and Provincial Managers EPI and assist him for:- Supervision of purchase/procurement and store sections Update regarding status of stock of vaccines and logistics needed by the Program Preparation of plan for purchase of procurement of all logistics for EPI. Distribution plan of EPI logistic components to provinces and other health departments. Supervision of maintenance of

				purchase/ procurement, storage and distribution record including report and returns. Liaison with provincial health departments for their logistic needs. Any other duty assigned by Provincial Manager EPI.
24.	Store Officer (BS-17)	01	Graduate. Five years' experience of handling stores and procurement services of the health institution in BS-16 or equivalent experience in reputable private sector/ UN organization Computer skills preferable	To work under direct supervision of Federal and Provincial Managers to assist in carrying out his/her assigned duties pertaining to stores of EPI as under:- Update on stock position of vaccines and logistics needed by the Program. Ensure proper vaccine management and avoid wastage at all levels through close coordination with In-Charges of Provincial and District Stores. Responsible for all matters related to the Store and maintain liaison with his/her Provincial and District counterparts. Ensure timely supplies of vaccines and logistics in accordance with the agreed quarterly plan. Assist provincial stores in getting certification. Develop work plan for the provinces/areas and districts. Keep in touch with the Manager, Procurement and Logistics, and inform him of the availability of storage space for vaccines and other logistics. Any other duty assigned by Provincial Manager EPI
25.	Assistant Store Officer (BS-16)	01	He/she have a degree either bachelor or intermediate with 5 years working experience as store keeper. He/she will be promoted on performance basis from already working store keepers.	The Assistant Store Officer will assist the Store Officer in meeting WHO requirements for certification of the store. He will be responsible to computerize all store related data according to the VSLIM software developed for this purpose and suggest improvements and amendments if required. He/she will also be

				responsible for every store related matter for all provinces/areas i.e. ensure timely supplies of vaccines and logistics in accordance with the agreed plan.
26.	Store Keeper (BS-11)	11	He/she have a degree either intermediate or 10 years schooling with 5 years working experience stores..	Store Keeper will assist the Store Officer and the Assistant Store Officer in obtaining clearance and transportation of vaccine and logistics from the ports of entry. He will keep the Store Officer and the Assistant Store Officer informed of the availability of space in the Stores for vaccines and other logistics. He/she will also be responsible for all matters concerning the Store and the supply of vaccines and other logistics to the Provinces/Areas.
27.	Health Education Officer (BS-17)	01	Master Degree in Journalism or Mass Media Communication or equivalent qualification recognized by HEC. 5 years' experience in relevant field Computer skills are preferable.	To work under supervision of Federal and Provincial Managers EPI and assist him to:- Plans Health Education of general masses and public for motivation to EPI activities. Conduct training of health personnel and paramedics. Create health awareness amongst general public through all components of media. Any other duty assigned by Provincial Manager EPI.
29	Statistical Officer (BS-17)	01	M.Sc. Statistics or Economics MPH or equivalent recognized by PMDC. Experience in public health programmes and computer skills are preferable.	He will assist M&E section in compilation of reports of routine immunization, Vaccine Preventable Surveillance, Bacterial Meningitis, Rotavirus and AEFI surveillance. He will also assist his Supervisors and get in touch with the provinces for timely collection and compilation of data relating to Routine immunization and Surveillance.
30	Statistical Assistant (BS-11)	01	Degree either Bachelor or intermediate with working experience on data collection preferable	He will assist Statistical Officer in follow-up with provinces for timely receipt and compiling of data pertaining to routine immunization.

Federally Administered Tribal Areas (FATA)

Statement Showing Posts, Basic Scale, Requisite Qualifications, Experience and Job Description

S.N	Name of Post	No. of Posts	Qualification/Experience for Post	Job Description
1.	Deputy Director Monitoring & Evaluation (BS-18)	01	• MBBS • MSPH or equivalent recognized qualification by PMDC • 5 Years' experience in BS-17 in public health programs. Computer skills.	Head of the M&E Department Plan and implement M&E activities Develop all kind of tools for M&E Coordinate with provinces and districts Compilation of data and its distribution to the concerned quarters Feedback to the districts on data analysis To work under direct supervision of Provincial Manager EPI
2.	Assistant Director M&E (BS-17)	08	MBBS or equivalent degree recognized by PMDC or Experience in monitoring and evaluation of health programmes will be preferred..	Plan and implement M&E activities Develop all kind of tools for M&E Coordinate with provinces and districts Compilation of data and its distribution to the concerned quarters Feedback to the districts on data analysis To work under direct supervision Deputy Director
3.	EPI Coordinator/ Epidemiologist (BS-17)	45	MBBS or equivalent qualification recognized by PMDC. Experience in preventive programs will be preferred.	To work under supervision of Provincial and Districts Managers. She/he will assist them for carrying outassigned duties under his/her job description and will also take part in other programme related activities at field level as and when required by the Provincial Manager
4.	Provincial Superintendent Vaccination. (BS-17)	08	Bachelor or intermediate with 10 years working experience in EPI. He/she will be promoted on performance basis from already working District Superintendent Vaccination	He/she will provide technical assistance and guidance to the District EPI Cells in order to train them to establish proper supervision, monitoring and reporting system. He/she will also train

				district staff for planning vaccination sessions at union council level in accordance with Reach Every District approach (RED). She/he will work under the direct supervision of the Provincial Manager.
5.	District Superintendent Vaccination (BS-16)	15	Degree either Bachelor or intermediate with 5-10 years working experience as Tehsil/Taluka Superintendent Vaccination or according to the needs/requirements of the post. He/she will be promoted on performance basis from already working Taluka Superintendent Vaccination	He/she will assist Distinct Officer Health in planning vaccination sessions at union council level and assist his supervisors in compilation of reports of vaccination performance and disease surveillance for onward submission to provincial and federal levels. He/she will also monitor performance of his supervisors and field staff on up raising the immunization coverage more than 90% at every union council level and even for other field related activities as and when required basis.
6.	Vaccinators (BS-6)	100	He/she must have a minimum of 10 years of schooling, be more than 18 years of age. All recruited vaccinators must be permanent residents of the areas of posting from same union council.	Vaccinators will be recruited with the target of having at least two vaccinators for every union council. Newly recruited vaccinators will undergo for on job training for six months before administration of EPI injections,
7.	Dy. Director (Surveillance) (BS-18)	01	M.Sc. Statistics MPH or equivalent qualification recognized by PMDC 5 years' experience in BPS-17 in public health Programme or equivalent experience in reputable private sector/ UN organization Experience in disease Surveillance will be preferred.	Head of the Surveillance Department Plan and implement surveillance activities Develop all kind of tools for surveillance Coordinate with provinces and districts Compilation of data and its distribution to the concerned quarters Feedback to the districts on data analysis Any other duty assigned by Provincial Managers EPI.
8.	Assistant Director Surveillance (BS-17)	08	M.Sc. Statistics or Economics MPH or equivalent recognized qualification by PMDC	Plan and implement Surveillance activities Develop all kind of tools for

			5 Years' experience in BS-17 in public health programmes. Computer Skills will be Preferred.	Surveillance Coordinate with provinces and districts Compilation of data and its distribution to the concerned quarters Feedback to the districts on data analysis To work under direct supervision Deputy Director
9.	Dy. Director (Training) (BS-18)	01	M.Sc. Statistics MPH or equivalent qualification recognized by PMDC 7years' experience in BPS-17 in public health Programme or equivalent experience in reputable private sector/ UN organization	Head of the Training Department Plan and implement capacity building activities in the province Coordinate with provinces and districts for need assessment Any other duty assigned by Provincial Manager EPI.
10.	Assistant Director (Training) (BS-17)	08	MBBS or equivalent qualification in Social Sciences recognized by PMDC. Extra qualification and experience in capacity building of workers will be preferred.	To work under supervision of Deputy Director Training and assist him for carrying out assigned duties under his/her job description. Any other duty assigned by Deputy director.
11.	Administrative Officer (BS-17)	01	Master degree with five years' experience in BS-17 or Graduate with seven years' experience in BS-17 of working in the managerial/ administrative cadre of health institution/ programme. Computer skills will be preferred	To work under direct supervision of Federal and Provincial Managers EPI and assist them for:- Supervision of Administration Department Supervision of Accounts, Transport, Maintenance and Security Section. Dealing with all administrative matters. Supervision of maintenance of personal files/record of officers/officials of EPI. Convening of program meetings, workshops and seminars. Preparation of minutes/proceedings of meetings, workshops and seminars. Dealing with audit teams during the Program's audit with the assistance of staff of all concerned sections. Any other duty assigned by Provincial Manager EPI.

12.	Assistant Administrative Officer (BS-16)	02	Graduate. Three years' experience as Assistant of any Ministry	To work under supervision of Administrative Officer to assist him/her in administrative and account matters of the department.
13.	Data Managers (BS-14)	18	Diploma (Computer) or equivalent qualification recognized by HEC. Three years' experience in maintenance of office data.	He/she will assist Deputy Directors M&E, Surveillance and Administrative Officer. She/he will be responsible for compilation of reports of immunization performance, BMS, Rotavirus and AEFI. He will also assist his Supervisors and get in touch with the provinces for timely collection and compilation of data relating to Vaccine Preventable Diseases (VPD). He/she will be promoted on performance basis among already working as post of Statistical Assistant or its equivalent.
14.	Transport Superintendent (BS-16)	01	Graduate or Intermediate. Three years' experience as Transport Supervisor	Assist Administrative officer in detainment of vehicles within and outstation movements. He/she will also assist administrative Officer in repair and maintenance of vehicles
15.	Transport Supervisor (BS-11)	01	Intermediate. Three years' experience in vehicle detainment	Will assist Transport Superintendent in clearance of vehicle documents, detainment and repair and maintenance of vehicles
16.	Mechanics (BS-11)	04	Intermediate with Diploma in Motor Mechanics. Three years' experience preferable	Will assist Transport Superintendent in repair and maintenance of vehicles
17.	Driver (BS-5)	10	Middle pass holding required driving license. Three year driving experience	Will work under supervision of Transport Superintendent
18.	Sub-Engineer (Civil) (BS-16)	01	Diploma (Civil) or equivalent qualification recognized by HEC. Three years' experience in civil maintenance of office buildings.	To work under supervision of Administrative Officer. Responsible for civil maintenance of EPI office buildings and warehouses of EPI. Prepare periodic maintenance plan of the buildings. Any other duty assigned by Provincial Manager EPI.
19.	Supervisor Horticulture (BS-14)	01	10 years schooling with three year experience in plants and flowers	He/she will assist Sub-Engineer Civil in beautification office building

20.	Accounts Officer (BS-17)	01	M.Com or MBA Finance with three years or B.com/ BBA with five years' experience in account matters in BPS-16 in health programme /institution. 3 years' experience in relevant field Computer skills preferable.	To work under direct supervision of Provincial Manager and assist him/ her in carrying out assigned duties pertaining to Accounts Section of programme and:- Prepare budget, cash plan in consultation with the Program Management) Deal with all budgetary matters including reconciliation, releases and expenditures Examination of all financial claims before submission for approval by the Competent Authority. Preparation of replies to audit observations. Maintenance of Cash Books in accordance with the rules, regulations and procedures of the Government of Pakistan and Donor Agencies so that financial monitoring reports are easily prepared from the accounts record. Liaison with AGPR for early settlement of claims and payments of bills. Any other duty assigned by Provincial Manager EPI.
21.	Assistant Accounts Officer (BS-16)	02	Graduate or Intermediate with three years' experience in handling accounts of public and private departments	He/she will assist account officer in maintaining the books of accounts of EPI and prepare financial monitoring reports, including budgets, reconciliation of expenditure and submit the same to the Department of Health and Accountant General of Punjab (AGP) with the approval of the Accounts Officer (DDO) and Project Director. He will maintain and ensure financial discipline.
22.	Cashier (BS-14)	01	Intermediate with three years' experience in relevant field	He/she will maintain books of accounts of EPI and prepare financial monitoring

				reports, including budgets, reconciliation of expenditure and submit the same to Ministry of Health and Accountant General of KPK (AGP) with the approval of the Accounts Officer (DDO) and Provincial Program Manager. He will maintain and ensure financial discipline.
23.	Procurement Officer (BS-17)	01	Master degree with five years' experience in BS-17 or Graduate with seven years' experience in BS-17 of working in the managerial, administrative, purchase and procurement cadre health institution/ programme. Experience in purchase and procurement of health institution/ programme or equivalent experience in reputable private sector/ UN organization Computer skills will be preferred	To work under direct supervision of Federal and Provincial Managers EPI and assist him for:- Supervision of purchase/procurement and store sections Update regarding status of stock of vaccines and logistics needed by the Program Preparation of plan for purchase of procurement of all logistics for EPI. Distribution plan of EPI logistic components to provinces and other health departments. Supervision of maintenance of purchase/ procurement, storage and distribution record including report and returns. Liaison with provincial health departments for their logistic needs. Any other duty assigned by Provincial Manager EPI.
24.	Store Officer (BS-17)	01	Graduate. Five years' experience of handling stores and procurement services of the health institution in BS-16 or equivalent experience in reputable private sector/ UN organization Computer skills preferable	To work under direct supervision of Federal and Provincial Managers to assist in carrying out his/her assigned duties pertaining to stores of EPI as under:- Update on stock position of vaccines and logistics needed by the Program. Ensure proper vaccine management and avoid wastage at all levels through close coordination with In-Charges of Provincial and District Stores.

				Responsible for all matters related to the Store and maintain liaison with his/her Provincial and District counterparts. Ensure timely supplies of vaccines and logistics in accordance with the agreed quarterly plan. Assist provincial stores in getting certification. Develop work plan for the provinces/areas and districts. Keep in touch with the Manager, Procurement and Logistics, and inform him of the availability of storage space for vaccines and other logistics. Any other duty assigned by Provincial Manager EPI
25.	Assistant Store Officer (BS-16)		He/she have a degree either bachelor or intermediate with 5 years working experience as store keeper. He/she will be promoted on performance basis from already working store keepers.	The Assistant Store Officer will assist the Store Officer in meeting WHO requirements for certification of the store. He will be responsible to computerize all store related data according to the VSLIM software developed for this purpose and suggest improvements and amendments if required. He/she will also be responsible for every store related matter for all provinces/areas i.e. ensure timely supplies of vaccines and logistics in accordance with the agreed plan.
26.	Store Keeper (BS-11)		He/she have a degree either intermediate or 10 years schooling with 5 years working experience stores.	Store Keeper will assist the Store Officer and the Assistant Store Officer in obtaining clearance and transportation of vaccine and logistics from the ports of entry. He will keep the Store Officer and the Assistant Store Officer informed of the availability of space in the Stores for vaccines and other logistics. He/she will also be responsible for all matters

				concerning the Store and the supply of vaccines and other logistics to the Provinces/Areas.
27.	Health Education Officer (BS-17)	01	Master Degree in Journalism or Mass Media Communication or equivalent qualification recognized by HEC. 5 years' experience in relevant field Computer skills are preferable.	To work under supervision of Federal and Provincial Managers EPI and assist him to:- Plans Health Education of general masses and public for motivation to EPI activities. Conduct training of health personnel and paramedics. Create health awareness amongst general public through all components of media. Any other duty assigned by Provincial Manager EPI.
28.	Media Production Specialist (BS-17)	01	Master degree in Journalism or Mass Media or equivalent qualification recognized by HEC 3 years' experience in relevant field Computer skill preferable.	To work under supervision NPM EPI and assist him to:- Plans for preparation of media programmes and print material on EPI activities. Writing of small stories for public in the press. Preparation of jingles on EPI. Health Education of general masses and public for motivation to EPI activities. Conduct training of health personnel and paramedics. Training to medial on EPI. Any other duty assigned by Provincial Manager EPI.

Islamabad Capital Territory (ICT)

Statement Showing Posts, Basic Scale, Requisite Qualifications, Experience and Job Description

S.N	Name of Post	No. of Posts	Qualification/Experience for Post	Job Description
1.	Deputy Director Monitoring & Evaluation (BS-18)	01	• MBBS • MSPH or equivalent recognized qualification by PMDC • 5 Years' experience in BS-17 in public health programs. Computer skills.	Head of the M&E Department Plan and implement M&E activities Develop all kind of tools for M&E Coordinate with provinces and districts Compilation of data and its distribution to the concerned quarters Feedback to the districts on data analysis To work under direct supervision of Provincial Manager EPI
2.	Assistant Director M&E (BS-17)	02	MBBS or equivalent degree recognized by PMDC or Experience in monitoring and evaluation of health programmes will be preferred..	Plan and implement M&E activities Develop all kind of tools for M&E Coordinate with provinces and districts Compilation of data and its distribution to the concerned quarters Feedback to the districts on data analysis To work under direct supervision Deputy Director
3.	EPI Coordinator/ Epidemiologist (BS-17)	15	MBBS or equivalent qualification recognized by PMDC. Experience in preventive programs will be preferred.	To work under supervision of Provincial and Districts Managers. She/he will assist them for carrying out assigned duties under his/her job description and will also take part in other programme related activities at field level as and when required by the Provincial Manager
4.	Provincial Superintendent Vaccination. (BS-17)	01	Bachelor or intermediate with 10 years working experience in EPI. He/she will be promoted on performance basis from already working District Superintendent Vaccination	He/she will provide technical assistance and guidance to the District EPI Cells in order to train them to establish proper supervision, monitoring and reporting system. He/she will also train district staff for planning vaccination sessions at union council level in accordance

				with Reach Every District approach (RED). She/he will work under the direct supervision of the Provincial Manager.
5.	District Superintendent Vaccination (BS-16)	3	Degree either Bachelor or intermediate with 5-10 years working experience as Tehsil/Taluka Superintendent Vaccination or according to the needs/requirements of the post. He/she will be promoted on performance basis from already working Taluka Superintendent Vaccination	He/she will assist Distinct Officer Health in planning vaccination sessions at union council level and assist his supervisors in compilation of reports of vaccination performance and disease surveillance for onward submission to provincial and federal levels. He/she will also monitor performance of his supervisors and field staff on up raising the immunization coverage more than 90% at every union council level and even for other field related activities as and when required basis.
6.	Vaccinators (BS-6)	100	He/she must have a minimum of 10 years of schooling, be more than 18 years of age. All recruited vaccinators must be permanent residents of the areas of posting from same union council.	Vaccinators will be recruited with the target of having at least two vaccinators for every union council. Newly recruited vaccinators will undergo for on job training for six months before administration of EPI injections,
7.	Dy. Director (Surveillance) (BS-18)	01	M.Sc. Statistics MPH or equivalent qualification recognized by PMDC 5 years' experience in BPS-17 in public health Programme or equivalent experience in reputable private sector/ UN organization Experience in disease Surveillance will be preferred.	Head of the Surveillance Department Plan and implement surveillance activities Develop all kind of tools for surveillance Coordinate with provinces and districts Compilation of data and its distribution to the concerned quarters Feedback to the districts on data analysis Any other duty assigned by Provincial Managers EPI.
8.	Assistant Director Surveillance (BS-17)	02	M.Sc. Statistics or Economics MPH or equivalent recognized qualification by PMDC 5 Years' experience in BS-17 in public health programmes. Computer Skills will be Preferred.	Plan and implement Surveillance activities Develop all kind of tools for Surveillance Coordinate with provinces and districts Compilation of data and its

				distribution to the concerned quarters Feedback to the districts on data analysis To work under direct supervision Deputy Director
9.	Dy. Director (Training) (BS-18)	01	M.Sc. Statistics MPH or equivalent qualification recognized by PMDC 7years' experience in BPS-17 in public health Programme or equivalent experience in reputable private sector/ UN organization	Head of the Training Department Plan and implement capacity building activities in the province Coordinate with provinces and districts for need assessment Any other duty assigned by Provincial Manager EPI.
10.	Assistant Director (Training) (BS-17)	02	MBBS or equivalent qualification in Social Sciences recognized by PMDC. Extra qualification and experience in capacity building of workers will be preferred.	To work under supervision of Deputy Director Training and assist him for carrying out assigned duties under his/her job description. Any other duty assigned by Deputy director.
11.	Administrative Officer (BS-17)	01	Master degree with five years' experience in BS-17 or Graduate with seven years' experience in BS-17 of working in the managerial/ administrative cadre of health institution/ programme. Computer skills will be preferred	To work under direct supervision of Federal and Provincial Managers EPI and assist them for:- Supervision of Administration Department Supervision of Accounts, Transport, Maintenance and Security Section. Dealing with all administrative matters. Supervision of maintenance of personal files/record of officers/officials of EPI. Convening of program meetings, workshops and seminars. Preparation of minutes/proceedings of meetings, workshops and seminars. Dealing with audit teams during the Program's audit with the assistance of staff of all concerned sections. Any other duty assigned by Provincial Manager EPI.
12.	Assistant	02	Graduate.	To work under supervision

	Administrative Officer (BS-16)		Three years' experience as Assistant of any Ministry	of Administrative Officer to assist him/her in administrative and account matters of the department.
13.	Data Managers (BS-14)	3	Diploma (Computer) or equivalent qualification recognized by HEC. Three years' experience in maintenance of office data.	He/she will assist Deputy Directors M&E, Surveillance and Administrative Officer. She/he will be responsible for compilation of reports of immunization performance, BMS, Rotavirus and AEFI. He will also assist his Supervisors and get in touch with the provinces for timely collection and compilation of data relating to Vaccine Preventable Diseases (VPD). He/she will be promoted on performance basis among already working as post of Statistical Assistant or its equivalent.
15.	Transport Supervisor (BS-11)	01	Intermediate. Three years' experience in vehicle detainment	Will assist Transport Superintendent in clearance of vehicle documents, detainment and repair and maintenance of vehicles
16.	Mechanics (BS-11)	01	Intermediate with Diploma in Motor Mechanics. Three years' experience preferable	Will assist Transport Superintendent in repair and maintenance of vehicles
17.	Driver (BS-5)	10	Middle pass holding required driving license. Three year driving experience	Will work under supervision of Transport Superintendent
20.	Accounts Officer (BS-17)	01	M.Com or MBA Finance with three years or B.com/ BBA with five years' experience in account matters in BPS-16 in health programme /institution. 3 years' experience in relevant field Computer skills preferable.	To work under direct supervision of Provincial Manager and assist him/ her in carrying out assigned duties pertaining to Accounts Section of programme and:- Prepare budget, cash plan in consultation with the Program Management) Deal with all budgetary matters including reconciliation, releases and expenditures Examination of all financial claims before submission for approval by the Competent Authority. Preparation of replies to audit observations. Maintenance of Cash Books in accordance with the rules,

				regulations and procedures of the Government of Pakistan and Donor Agencies so that financial monitoring reports are easily prepared from the accounts record. Liaison with AGPR for early settlement of claims and payments of bills. Any other duty assigned by Provincial Manager EPI.
21.	Assistant Accounts Officer (BS-16)	02	Graduate or Intermediate with three years' experience in handling accounts of public and private departments	He/she will assist account officer in maintaining the books of accounts of EPI and prepare financial monitoring reports, including budgets, reconciliation of expenditure and submit the same to the Department of Health and Accountant General of Punjab (AGP) with the approval of the Accounts Officer (DDO) and Project Director. He will maintain and ensure financial discipline.
22.	Cashier (BS-14)	01	Intermediate with three years' experience in relevant field	He/she will maintain books of accounts of EPI and prepare financial monitoring reports, including budgets, reconciliation of expenditure and submit the same to Ministry of Health and Accountant General of KPK (AGP) with the approval of the Accounts Officer (DDO) and Provincial Program Manager. He will maintain and ensure financial discipline.
23.	Procurement Officer (BS-17)	01	Master degree with five years' experience in BS-17 or Graduate with seven years' experience in BS-17 of working in the managerial, administrative, purchase and procurement cadre health institution/ programme. Experience in purchase and procurement of health institution/ programme or equivalent experience in reputable private sector/ UN	To work under direct supervision of Federal and Provincial Managers EPI and assist him for:- Supervision of purchase/procurement and store sections Update regarding status of stock of vaccines and logistics needed by the Program Preparation of plan for purchase of procurement of

			organization Computer skills will be preferred	all logistics for EPI. Distribution plan of EPI logistic components to provinces and other health departments. Supervision of maintenance of purchase/ procurement, storage and distribution record including report and returns. Liaison with provincial health departments for their logistic needs. Any other duty assigned by Provincial Manager EPI.
24.	Store Officer (BS-17)	01	Graduate. Five years' experience of handling stores and procurement services of the health institution in BS-16 or equivalent experience in reputable private sector/ UN organization Computer skills preferable	To work under direct supervision of Federal and Provincial Managers to assist in carrying out his/her assigned duties pertaining to stores of EPI as under:- Update on stock position of vaccines and logistics needed by the Program. Ensure proper vaccine management and avoid wastage at all levels through close coordination with In-Charges of Provincial and District Stores. Responsible for all matters related to the Store and maintain liaison with his/her Provincial and District counterparts. Ensure timely supplies of vaccines and logistics in accordance with the agreed quarterly plan. Assist provincial stores in getting certification. Develop work plan for the provinces/areas and districts. Keep in touch with the Manager, Procurement and Logistics, and inform him of the availability of storage space for vaccines and other logistics. Any other duty assigned by Provincial Manager EPI
25.	Assistant Store Officer (BS-16)	01	He/she have a degree either bachelor or intermediate with 5 years working experience as	The Assistant Store Officer will assist the Store Officer in meeting WHO

			store keeper. He/she will be promoted on performance basis from already working store keepers.	requirements for certification of the store. He will be responsible to computerize all store related data according to the VSLIM software developed for this purpose and suggest improvements and amendments if required. He/she will also be responsible for every store related matter for all provinces/areas i.e. ensure timely supplies of vaccines and logistics in accordance with the agreed plan.
26.	Store Keeper (BS-11)	01	He/she have a degree either intermediate or 10 years schooling with 5 years working experience stores..	Store Keeper will assist the Store Officer and the Assistant Store Officer in obtaining clearance and transportation of vaccine and logistics from the ports of entry. He will keep the Store Officer and the Assistant Store Officer informed of the availability of space in the Stores for vaccines and other logistics. He/she will also be responsible for all matters concerning the Store and the supply of vaccines and other logistics to the Provinces/Areas.
27.	Health Education Officer (BS-17)	01	Master Degree in Journalism or Mass Media Communication or equivalent qualification recognized by HEC. 5 years' experience in relevant field Computer skills are preferable.	To work under supervision of Federal and Provincial Managers EPI and assist him to:- Plans Health Education of general masses and public for motivation to EPI activities. Conduct training of health personnel and paramedics. Create health awareness amongst general public through all components of media. Any other duty assigned by Provincial Manager EPI.

Capital Development Authority (CDA)

Statement Showing Posts, Basic Scale, Requisite Qualifications, Experience and Job Description

S.N	Name of Post	No. of Posts	Qualification/Experience for Post	Job Description
1.	Deputy Director Monitoring & Evaluation (BS-18)	01	• MBBS • MSPH or equivalent recognized qualification by PMDC • 5 Years' experience in BS-17 in public health programs. Computer skills.	Head of the M&E Department Plan and implement M&E activities Develop all kind of tools for M&E Coordinate with provinces and districts Compilation of data and its distribution to the concerned quarters Feedback to the districts on data analysis To work under direct supervision of Provincial Manager EPI
2.	Assistant Director M&E (BS-17)	08	MBBS or equivalent degree recognized by PMDC or Experience in monitoring and evaluation of health programmes will be preferred..	Plan and implement M&E activities Develop all kind of tools for M&E Coordinate with provinces and districts Compilation of data and its distribution to the concerned quarters Feedback to the districts on data analysis To work under direct supervision Deputy Director
3.	EPI Coordinator/ Epidemiologist (BS-17)	10	MBBS or equivalent qualification recognized by PMDC. Experience in preventive programs will be preferred.	To work under supervision of Provincial and Districts Managers. She/he will assist them for carrying out assigned duties under his/her job description and will also take part in other programme related activities at field level as and when required by the Provincial Manager
4.	Provincial Superintendent Vaccination. (BS-17)	04	Bachelor or intermediate with 10 years working experience in EPI. He/she will be promoted on performance basis from already working District Superintendent Vaccination	He/she will provide technical assistance and guidance to the District EPI Cells in order to train them to establish proper supervision, monitoring and reporting system. He/she will also train district staff for planning vaccination sessions at union council level in accordance

				with Reach Every District approach (RED). She/he will work under the direct supervision of the Provincial Manager.
5.	District Superintendent Vaccination (BS-16)	8	Degree either Bachelor or intermediate with 5-10 years working experience as Tehsil/Taluka Superintendent Vaccination or according to the needs/requirements of the post. He/she will be promoted on performance basis from already working Taluka Superintendent Vaccination	He/she will assist Distinct Officer Health in planning vaccination sessions at union council level and assist his supervisors in compilation of reports of vaccination performance and disease surveillance for onward submission to provincial and federal levels. He/she will also monitor performance of his supervisors and field staff on up raising the immunization coverage more than 90% at every union council level and even for other field related activities as and when required basis.
6.	Vaccinators (BS-6)	100	He/she must have a minimum of 10 years of schooling, be more than 18 years of age. All recruited vaccinators must be permanent residents of the areas of posting from same union council.	Vaccinators will be recruited with the target of having at least two vaccinators for every union council. Newly recruited vaccinators will undergo for on job training for six months before administration of EPI injections,
7.	Dy. Director (Surveillance) (BS-18)	01	M.Sc. Statistics MPH or equivalent qualification recognized by PMDC 5 years' experience in BPS-17 in public health Programme or equivalent experience in reputable private sector/ UN organization Experience in disease Surveillance will be preferred.	Head of the Surveillance Department Plan and implement surveillance activities Develop all kind of tools for surveillance Coordinate with provinces and districts Compilation of data and its distribution to the concerned quarters Feedback to the districts on data analysis Any other duty assigned by Provincial Managers EPI.
8.	Assistant Director Surveillance (BS-17)	08	M.Sc. Statistics or Economics MPH or equivalent recognized qualification by PMDC 5 Years' experience in BS-17 in public health programmes. Computer Skills will be Preferred.	Plan and implement Surveillance activities Develop all kind of tools for Surveillance Coordinate with provinces and districts Compilation of data and its

				distribution to the concerned quarters Feedback to the districts on data analysis To work under direct supervision Deputy Director
9.	Dy. Director (Training) (BS-18)	01	M.Sc. Statistics MPH or equivalent qualification recognized by PMDC 7years' experience in BPS-17 in public health Programme or equivalent experience in reputable private sector/ UN organization	Head of the Training Department Plan and implement capacity building activities in the province Coordinate with provinces and districts for need assessment Any other duty assigned by Provincial Manager EPI.
10.	Assistant Director (Training) (BS-17)	08	MBBS or equivalent qualification in Social Sciences recognized by PMDC. Extra qualification and experience in capacity building of workers will be preferred.	To work under supervision of Deputy Director Traing and assist him for carrying out assigned duties under his/her job description. Any other duty assigned by Deputy director.
11.	Administrative Officer (BS-17)	01	Master degree with five years' experience in BS-17 or Graduate with seven years' experience in BS-17 of working in the managerial/ administrative cadre of health institution/ programme. Computer skills will be preferred	To work under direct supervision of Federal and Provincial Managers EPI and assist them for:- Supervision of Administration Department Supervision of Accounts, Transport, Maintenance and Security Section. Dealing with all administrative matters. Supervision of maintenance of personal files/record of officers/officials of EPI. Convening of program meetings, workshops and seminars. Preparation of minutes/proceedings of meetings, workshops and seminars. Dealing with audit teams during the Program's audit with the assistance of staff of all concerned sections. Any other duty assigned by Provincial Manager EPI.
12.	Assistant Administrative Officer (BS-16)	02	Graduate. Three years' experience as Assistant of any Ministry	To work under supervision of Administrative Officer to assist him/her in administrative and account

				matters of the department.
13.	Data Managers (BS-14)	10	Diploma (Computer) or equivalent qualification recognized by HEC. Three years' experience in maintenance of office data.	He/she will assist Deputy Directors M&E, Surveillance and Administrative Officer. She/he will be responsible for compilation of reports of immunization performance, BMS, Rotavirus and AEFI. He will also assist his Supervisors and get in touch with the provinces for timely collection and compilation of data relating to Vaccine Preventable Diseases (VPD). He/she will be promoted on performance basis among already working as post of Statistical Assistant or its equivalent.
15.	Transport Supervisor (BS-11)	01	Intermediate. Three years' experience in vehicle detainment	Will assist Transport Superintendent in clearance of vehicle documents, detainment and repair and maintenance of vehicles
16.	Mechanics (BS-11)	02	Intermediate with Diploma in Motor Mechanics. Three years' experience preferable	Will assist Transport Superintendent in repair and maintenance of vehicles
17.	Driver (BS-5)	10	Middle pass holding required driving license. Three year driving experience	Will work under supervision of Transport Superintendent
18.	Sub-Engineer (Civil) (BS-16)	01	Diploma (Civil) or equivalent qualification recognized by HEC. Three years' experience in civil maintenance of office buildings.	To work under supervision of Administrative Officer. Responsible for civil maintenance of EPI office buildings and warehouses of EPI. Prepare periodic maintenance plan of the buildings. Any other duty assigned by Provincial Manager EPI.
19.	Supervisor Horticulture (BS-14)	01	10 years schooling with three year experience in plants and flowers	He/she will assist Sub-Engineer Civil in beautification office building
20.	Accounts Officer (BS-17)	01	M.Com or MBA Finance with three years or B.com/ BBA with five years' experience in account matters in BPS-16 in health programme /institution. 3 years' experience in relevant field Computer skills preferable.	To work under direct supervision of Provincial Manager and assist him/ her in carrying out assigned duties pertaining to Accounts Section of programme and:- Prepare budget, cash plan in consultation with the Program Management) Deal with all budgetary

				matters including reconciliation, releases and expenditures Examination of all financial claims before submission for approval by the Competent Authority. Preparation of replies to audit observations. Maintenance of Cash Books in accordance with the rules, regulations and procedures of the Government of Pakistan and Donor Agencies so that financial monitoring reports are easily prepared from the accounts record. Liaison with AGPR for early settlement of claims and payments of bills. Any other duty assigned by Provincial Manager EPI.
21.	Assistant Accounts Officer (BS-16)	02	Graduate or Intermediate with three years' experience in handling accounts of public and private departments	He/she will assist account officer in maintaining the books of accounts of EPI and prepare financial monitoring reports, including budgets, reconciliation of expenditure and submit the same to the Department of Health and Accountant General of Punjab (AGP) with the approval of the Accounts Officer (DDO) and Project Director. He will maintain and ensure financial discipline.
22.	Cashier (BS-14)	01	Intermediate with three years' experience in relevant field	He/she will maintain books of accounts of EPI and prepare financial monitoring reports, including budgets, reconciliation of expenditure and submit the same to Ministry of Health and Accountant General of KPK (AGP) with the approval of the Accounts Officer (DDO) and Provincial Program Manager. He will maintain and ensure financial discipline.
23.	Procurement Officer	01	Master degree with five years'	To work under direct

	(BS-17)		experience in BS-17 or Graduate with seven years' experience in BS-17 of working in the managerial, administrative, purchase and procurement cadre health institution/ programme. Experience in purchase and procurement of health institution/ programme or equivalent experience in reputable private sector/ UN organization Computer skills will be preferred	supervision of Federal and Provincial Managers EPI and assist him for:- Supervision of purchase/procurement and store sections Update regarding status of stock of vaccines and logistics needed by the Program Preparation of plan for purchase of procurement of all logistics for EPI. Distribution plan of EPI logistic components to provinces and other health departments. Supervision of maintenance of purchase/ procurement, storage and distribution record including report and returns. Liaison with provincial health departments for their logistic needs. Any other duty assigned by Provincial Manager EPI.
24.	Store Officer (BS-17)	01	Graduate. Five years' experience of handling stores and procurement services of the health institution in BS-16 or equivalent experience in reputable private sector/ UN organization Computer skills preferable	To work under direct supervision of Federal and Provincial Managers to assist in carrying out his/her assigned duties pertaining to stores of EPI as under:- Update on stock position of vaccines and logistics needed by the Program. Ensure proper vaccine management and avoid wastage at all levels through close coordination with In-Charges of Provincial and District Stores. Responsible for all matters related to the Store and maintain liaison with his/her Provincial and District counterparts. Ensure timely supplies of vaccines and logistics in accordance with the agreed quarterly plan. Assist provincial stores in getting certification. Develop work plan for the

				provinces/areas and districts. Keep in touch with the Manager, Procurement and Logistics, and inform him of the availability of storage space for vaccines and other logistics. Any other duty assigned by Provincial Manager EPI
25.	Assistant Store Officer (BS-16)		He/she have a degree either bachelor or intermediate with 5 years working experience as store keeper. He/she will be promoted on performance basis from already working store keepers.	The Assistant Store Officer will assist the Store Officer in meeting WHO requirements for certification of the store. He will be responsible to computerize all store related data according to the VSLIM software developed for this purpose and suggest improvements and amendments if required. He/she will also be responsible for every store related matter for all provinces/areas i.e. ensure timely supplies of vaccines and logistics in accordance with the agreed plan.
26.	Store Keeper (BS-11)		He/she have a degree either intermediate or 10 years schooling with 5 years working experience stores..	Store Keeper will assist the Store Officer and the Assistant Store Officer in obtaining clearance and transportation of vaccine and logistics from the ports of entry. He will keep the Store Officer and the Assistant Store Officer informed of the availability of space in the Stores for vaccines and other logistics. He/she will also be responsible for all matters concerning the Store and the supply of vaccines and other logistics to the Provinces/Areas.
27.	Health Education Officer (BS-17)	01	Master Degree in Journalism or Mass Media Communication or equivalent qualification recognized by HEC. 5 years' experience in relevant field Computer skills are preferable.	To work under supervision of Federal and Provincial Managers EPI and assist him to:- Plans Health Education of general masses and public for motivation to EPI activities.

				Conduct training of health personnel and paramedics. Create health awareness amongst general public through all components of media. Any other duty assigned by Provincial Manager EPI.

Appendix – 14
DESCRIPTION OF GOVERNANCE ENTITIES

Impact assessment committee

Purpose:	Conduct in-depth program review of EPI
Composition:	Headed by the Chief Health Planning Commission Members: • Ministry of National Health Services, Regulation and Coordination, • NPM-EPI, • Representative from the Ministry of Finance, • Representative of EAD, • Provincial and Federating Managers • One member each from WHO and UNICEF.
Operation:	Meeting quarterly conducting desk review of programmatic and financial reports of the EPI Carrying out coordination field visits

Project Implementation Coordination Committee (PICC)

Purpose:	1. Oversee and review the technical and financial progress of the project and 2. PSDP funds. 3. Provide guidance to the program in proper implementation of the project and resolve bottlenecks which create problem in its implementation. 4. To *monitor project at provincial* level on periodic basis
Composition:	Financial Advisor Ministry of National Health Services, Regulation and Coordination Sr. JS PDM/Health, Ministry of National Health Services, Regulation and Coordination Chief Health Planning, P&D National Programme Manager EPI (Secretary) Director Generals Health Services of all provinces Provincial Programme Managers EPI Co-opted members (any) with permission of Chairman
Operation:	Meets as and when required

National Interagency Co-ordination Committee (NICC)

Purpose:	1. **Coordinate** support at national level from government and partner agencies to strengthen EPI and polio eradication activities in Pakistan. 2. **Mobilize** the national government and NGOs to eradicate polio and control other vaccine-preventable disease. 3. **Assist** Pakistan in becoming self-sufficient in its immunization programmes. 4. **Establish** a forum for exchange of information and dialogue on immunization programmes in the country and facilitate that dialogue by making data information sources readily available. 5. **Ensure** the availability of appropriate policies, advice and tools to the Pakistan government. 6. **Assist** the international and national community in identifying and

	developing support for new disease control programmes when appropriate intervention tools, such as new vaccines become available. 7. **Advise** the government in specific areas related to EPI and Polio Eradication where partner agencies have specialized expertise. 8. **Review** progress towards Polio Eradication. Improving EPI and plans for further activities.
Composition:	Chair: Federal Minister of Mo National Health Services, Regulation and Coordination Co-chair: Federal Secretary of Mo National Health Services, Regulation and Coordination 1) Financial Advisor National Health Services, Regulation and Coordination 2) JS Health Ministry of National Health Services, Regulation and Coordination 3) Chief Health Planning 4) Director General Health Services of all Provinces 5) Provincial Programme Managers EPI 6) National Program Manager EPI 7) Members from concerned organizations and government departments ▪ World Health Organization (WHO) ▪ United Nations Children Fund (UNICEF) ▪ World Bank ▪ Government of Japan ▪ Rotary International ▪ United States Agency for International Development (USAID) ▪ Department of International Development (DFID) ▪ Canadian International Development Agency (CIDA) ▪ Private Sector Organizations (Aga Khan University)
Operation:	Meets quarterly

National Steering committee for EPI

Purpose:	Oversee the progress and implementation of national EPI as per the national policy guidelines and national ICC recommendations. Ensure routine EPI duties and responsibilities laid upon officials at all levels are balanced and properly executed in harmony with other priority areas such as Polio Eradication, Measles elimination and Neonatal Tetanus elimination Exercise supportive leadership to obtain cooperation and involvement of other government and non-government organizations in EPI activities Monitor progress, seek evidence on performance and achievement, capitalize on success and solve problems
Composition:	• National Programme Manager, EPI. • National Coordinator, National Program for FP & PHC • Director, M&E, Federal EPI • Health Education Advisor – Ministry of Health • In-charge/Virologist - Regional Reference Laboratory, NIH. • WHO National Team Leader for Polo Eradication Initiative • WHO Medical Officer - EPI • Chief Health & Nutrition –UNICEF

	• Health Specialist (Immunization) – UNICEF • Programme Communication Specialist – UNICEF • Health Advisor – EPI, JICA Pakistan • Representatives from Rotary International • Representative from WB, USAID, DFID, CIDA.
Operation:	Hold Quarterly *provincial* meeting

NITAG

Purpose:	Guide policy makers in the Federal Ministry of Health and Federal EPI of Paista to make evidence based immunization related policy decision for routine immunization activities and for national emergencies Conduct policy analysis and formulate strategies for control, elimination and eradication of VCD Bridging partnerships among different immunization stakeholders from other government and non-government organizations, associations, bodies and civil societies
Composition:	• Formed by the executive order of the Ministry of NHSRC (on the basis of a proposal from Federal EPI "in accordance with the NSC EPI decision") • Core members – independent experts (meeting specific criteria) from the following fields o Pediatrics o Infectious disease epidemiology o Immunology o Clinical Research o Virology o Microbiology o Health Economics o Social sciences • Liaison members (not participate in final decision making): o National Program Manager, EPI (secretary of the NITAG) o Chief Health, Planning Commission o Chief, Public Health Division, National Institute of Health o National Team Leader – PEI, World Health Organization o Chief – Health & Nutrition, UNICEF o Medical Officer – EPI, World Health Organization o Executive Director – Pakistan Medical Research Council o President – Pakistan Pediatrics Association
Operation:	Policy guideline and recommendations are submitted to the Ministry for final approval and implementation Frequency of meetings – as needed

National Task Force for Polio Eradication

Purpose:	Oversee and monitor the progress made against National Emergency Plan of Action for polio eradication throughout the country with especial focus on high risk districts. Ensure that appropriate support is available to all provinces for successful implementation of District/Agency/Town Specific Plans for polio eradication.
Composition:	• Prime Minister Islamic Republic of Pakistan (Chairman) • Governor Khyber Pakhtunkhwa / FATA • Chief Ministers of all provinces • Federal Minister for NHSR&C • Special Assistant to Prime Minister (SAPM) for Social Sector • Principal Secretary to Prime Minister Representative of the Chief of Army Staff • Federal Secretary NHSR&C National Coordinator • PM's Polio Monitoring Cell /Focal Person • National Programme Manager EPI • Representatives of WHO, UNICEF, Rotary and Bill Gates Foundation, WB and USAID • Any other nominee
Operation:	Meets every six months to review the following aspects of Polio eradication initiative: 1. The progress made in provinces against Emergency Plan of Action 2011 for eradication of Polio and direct the federal and provincial governments to take remedial measures 2. Inter-provincial and inter sectoral coordination and give direction on issues if any of them hampering the efforts. 3. Adequate resources are secured for the implementation of National Emergency Plan of Action for polio eradication.

Provincial Task Force / Steering Committee for Polio Eradication

Purpose:	Oversee and monitor the progress made against National Emergency Plan of Action for polio eradication in province.
Composition:	• Chief Minister/ Chief Secretary - Chairman • Secretary, Health Department - Secretariat • Technical Focal Person for National Emergency Action Plan for Polio Eradication in Chief Minister Office – to be nominated by Chief Secretary • Secretary, Department of Education, Information, Local Government, Auqaf and Home. • Director General Health Services • Provincial EPI Manager along with Provincial Head of PRSP/PPHI • Provincial Heads of development partners (WHO, UNICEF, Rotary, etc.) • Any other nominee of Chief Secretary All Deputy Commissioners/ District Coordination Officers of the province / Political Agents (PA) of FATA will attend the meeting of PSC/PTF.
Operation:	Meet every two months to review and monitor the following aspects of Polio eradication initiative 1. Progress made in province against National Emergency Plan of Action for

	eradication of Polio and provide guidance on challenges being faced by each district. 2. Involvement of district and sub-district level arm of government to assume the responsibility of ensuring implementation of District Specific plan. 3. Involvement of the line departments and assigning specific roles and tasks to each department for the successful campaign implementation. 4. The plan and progress for advocacy and social mobilization activities at provincial and sub-provincial levels and ensure availability of adequate resources and their optimal use.

ANNEXURE - 1
PAKISTAN: National Immunization Support Project

1. Pakistan has a window of opportunity offered by the orderly democratic political transition that brought a new Government with a strong reform mandate. On May 11, 2013 86.2 million Pakistanis exercised their right to vote, with the highest voter turnout in the country's 66-year existence (56 percent). The 18th Constitutional Amendment agreed to reshape federal and provincial relations to strengthen poor service delivery. In parallel, a new redistribution formula shifted greater funding to the provinces and added weight to poverty, provincial tax effort, and population density to the previous single criteria of population. Further change will continue to stem from local and provincial government elections. Pakistan's security environment and law and order situation remains volatile, with continuous uncertainty over emerging geopolitical scenario in the region.

2. Pakistan is the world's sixth most populous country, with a population of 180 million. With a per-capita income of US$1,260 in 2012, Pakistan is classified as a lower middle-income country. Pakistan faces significant economic challenges. The country's recovery from the 2008-09 global financial crises was the weakest in South Asia, with GDP growth averaging 2.9 in the FY09-13 period. Political challenges, natural disasters of 2010 and 2011 and ongoing security challenges continue to limit economic growth. The poverty rate fell by half from 34.7% in 2002 to 13.6% in 2011. Poverty reduction has been led by rural areas, where poverty has decreased by 23.2 percentage points (versus 14.7 percent in urban areas).

3. Pakistan has had to face multiple challenges over the last decade including natural and man-made disasters as well as an unstable macroeconomic situation. As evident from the latest surveys like PDHS 12-13, recently released PSLM Pakistan will be unable to achieve the health related MDGs. Immunization coverage has stagnated over the last decade and proportion of children who are fully immunized is approximately 43 to 62 percent (depending on the survey and year). The country comprehensive multiyear plan for immunization (2014) assigns a baseline national coverage in 2012 of 53%, which is a reasonable consensus estimate. Evidence suggests that underachievement of the EPI is due to a combination of factors including : inadequate performance in the areas of service delivery, program management, monitoring and evaluation, logistics control, human resource and financial management as well as community health-seeking behaviors and other demand side issues. Another reason for the poor performance is the reduced focus on EPI (funding and technical assistance) in relation to polio campaigns.

4. In line with international standards, the Expanded Program on Immunization (EPI) in Pakistan

Age	Vaccines	
At birth	BCG and OPV 0	
6 weeks	OPV 1	Pentavalent 1
10 weeks	OPV 2	Pentavalent 2
14 weeks	OPV 3	Pentavalent 3
9 months	Measles	
Second year of life	Measles	

Table 1: Pakistan EPI Schedule

aims to immunize all children between 0 and 23 months against eight vaccine preventable diseases that include tuberculosis, poliomyelitis, diphtheria, pertussis, tetanus, hepatitis B, haemophilus influenza type b (Hib), and measles. Newer vaccines which will expand EPI are either in the process of roll out (pneumococcal vaccine) or under planning (rotavirus vaccine, inactivated polio vaccine).

5. Before the 1990's immunization was financed by the support extended from USAID which came to a halt in the early 1990s and that's when the World Bank support (along with some other donors) bridged the financing gap till 2003. GAVI support became available for the procurement of vaccines from 2005-06 onwards in the country. Prior to 2001, Pakistan followed a federally/provincially

managed structure to deliver health services. In 2001, some of the powers were devolved to the district governments, and EPI was integrated into district-level preventive programs. Later the Constitutional Amendment 18 became law on April 8, 2010, and much of the management of health services including immunization was devolved to the provinces. Since then, the provinces are expected to plan and manage their own provincial budgets for EPI.

6. Post devolution provinces have shown less then desired results due to lack of human resource capacity, low budget allocation and non-integration of program in provincial health delivery system. The federal government is financing the cost of vaccines and consumables as per Council of Common Interest decision and it will continue to do so till the end of 7th NFC award by year 2015. Another important contextual factor is the fluid situation regarding role of local governments in service delivery. Each province is in the process of enacting local government act with varied mandate and there is still confusion around the devolved health related responsibilities to district governments. In FY 2011-12 government of Pakistan spent PKR 9 Billion (USD 90 Million) on routine immunization (not including new vaccines). Federal government shared PKR 5.2 Billion and provincial governments provided PKR 3.8 billion from their respective budgets.

7. The federal share mainly comprised vaccine and disposal that accounted for 98% of its contribution while the remaining 2% covered program management cost at federal EPI cell including central control storage. Out of provincial budgets, Punjab expenditure on immunization accounts for 53% of the total immunization spending followed by Sind (21%). Overall, Government of Pakistan funds accounted for 52% of EPI expenditure and the donors shared remaining 48%.

8. In 2012, the World Bank conducted a review of EPI in Pakistan, based on an independent analysis, and offered recommendations to improve the program's performance. These included:

- Strengthening interprovincial coordination and collaboration, focusing on program targets, aspects of policy, and inter-province learning.
- Supporting an EPI implementation plan for each district within each province based a situational analysis of coverage and capacity
- Improving the logistics system, including cold chain monitoring tools, vaccine procurement capacity and cold chain equipment maintenance.
- Fostering leadership and good management through appropriate training
- Institutionalizing mechanisms for staff motivation – particularly including incentives for good performance by individuals or teams.
- Restructuring of supervision and monitoring to promote performance and accountability.
- Strengthening of monitoring, evaluation, and surveillance.
- Building demand for immunization services

9. The proposed NISP builds on these recommendations and reflects the action plans for EPI that have been developed by the provincial governments, as well as the updated National EPI Policy (2013). The proposed program is firmly anchored in the Comprehensive Multi Year Plan (cMYP) for Immunization prepared by the government in close consultation with WHO and UNICEF. The program is designed to avoid displacing government resources for EPI to ensure sustainability of the system at the end of project implementation. Rather than providing supplementary finance, it aims to regularize and strengthen the government systems supporting routine immunization with a focus at the provincial level. NISP is designed as a one off management and structural reform of EPI to revamp the infrastructure, review and reorganize the management structures, review and adjust human resource requirements and streamline reporting mechanisms to enable real time reporting of data and enhance analytic capacities. New innovative approaches are proposed to increase immunization coverage in urban and peri-urban areas, including contracting out of service provision to CSO/NGOs, enhanced engagement with the private sector, demand creation through voucher schemes, and the use of enhanced planning and monitoring tools (such as GPRS tracking).

10. The NISP investment of US$170 million will use a results-based approach. This includes US$50 million IDA credit and up to US$100 million in grant co-financing from the GAVI Alliance, and the Health Results Innovation Trust Fund (HRITF), subject to their approval. Counterpart financing will total US$20 million. The BMGF have indicated interest in financing a partial results-linked buy-down of the credit of up to US$25 million. Such an agreement would operate to provide an incremental contribution over the lifetime of the project period, proportionately determined by the achievement of the same DLIs. At the completion of the project, the credit would be partially bought down to the extent of the total Gates contribution – which would comprise at maximum a US$10.292M buy-down for interest and service charge and US$14.708M buy-down for the principal. Therefore, the US$50 million loan would be converted into a US$31.3 million loan with zero coupon (current estimate).

11. The project aims to equitably increase immunization coverage in Pakistan through four components. The project is comprised of components which support both the federal and provincial levels, with much of the finance to be delivered through a performance based structure. At the federal level, overall project monitoring will be the responsibility of the EPI unit within MONHSRC. Each provincial Department of Health will be responsible for independent program implementation, with coordination being provided by the federal body. The first three components take a results-based approach using Disbursement Linked Indicators (DLIs), while the fourth component will finance technical assistance and capacity building activities not linked to DLIs, including inputs for pilot programs. The Pakistan task team has had significant experience in designing and implementing DLI-based programs over the past decade in the Human Development sectors. At present the World Bank team in Pakistan is assisting in the implementation of Punjab Health sector reform project with the Government of Punjab and DfID, in addition to having experience in DLI-based operations in the Education sector.

12. Capacity in program management is variable across the provincial health departments, particularly in planning, policy making, procurement, surveillance, monitoring and reporting. This project will address these through the provision of training and technical assistance. In Punjab, there is increasing familiarity with RBF mechanisms, through the new Health Sector Reform Project (P123394) - however this capacity will require strengthening in other provinces, particularly in reporting systems, payment mechanisms and data validation. District level facilities are the principal sites of service delivery - however, they have limited capacity for provision of immunization through fixed or outreach services - with key barriers being human resources, systems for timely reporting and demand creation. Successful implementation of an RBF approach will require strengthening each of these areas through training and technical assistance - as well as the support for independent third party validation of program performance data.

13. There is some capacity in the MONHSRC for project management, and monitoring and coordination of provincial EPI - as well as program implementation in the federally administered territories. These functions would require strengthening and broadening to include policy support, technical assistance in specific areas, information collection and analysis and international reporting.

14. **Component 1: Component I: Strengthening Management, Governance and Stewardship Functions** (total US$27 million, including IDA contribution up to US$8 million and TF contribution up to US$19 million). This component has the objective of addressing the fundamental systemic weaknesses that underlie the poor performance and accountability of EPI in Pakistan. Strengthened oversight, informed by rigorously generated information, will target bottlenecks in program management and oversight. The projects engagement will focus on the following thematic areas:

(i) Oversight, Coordination and stewardship functions. As a first step in ensuring accountability of the program, systems will be strengthened for the rigorous monitoring by the development

partners [18]and civil society at the national and provincial levels. The Federal EPI Cell shall arrange for bi annual review meetings with participation of all provinces and territories and development partners to assess program performance against agreed milestones and targets and address vulnerable areas for improvements. There will be quarterly review meetings at the provincial level formalized as a provincial monitoring/ technical committee chaired by the Secretary of Health to evaluate performance of the routine program and polio/measles eradication activities. The oversight by provincial committees will be supplemented by monthly review meetings held at the district level. ANational EPI Council, including all provincial program managers and the Federal EPI manager, will be established and its functions will include quarterly review meetings for consensus decisions on resource allocation, policy review and setting of guidelines, decisions on new vaccine introduction (including relevant research), campaign planning & review and resource mobilization. To support the activities of this council, the capacity of the Federal EPI cell will be strengthened in the specific responsibilities of national standard setting, monitoring of national EPI program performance, advocacy, interprovincial coordination, coordination with development partners, consolidation of national plans and reports, synthesis and analysis of all data from surveillance, research, logistics systems and independent reviews. In addition the capacity of the Federal EPI cell will be strengthened to provide training (development of updated modules/manuals, guidelines, conduct review meetings), technical support, operational research, respond to litigations and perform national level coverage surveys.

(ii) *Robust monitoring & evaluation mechanisms*. The system to support EPI management with timely and reliable program data will be comprehensively strengthened at the provincial and district levels. The activities will comprise collation and analysis of data from the following program functions: vaccine utilization and reported coverage, trends of immunization coverage at the UC level, plans and actual performance of campaign activities during SIAs, supervisory reports from district & provincial supervisors, third party reports and other national/regional surveys. The latest technological approaches which have been successfully applied in some areas of the country will be more broadly introduced. An effective and sustainable vaccine logistics management information system (vLMIS) will ensure adequate quality and quantities of vaccines are available at the service delivery point. Internal monitoring of the routine immunization activities will be complimented and validated annually by independent 3rd party monitoring to be conducted by firms hired on competitive basis by the federal EPI cell.

(iii) *Surveillance systems*: The critical capacity of surveillance is to be greatly enhanced. This function will be taken up by the provinces, with the Federal EPI cell providing technical and logistic support. The goal of this strengthening is a well-functioning and sustained EPI and vaccine preventable disease reporting system in 3 years encompassing surveillance, online reporting and response. The strengthening will build on the capacities and experience of the system for surveillance of acute flaccid paralysis (AFP) supported by WHO, which rapidly and comprehensive assembles data from the basic health facility through to provincial and national levels. The national core capacities for surveillance and outbreak response will be integrated with this system.

14. **Component 2: Improving Service Delivery Performance** (total US$37 million, including IDA contribution up to US$11 million and TF contribution up to US$26 million). In Pakistan, an historical disconnect persists between the distribution of population (demand) and the focus of the EPI program infrastructure for service delivery (supply). Recent urban population growth has been very high - which has changed urban and rural population ratio from historical 30:70 to 45:55 in 2013. However in many districts the provision of services has not kept pace with this demographic shift through the strengthening of EPI services in static health facilities. Consequent low availability is compounded by poor governance and management systems, unreliable supply chains, lack of availability and retention of skilled staff and poor linkages between communities and health facilities. This component will increase equitable access to EPI services at the UC level through improved planning, management of human resources and strengthened supply chain management at the point of service delivery.

[18] Development partners include Technical Agencies: WHO, UNICEF, as well as USAID, DFAT Australia, JICA, DFID, the GAVI Alliance, the Bill & Melinda Gates Foundation and the World Bank

(i) *Enhanced planning for performance*: A versatile and powerful planning system is in place throughout Pakistan to support polio eradication campaigns. The provincial EPI offices will ensure the conversion of the current EPI tour plans into computerized micro plans with much greater detail, based on the format used by the Polio micro plans, and integrated with this system. An online database will be created to enable data entry of the micro-plans in the agreed format by union council. The micro-plan will have a very precise coverage estimate for each Union Council. As a policy, LHW and Vaccinators will prepare joint micro-plans for immunization in each UC. The database shall have the capacity to consolidate data by district/province as well as provide detailed information by union council upon query. Technical support and training will be provided to DSV and vaccinators to enter the annual and monthly UC level micro-plans at district and provincial level. On important aspect will be the development of integrated EPI staff workplansencompassing 14-16 workdays per month, with the remainder set aside for other activities like administrative meetings, catchup days, tracing defaulters, and other vaccination campaigns.

(ii) *Availability and Management of skilled human resources*: Adequate numbers, allocation and quality of human resources are most critically required to handle the additional workload and responsibilities assumed by the provincial EPI cells after devolution. The expanded provincial activities will be extremely various - ranging from community outreach sessions, capacity building, maintenance of cold chain equipment, through to social mobilization. Hence the provincial EPI cell requires an expanded variety of qualified personnel on both the technical and managerial sides. The draft National EPI Policy states that two vaccinators should be deputed per union council – and recruitments will be done at the PHC level to meet this standard. As a policy additional staff will be not be recruited on contract basis. Any such new posts will be created under the regular provincial budget to allow for continuity of the program. Regular training of provincial and district EPI staff (managers, EPI Technicians and other health care providers) is necessary to maintain the quality of service delivery for immunization. Under this component, provincial EPI cells will train LHWs, vaccinators, management level staff and all other cadres – with a particular focus on capacity building of mid-level management. The federal EPI program will be responsible for the development of national training standards, manuals and guidelines – and to provide technical support to the provinces.

(iii) *Effective supervisory systems for EPI:* One aspect of weak program management has been the lack of quality data on EPI performance, which is addressed above. This subcomponent supports the availability of these data and the institution of supervisory systems to allow their effective use. **Systematic prioritization of poorly performing areas**. The provincial EPI Cell, as part of the provincial plan, will monitor all the districts based on achieved immunization coverage data collected through routine reporting, LQAS and coverage surveys and maintain consolidated reports by district/division/province. Similarly the UCs within a district will also be ranked based on their achievement of immunization coverage. This will inform program responses at the province/district/UC levels to prepare and improve micro-plans focusing on the weaker areas. At the UC level, the **quality of micro-plans** prepared by DSV will also be monitored and improved by training and routine involvement of vaccinators, LHWs and provision of technical support. The project will address the issue of poor **availability and quality of program data** through establishment of an automated immunization management information system (MIS). As a result EPI officials will be able to review accurate vaccination data from each district and have a clear understanding of cold chain issues, immunization worker absenteeism, and coverage and vaccine management issues. Reported MIS data will be validated at the district level by **Lot Quality Assurance Sampling** (LQAS) sampling of at least 30% of the Union Councils every month. LQAS is a rapid survey method to assess the quality of vaccination coverage using a small sample size, and has been successfully applied in the management of polio eradication campaigns. The provincial EPI will be responsible for sampling at the district/ tehsil level while districts will sample at the UC level particularly the validation of the UCs having less than 40 percent verified coverage. A second level of validation will be instituted at the federal level, which will also sample at district level to cross-validate the provincial data. At the district level, field staff will submit **online monthly monitoring reports** to the EDO(H) in a structured format to be designed

by the monitoring unit at the provincial EPI cell with technical assistance from the federal EPI cell. The online monitoring reporting format will highlight program performance issues and progress on the status of recommended remedial actions.

(iv) *Enhanced linkage to communities*: Linkages will be established by provincial EPI cells with private sector health providers and health related NGOs and CSOs working in low coverage catchment areas - especially urban slums. The private sector will be offered a venue to work with the provinces in developing policy guidelines covering joint activities such as micro-planning, contract management between the government and the NGO/private sector and integration with other health programs. The project will create synergies between public and private sectors at the provincial level for enhancing coverage while avoiding duplication in service provision. Models will be developed for sustainably financed CSO engagement in service provision in the following areas: Service delivery, supervision and reporting, Training, Research and Behavior Change Communication (BCC).

15. **Component 3: Demand Generation** (total US$44 million, including IDA contribution up to US$13 million and TF contribution up to US$31 million). Increasing the demand for vaccines at the population level will be essential to increase immunization coverage in Pakistan. The objective of this component is to explore and expand innovative strategies to empower communities to access immunization services and promote positive behaviors for acceptance and seeking of immunization services. These innovations will be supported by rigorous evidence and high level advocacy. CSOs will be key partners in this project component.

(i) *Social mobilization and community awareness*: The activities which will be carried out by the provinces include awareness creation through electronic and print media along with radio broadcasts highlighting the importance and benefits of immunization will be utilized across the country. Specific EPI centers will be targeted to conduct local community awareness activities (advertisements, activities for active participation of the local community, rebranding of EPI centers). The focus will be supporting CSOs to take an active role to increase LHWs/CMWs involvement provided to the community to motivate the parents to bring children and pregnant women to EPI centers for immunization, to restore service utilization rates in these facilities.

(ii) *Advocacy*: The Federal EPI cell will develop a plan to sensitize political bodies and senior religious figures on the benefits of routine immunization, which will be implemented locally by the Provinces. A sustained communication presence will be ensured at all levels to achieve the program objectives. Advocacy activities will be coordinated with the social mobilization messaging – and raise political awareness to support these activities designed to enhance awareness of parents regarding the importance of immunization, increase the involvement of community and political leadership in immunization and improve the motivation and interpersonal skills of vaccination staff.

(iii) *School Curriculum*: Awareness of immunization and its importance to improve child health outcomes will be added as a component of the standard school curriculum. It will be the first component of the curriculum to deal with a public health issue. This will be introduced at the secondary level in a step-wise manner, with development of the module in coordination by the federal and provincial EPI cells, in consultation with the relevant departments of education.

16. **Component 4: Improving Capacity in Technical Areas for Increased Immunization Coverage** (total US$62 million, including IDA contribution US$18 million and TF contribution US$44 million). This component will finance strengthening of the Federal EPI cell in national coordination, project management and analytic capacities as well as Health System Strengthening elements. The component will finance the following specific inputs using the traditional investment lending instrument:

(i) *Health Systems Strengthening*: An assessment of provincial cold chain capacity has noted provinces have insufficient or outdated cold rooms, not sufficient to support the provincial coordination of vaccines which requires a minimum capacity of six month's supply. This component will support the procurement of cold rooms, and ice lined refrigerators (ILRs) and expansion/maintenance of the vaccine logistics management information system (vLMIS). It will also

support provision of training and technical assistance to be provided by international technical agencies World Health Organization (WHO) and United Nations Children's Fund (UNICEF). Part of the contributions to the new multi-donor trust fund will be transferred on a "pass-through" basis by the Bank to WHO and UNICEF for the financing of technical assistance activities consistent with the objectives of the Trust Fund and the project to be executed by the specific institution, as set forth in the relevant transfer agreement to be executed between the institution and the Bank. Whereas the level of the fee will be agreed in a Memorandum of Understanding to be signed with the other Donor institution, such fee will not duplicate any overhead costs already charged by the Bank's fee.

(ii) *Capacity of Federal and Provincial EPI Cells:* This component will support capacity building activities to strengthen the ability of the Federal EPI Cell within MONHSRC to implement the project, including in the areas of: financial management, procurement, environmental and social management, and monitoring and evaluation. It will also support the important role of the Federal EPI Cell in coordination of the national EPI programs, including in establishment and support of the National EPI Council, facilitating regular provincial program reviews, standard setting, consolidation of national data and international reporting.

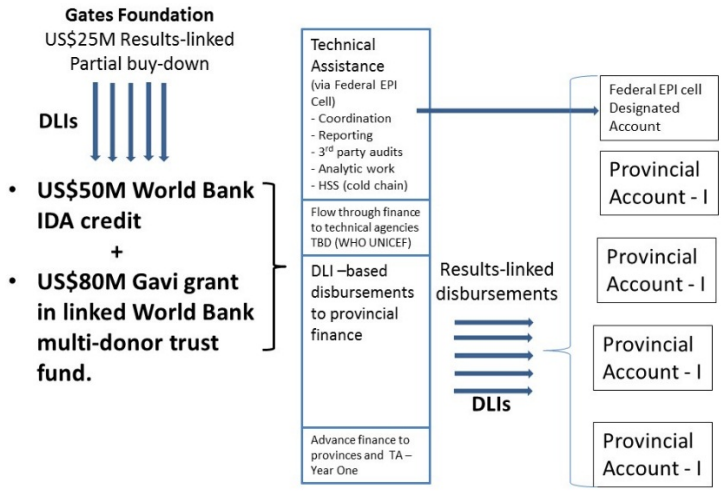
(iii) *Research and Evaluation*: A significant investment will be made to support analytical work and research to provide evidence for policy. This will include operational research to develop improved measures of immunization coverage, national level surveys and institution of a comprehensive system of independent third party assessment of program performance to verify achievement of DLI. It will also support a pilot Conditional Cash Transfer Scheme to provide incentives for accessing immunization services to mothers and health care providers, which will be piloted in the state of Punjab under the Punjab Health Sector Reform project. Based on evidence of performance in creating awareness and mobilizing demand, it is intended to expand this scheme within Punjab and to adapt it for national implementation.

Results-Linked Buy Down

17. The BMGF has been a strong supporter of immunization in Pakistan for more than 10 years – particularly as a partner in the Global Polio Eradication Initiative, and through innovative financing of the World Bank-supported Partnership for Polio Eradication Program which has "bought-down" the credits provided by the IDA and the Islamic Development Bank to the country for polio eradication. Recognizing the crucial role which strong routine immunization systems play in achieving interruption of polio virus transmission, the Gates Foundation have indicated interest to further support the Government of Pakistan through the NISP. This proposed contribution by the Gates Foundation, made over the 5-year life of the project, will be solely used to write-off a portion of the fees, service charges and principle of the credit ("partial buy down") upon project completion, and thus support substantially increasing the concessionality of the credit while being linked to the clients' performance.

18. The majority of the NISP credit (a proposed US$32 million out of US$50 million total) and associated grant finance will be disbursed conditionally on the achievement of an agreed set of DLI. It is proposed that the buy down contributions from the Gates Foundation be made to a total of US$25 million over the five years of the NISP project. These funds would be held by the World Bank in a dedicated Trust Fund. The total amount of the funds to be used for the buy-down upon project completion will be of a dollar amount in direct proportion to the IDA disbursements actually made to Pakistan on the basis of independently verified achievement of the DLIs. At each supervision mission for the NISP, an estimate would be made of the increased grant component of the credit at project closure, based on the revised buy down amount from the Gates Foundation. This estimate would be provided to the Government of Pakistan. This approach aligns the incentives for program performance, credit financing, grant financing and loan concessionality.

Results-linked buy down



ANNEXUREII:

Implementation Arrangements

PAKISTAN: National Immunization Support Project

I. Institutional and Implementation Arrangements

1. The program will have five implementing Agencies: Expanded Program for Immunization (EPI) cell with responsibility for the federal territories, under Ministry of National Health Regulation, Services and Coordination (MONHSRC) at Federal Government level and the four provincial Departments of Health (DOH) through EPI cells established in the office of the Director General Health Services (DGHS) in each province. The implementing entities will coordinate with the Department of Planning and Development and the Finance Departments, the Accountant General (AG) office and the concerned offices of the Auditor General of Pakistan. It is envisaged that overall project management and monitoring will be the responsibility of the Federal EPI Cell.

2. ***Federal Level Roles and Responsibilities:*** Standard setting, Monitoring, Consolidation of: plans, reports, surveillance, Logistics data, data analysis, Vaccine reviews, Trainings (Development of updated modules/manuals, guidelines), Review meetings, Advocacy, Coordination (development partners, international and interprovincial), Technical support, Operational research, Litigations and National Coverage Surveys.

3. ***Provincial/Regional Level Roles and Responsibilities*** :Monitoring, Supervision, Planning, Reporting, data analysis, surveillance, Procurement, Logistics, Financial management, Vaccine management , HR management, Trainings, Review meetings, HE, Social mobilization, Advocacy, Coordination, Technical support, IT solutions, engagement of CSO/Private sector, Operational research and Litigations.

4. ***District Level Roles and Responsibilities:*** Monitoring, Supervision, Planning, Reporting, data analysis, surveillance, Logistics, Financial management, Vaccine management, HR management, Trainings, Review meetings, Health Education, Social mobilization, Advocacy, Coordination, engagement of CSO/Private sector and Data Validation.

5. ***Union Council LevelRoles and Responsibilities:*** Planning, Implementation, Supervision, Monitoring, Reporting, Logistic management, Vaccine management, Social mobilization and CSO.

6. There are notified Steering Committees within the DOH at the Federal and Provincial level and will meet bi-annually to review the physical and financial progress as well as annual work plans including procurement and training plans. There will be bi-annual review meetings of provincial coordination committee and monthly review meetings at district level for the purpose of monitoring, supervision, planning, reporting, data analysis, HR management, trainings, coordination, data validation etc.

7. The design of the program relies on district-led program implementation and regular monitoring where the activities are coordinated by Executive District Officer (Health) - EDO(H) of each district. Keeping in view the current implementation challenges the program will support measures to improve the capacity of both provincial and district managers for effective program implementation.

8. The project will employ DLIs as an incentive to achieve project results by disbursing a portion of the total project financing upon achievement of key results related to the implementation of the project components. The DLI targets are critical to advancing the EPI reform process and achieving the PDO. DLIs include key intermediate results, implementation performance targets, and milestones for strengthening management, governance and stewardship functions. Progress by each province will be monitored with the province-specific targets for each indicator, according to the province context and capacity. The sum of individual progress will determine the total of each disbursement request.

Upon the request, credit and grant disbursements will be made against selected key health budget line items of the EEPs, with individual transfers to each of the five entities, contingent on their individual achievement of DLIs.

II. Financial Management, Disbursements and Procurement

Financial Management

9. A financial management assessment of EPI has been carried out as part of the preparation of the NISP. This provided an overview of the existing financial management arrangements at the EPI as well as relevant financial management risks for NISP. The program will have five implementing agencies including the federal EPI Cell the four provincial EPI Cells. For the assessment, the FM team visited Federal, Punjab and Sindh EPI cells as well as selected districts in Punjab and Sindh provinces for data collection and review of the existing systems. Meetings with the officials of EPI Cells in Khyber Pakhtunkhwa and Balochistan provinces were held at Islamabad.

10. **Risk and Mitigating Measures**: The financial management risk for the project is assessed **"Substantial"**. The detailed risk assessment is available in the project files. A summary of the constituent elements of the overall risk and the respective mitigating measures is provided in the table below. The Bank is also providing technical assistance to the EPI cells to improve program budgeting and financial report as well as preparing templates for the periodic financial reports. The TA will conclude by June 30, 2015 and will help in developing the capacity for the project implementation. In addition, the project includes a DLI on budgeting reforms and a legal covenant includes the hire of financial management specialists within provincial EPI cells.

Table 1: Risk Mitigation Matrix

	Risk/ Issue	**Proposed Mitigating Measure**
1.	The EPI budgeting process, which is segmented between federal and provinces, does not follow any approved policy framework. The Federal EPI cell along with provincial counterparts is in the process of updating comprehensive Multi Year Plan (cMYP 2010-15). However, document does not have any statutory status to ensure that federal and provincial governments allocate resources for immunization milestones**.** Therefore,there is incongruity between federal and provincial EPI budgets underscore the risk that provinces may not budget adequate funds in line with immunization targets.	• Preparation and approval of national level policy framework for immunization by end of year-1 that provides immunization targets and annual resource requirements for each province. • Federal and provincial EPI budgets based on approved policy framework from year-2 onwards.
2.	There is lack of visibility of EPI budget and expenditure information in country financial management system. Part of current expenditure relating to salaries and operating cost included in DGHS and DOH Budgets are not separately identifiable. This affects the financial reporting and expenditure tracking of EPI, thus, undermining informed decision making.	• By end of year-1 separate DDO codes to be created for EPI. • Provincial and district budgets to include separate DDO Codes/ Cost Centers for EPI budget by end of year-2. Directly attributable costs of the EPI to be budgeted against these newly created DDO Codes.
3.	Major EPI expenditure (including recurrent) is part of development budget in the provinces of Sindh, Khyber Pakhtunkhwa and Baluchistan. Development budget is more sensitive to change in priorities when seen in political economy context. Similarly, in case of	• EPI recurrent expenditure to be made part of the current budget in the provinces of Sindh, Khyber Pakhtunkhwa and Balochistan.

	Risk/ Issue	Proposed Mitigating Measure
	development projects, the PC-1 approval time may run deep into the financial year causing further delays. The release procedure for development funds takes more time than current side releases.	
4.	Adequate allocations for operating cost are not made as part of provincial and district health budgets. EPI activities are carried out as part of overall health mandate in the province; therefore, inadequate allocations adversely impact the ability to deliver immunization services.	• Define standard for proportion of operating costs. • Adequate allocation for operating cost to be made for the EPI activities in the provincial and district budgets.
5.	Consolidated Program Level Financial Reports are not Prepared. Financial Reporting is limited to Budget Execution Reports (BERs) prepared for each cost center/ Drawing and Disbursing Officer (DDO).	• Federal EPI Cell to hire a Financial Reporting Specialist to prepare periodic national level program reports and annual financial statements within three months of loan effectiveness. • Hiring of a Financial Reporting Specialist by each provincial EPI Cell to prepare periodic provincial level program reports and annual financial statements by the end of year-1. • Prepare a roadmap to and subsequently implement the program reporting functionality within National FMIS within six (6) months of the loan effectiveness.
6.	Various donors have provided in-kind grants for government routine immunization program. These grants mostly include vaccine and cold chain equipment and have remained outside the country financial management system. This not only results in under reporting of expenditure but also reduces government oversight over donor investment.	• Mechanism to incorporate all grant in kind in country financial management system by the end of year-1. • All in grant in kind for EPI activities part of government budgeting system from year -2 onwards.
7.	As per EPI Punjab no GAVI funds have been received since 2010. These funds were disbursed during FY 2010-11 to Federal Government, which forwarded Rs. 263M to government of Punjab since then.	• Transparent fund flow between federal and provincial government within six months from the loan effectiveness. • Mechanism to track donor funds through country financial management system in place by the end of year-1.
8.	Standard for vaccine inventory management varies across provinces and districts. There is no underlying inventory reporting mechanism to monitor flow of vaccines from federal to provincial to district level. Similarly, fixed asset registers are no maintained and coding has not been carried out.	• Issuance of standardized inventory management guidelines by Federal EPI by end of year-1. • Introduction of asset register, coding and mechanism for annual inventory inspection by the end of year-2.

Proposed Financial Management Arrangements for NISP

11. *Implementing entity*: The five implementing agencies will be Extended Program for Immunization EPI cell under MONHSRC at Federal Government level and the four provincial DOHs through EPI cells established in the office of the DGHS in each province. The implementing entities will coordinate with the Department of Planning and Development and the Finance Departments, the AG) office and the concerned offices of the Auditor General of Pakistan. At the federal level, it is envisaged that overall project management and monitoring will be the responsibility of the EPI unit within MONHSRC. Federal EPI cell will also be responsible for processing and submitting of withdrawal applications on behalf of all four provinces. Each provincial EPI cell will be responsible for independent program implementation, with coordination being provided by the federal body.

12. *Resources/Personnel*: The existing financial management team at federal EPI consists of four government officials headed by account officer. The FM team will be strengthened by hiring a FM Specialist within three (3) months of effectiveness, as per TORs agreed with the Bank. At present, provincial EPI cells have limited capacity of financial planning and analysis for management decision making. The FM services are provided by the Budget and Account section of DGHS office. A dedicated FM specialist will also be hired at each provincial EPI cell to strengthen the cell's FM capacity. Accountant General at the provincial level will undertake recording, accounting and reporting functions through government's FMIS and will be responsible for budget execution and monitoring.

13. *Budgeting*: The federal government will provide fund through PC-1 prepared for EPI cell under the development budget of MONHSRC. All four provinces will provide funding for the core project activities through separate PC-1 and will finance recurrent expenditure of immunization activities from non-development side allocation in the DOH budget using detailed object and functional classification prescribed in the Chart of Accounts. In case where district governments are involved, the district government will provide funds for corresponding activities from current side of the district health budget. Newly created DDO Codes/ Cost Centres for EPI will be used from the second financial year for budget preparation at the federal and provincial level.

14. The federal and provincial governments follow a detailed budget calendar and budget call circular including detailed instructions is circulated during the year. This calendar provides deadlines for all the steps involved to ensure that there is sufficient time to receive, review, discuss, and compile the inputs from all districts. The consolidated budget is prepared by the federal finance division and provincial finance departments for submission to the legislature.

15. *Accounting and Financial Reporting*: Accounting records for DLI component will be maintained using the government's FMIS and in accordance with the country accounting procedures and policies defined in the New Accounting Model (NAM). These policies and procedures are being progressively and consistently applied at the federal, provincial as well as district government levels. Use of NAM policies and procedures conforms to international standards and is acceptable to the Bank. For DA component, the Federal EPI Cell will manually maintain the following accounting records:

(a) Cash/ Bank Book – to record all cash/ bank receipts and payments
(b) General Ledger – to record all receipts and payments by object code
(c) Asset Register – to maintain up to date record of assets procured
(d) Invoice Register – to track payments
(e) Contract Register – to record all contract payments
(f) Vouchers for all receipts and payments

16. The system-generated accounting records and the manual records maintained by the Federal EPI Cell will be the basis for preparation of the EPI Budget Execution Reports, including program expenditures financed under the credit. The Project Financial Reports (interim and annual) will also be produced, showing the sources of project funds and their uses. The Project Financial Reports will take the form of biannual IFRs and Annual Financial Statements. The template for IFRs will be agreed during appraisal. Cash Basis IPAS will be used to prepare the Annual Financial Statements. Federal EPI will have primary responsibility for preparing and submitting financial reports to the Bank. IFRs will be submitted to the Bank within 45 days of the close of the six month period ending December 31 and June 30 each financial year.

17. *Internal Controls*: As with other government expenditure transactions, DLI Component payments under the project will be subject to the normal pre-audit verification at accounting offices before payments from the single treasury account are approved. Federal Component funds will be managed by the EPI Cell using the Designated Accounts. Majority of the expenditure under Federal Component will constitute monitoring, supervision and consulting services for data validation and will be expended using the Bank's procurement guidelines. Internal control activities for the project will at minimum include:

(a) ***Authorization and Approvals:*** For payments to be made from DA, the financial and administrative authority will be exercised in accordance with the approved delegation of powers.

(b) ***Verifications:*** For each payment the FM section will review that the payment claim is appropriately supported by documents, is in compliance with approved policies and has been approved by the competent authority.

(c) ***Segregation of Duties:*** The FM function will be independent of procurement and administration. There will be dual bank signatories, one of which will be from a unit other than FM.

(d) ***Physical Controls:*** The Federal EPI Cell will maintain a fixed assets register for assets procured from credit and grant proceeds. All assets will be tagged and periodically verified.

(e) ***Reconciliations:*** Expenditure reconciliation with the Accountant General and bank reconciliation will be carried out on a monthly basis. Any difference in the reconciliation will be reviewed and the reasons for the difference will be documented.

(f) ***Supervisory Controls:*** Monthly reconciliations with the Accountant General and the Bank, physical stock verifications reports and periodic financial reports will be reviewed by the Project Director.

18. *External Audit*: The annual financial statements of the program will be audited by the Auditor General of Pakistan (AGP). The audited financial statements will be submitted to the Bank within six months after the close of the financial year. The audit will be carried out in accordance with Financial Audit Manual (FAM), which is based on INTOSAI Auditing Standards and international best practices and is generally compliant with International Auditing Standards. The project level audit will involve multiple audit offices of the AGP and Federal EPI Cell will be responsible to coordinate with the auditors for timely initiation and completion of audit.

19. For each financial year closing on June 30, acceptable audited financial statements of the project along with Management Letter will be submitted to the Bank by December 31, i.e. within six months of the close of the financial year.

20. There are no overdue audit reports or unsettled ineligible expenditure in respect of the project implementing entities.

21. *Disbursement Arrangements*: The following table summarizes the project's disbursement arrangements.

Table 2: Disbursement Arrangements

Disbursement Categories	**Amount of Credit**	**Amount of Grant**	**%age of Expenditure to be Financed**	**Disbursement Cycle**	**Disbursement Condition**
(1) Eligible Expenditure Program ("EEP")	US$ 32 million	US$ 64 million	100%	Bi-Annual Reimbursement of eligible expenditure based on certification of DLIs achieved and expenditure reported in semi-annual IFRs	Achievement of DLI targets
(2) Goods, Non-Consulting Services, Consultants' Services, Incremental Operating Costs, Training and Workshops	US$ 18 million	US$ 36 million	100%	Bi-annual Advance to Designated Accounts	None
TOTAL	US$ 50 million	US$ 100 million			

22. Retroactive Financing of US$ ___ million under the credit and US$ ___ million under the grant is allowed from July 1st, 2014 till the date of signing of the financing agreement. Retroactive financing for procurable items is only allowed if items are procured in accordance with applicable Bank procurement guidelines/procedures

23. For Technical Assistance component, two segregated Designated Account (DA) – one for IDA Credit and the other for Grant - will be established in United States Dollars at the National Bank of Pakistan at the federal level. Disbursements will be report-based where advance equivalent to six months forecast will be provided and subsequent biannual Interim Financial Reports (IFRs) will be the basis of documentation of the expenditures. Subsequent IFRs will also provide forecast for the following six months, on the basis of which the amount of funds to be disbursed will be determined. However, the use of the designated account and Advance method will be available only when the issue of Lapsed Loan in the Pakistan portfolio is fully resolved.

24. The disbursements for Category 1 are conditional on the achievement of reform actions or results. These are identified as Disbursement Linked Indicators (DLIs). A certain amount of credit and grant proceeds has been allocated to each DLI, referred to as the DLI price, which is the amount that the government can claim as reimbursement against EEPs if that DLI has been achieved and verified. The price for each DLI has been agreed to as shown in Table 3 below.

Table 3: Pricing of DLIs

DLI	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	TOTAL
	US$ in Millions					
TOTAL						

For DLI Based Disbursements, the Bank will biannually disburse funds to the Federal Government Consolidated Fund - Account No. 1 (Non-Food) and the Consolidated Fund Account No. 1 (Non-Food) of each Provincial Government, consequent to the achievement and verification of the agreed DLIs. A one-time advance of US$___ will be provided upon project effectiveness against forecasted EEPs for the next one year. The advance will be subsequently documented against relevant actual EEPs conditional on achievement of DLIs. The Bank will reimburse eligible expenditures as reported in the biannual IFRs capped to the price of DLIs achieved. Disbursement from the credit and grant proceeds in US Dollars will be translated to Pakistani Rupees by the State Bank of Pakistan, and the local currency shall form the transaction basis for the operation's accounting and reporting.

25. Biannually, federal EPI cell will submit a Withdrawal Application duly signed by an authorized representative of EPI cell along with IFRs and DLI results report to the Bank for disbursements and documentation of expenditure. The template of Interim Financial Reports (IFRs) will be agreed during negotiations and will be used to report advances and actual project expenditure incurred against the eligible expenditure supported by the Bank under the program.

26. The Bank will disburse US$ 32 million IDA Credit and US$ 64 million grant against achievement of DLIs. For each bi-annum, the amount eligible for disbursement will be the product of the total number of DLIs achieved per the unitary DLI price. Where achievement of a DLI cannot be certified by the end of the fiscal year expected to be achieved, an amount equivalent to the unitary DLI price will be withheld. With respect to the amount withheld, the Bank will have full discretion to decide whether to partially release it, disburse it in full at a later day upon achievement of the DLI, cancel or reallocate it to another Disbursement Category. Following table presents an indicative disbursement schedule for DLI Based Disbursement:

Table 4:Indicative Disbursement Schedule – DLI-Based Disbursement

Performance & IFRs Period	No. of DLIs to be Achieved	Review by ICC and submission of DLI results report to the Bank along with IFR & WA	Verification of the results by the Bank	Discussion & Agreement on DLI results between the Bank and Government	Disbursement to Government	Amount to be Disbursed (US$)
	Advance	Effectiveness			Effectiveness – expected September	

					2015	
Sept – Dec, 2015	1	Jan 31, 2016	Feb 28, 2016	Mar 15, 2016	Mar 31, 2016	
Total Disbursement during FY 2016						**Million**
Jan – Jun, 2016	1	Jul 31, 2016	Aug 31, 2016	Sep 15, 2016	Sep 30, 2016	
Jul – Dec, 2016	2	Jan 31, 2017	Feb 28, 2017	Mar 15, 2017	Mar 31, 2017	
Total Disbursement during FY 2016-17						**Million**
Jan – Jun, 2017	1	Jul 31, 2017	Aug 31, 2017	Sep 15, 2017	Sep 30, 2017	
Jul – Dec, 2017	2	Jan 31, 2018	Feb 28, 2018	Mar 15, 2018	Mar 31, 2018	
Total Disbursement during FY 2017-18						**Million**
Jan – Jun, 2018	1	Jul 31, 2018	Aug 31, 2018	Sep 15, 2018	Sep 30, 2018	
Jul – Dec, 2018	2	Jan 31, 2019	Feb 28, 2019	Mar 15, 2019	Mar 31, 2019	
Total Disbursement during FY 2018-19						**Million**
Jan – Jun, 2019	1	Jul 31, 2019	Aug 31, 2019	Sep 15, 2019	Sep 30, 2019	
Jul – Dec, 2019	1	Jan 31, 2020	Feb 28, 2020	Mar 15, 2020	Mar 31, 2020	
Total Disbursement during FY 2019-20						**Million**
Jan – Jun, 2020	1	Jul 31, 2020	Aug 31, 2020	Sep 15, 2020	Sep 30, 2020	
Total Disbursement during FY 2020						**Million**

27. Expenditures that the Bank will reimburse upon achievement of DLIs are referred to as EEPs and are a part of the Provinces and Districts recurrent budget of the eligible activities in respect of EPI activities. These expenditures are clearly identifiable in the government budget, FMIS and the Chart of Accounts. The Bank funds would not be separately tracked and the Bank will accommodate withdrawal applications from the Credit as long as the overall expenditures eligible under the EEPs are more than or equal to the amount to be withdrawn from the Credit. A brief description of EEPs is provided below:

a. Description: Pay and allowances for employees of the Health Staff working on immunization at the districts in the provinces.
b. Oversight: The budget for pay and allowances for health staff working on immunization within each district is assigned to each department. Direct responsibility for pay and allowances lies with the Drawing and Disbursing Officer (DDO) where expenditures are incurred. Salaries are processed through the government's FMIS and are subject to overall payroll controls which are considered adequate. Amounts are transferred by the respective District Accounts Office to the personal bank accounts of employees. Few employees receive their salaries in cash through DDOs but efforts are being made to eliminate such cases.

Province	District	Budgetary Grant No.	Object Code & Description	Function Code & Description
Punjab	Attock	AK21C16	A01: Employee Related Expenses	07: Health
	Bhawal Nagar	BH21C16	A01: Employee Related Expenses	07: Health
	Bhukkar	BK21C16	A01: Employee Related Expenses	07: Health
	Bahawalpur	BR21C16	A01: Employee Related Expenses	07: Health
	Chakwal	CH21C16	A01: Employee Related Expenses	07: Health
	Chiniot	CT21C16	A01: Employee Related Expenses	07: Health
	D.G. Khan	DG21C16	A01: Employee Related Expenses	07: Health
	Faisalabad	FD21C16	A01: Employee Related Expenses	07: Health
	Gujranwala	GA21C16	A01: Employee Related Expenses	07: Health
	Gujrat	GT21C16	A01: Employee Related Expenses	07: Health
	Hafizabad	HF21C16	A01: Employee Related Expenses	07: Health
	Jhang	JG21C16	A01: Employee Related Expenses	07: Health
	Jhelum	JM21C16	A01: Employee Related Expenses	07: Health
	Khushab	KB21C16	A01: Employee Related Expenses	07: Health
	Kasoor	KS21C16	A01: Employee Related Expenses	07: Health
	Khaniwal	KW21C16	A01: Employee Related Expenses	07: Health
	Lodhran	LN21C16	A01: Employee Related Expenses	07: Health
	Lahore	LO21C16	A01: Employee Related Expenses	07: Health
	Layyah	LY21C16	A01: Employee Related Expenses	07: Health
	MandiBahudin	MB21C16	A01: Employee Related Expenses	07: Health
	MuzaffarGarh	MH21C16	A01: Employee Related Expenses	07: Health
	Mianwali	MI21C16	A01: Employee Related Expenses	07: Health
	Multan	MN21C16	A01: Employee Related Expenses	07: Health
	Nankana Sahib	NK21C16	A01: Employee Related Expenses	07: Health
	Narowal	NL21C16	A01: Employee Related Expenses	07: Health

Province	District	Budgetary Grant No.	Object Code & Description	Function Code & Description
	Okara	OK21C16	A01: Employee Related Expenses	07: Health
	Pak Patan	PK21C16	A01: Employee Related Expenses	07: Health
	Rawalpindi	RI21C16	A01: Employee Related Expenses	07: Health
	Rahim Yar Khan	RN21C16	A01: Employee Related Expenses	07: Health
	Rajanput	RP21C16	A01: Employee Related Expenses	07: Health
	Sheikhupura	SA21C16	A01: Employee Related Expenses	07: Health
	Sarghoda	SG21C16	A01: Employee Related Expenses	07: Health
	Sahiwal	SL21C16	A01: Employee Related Expenses	07: Health
	Sialko	ST21C16	A01: Employee Related Expenses	07: Health
	Toba Tek Singh	TS21C16	A01: Employee Related Expenses	07: Health
	Vehari	VR21C16	A01: Employee Related Expenses	07: Health
Sindh	Badin	BN21C25	A01: Employee Related Expenses	07: Health
	Dadu	DU21C25	A01: Employee Related Expenses	07: Health
	Ghotki	GH21C25	A01: Employee Related Expenses	07: Health
	Hyderabad	HD21C25	A01: Employee Related Expenses	07: Health
	Jacubabad	JD21C25	A01: Employee Related Expenses	07: Health
	Jamshoro	JS21C25	A01: Employee Related Expenses	07: Health
	Karachi	KA21C25	A01: Employee Related Expenses	07: Health
	Kashmore	KE21C25	A01: Employee Related Expenses	07: Health
	Khairpur	KP21C25	A01: Employee Related Expenses	07: Health
	Larkana	LA21C25	A01: Employee Related Expenses	07: Health
	Matiari	MQ21C25	A01: Employee Related Expenses	07: Health
	Mirpurkhas	MS21C25	A01: Employee Related Expenses	07: Health
	Mitthi	MT21C25	A01: Employee Related Expenses	07: Health
	NausheroFeroz	NF21C25	A01: Employee Related Expenses	07: Health
	Nawab Shah	NH21C25	A01: Employee Related	07: Health

Province	District	Budgetary Grant No.	Object Code & Description	Function Code & Description
			Expenses	
	ShahdadkotKambar	SD21C25	A01: Employee Related Expenses	07: Health
	Sukkur	SK21C25	A01: Employee Related Expenses	07: Health
	ShikarPur	SP21C25	A01: Employee Related Expenses	07: Health
	Sanghar	SR21C25	A01: Employee Related Expenses	07: Health
	Thatta	TA21C25	A01: Employee Related Expenses	07: Health
	Tandoallahyar	TD21C25	A01: Employee Related Expenses	07: Health
	Tando Muhammad Khan	TM21C25	A01: Employee Related Expenses	07: Health
	Umerkot	UK21C25	A01: Employee Related Expenses	07: Health
Khyber Pakhtunkhwa	Abbotabad	AD21C17	A01: Employee Related Expenses	07: Health
	Bunair	BD21C17	A01: Employee Related Expenses	07: Health
	Batagram	BM21C17	A01: Employee Related Expenses	07: Health
	Bannu	BU21C17	A01: Employee Related Expenses	07: Health
	Charsada	CA21C17	A01: Employee Related Expenses	07: Health
	Chitral	CL21C17	A01: Employee Related Expenses	07: Health
	Dir Lower	DA21C17	A01: Employee Related Expenses	07: Health
	Dera Ismail Khan	DI21C17	A01: Employee Related Expenses	07: Health
	Dir Upper	DP21C17	A01: Employee Related Expenses	07: Health
	Hungu	HG21C17	A01: Employee Related Expenses	07: Health
	Haripur	HR21C17	A01: Employee Related Expenses	07: Health
	Kohistan	KD21C17	A01: Employee Related Expenses	07: Health
	Karrak	KK21C17	A01: Employee Related Expenses	07: Health
	Kohat	KT21C17	A01: Employee Related Expenses	07: Health
	Lakki	LK21C17	A01: Employee Related Expenses	07: Health
	Manshera	MA21C17	A01: Employee Related Expenses	07: Health
	Malakan	MD21C17	A01: Employee Related Expenses	07: Health

Province	District	Budgetary Grant No.	Object Code & Description	Function Code & Description
	Mardan	MR21C17	A01: Employee Related Expenses	07: Health
	Nowshehra	NR21C17	A01: Employee Related Expenses	07: Health
	Peshawar	PR21C17	A01: Employee Related Expenses	07: Health
	Shangla	SH21C17	A01: Employee Related Expenses	07: Health
	Swabi	SU21C17	A01: Employee Related Expenses	07: Health
	Swat	SW21C17	A01: Employee Related Expenses	07: Health
	Tor Ghar	TG21C17	A01: Employee Related Expenses	07: Health
	Tank	TK21C17	A01: Employee Related Expenses	07: Health
Balochistan		BC211018	A01: Employee Related Expenses	07: Health

III. Procurement

19. Component 1, 2, and 3 of the project will be financed using a results-based DLI approach and EEPs related to 'non-procurable' expenditures and thus may not include activities that may require following a procurement process. However Component 4 of the proposed project will be carried out in accordance with the World Bank's guidelines on procurement and employment of Consultants[19], as well as the provisions stipulated in the Financing Agreement. Component 4 procurements of TA - which will support associated activities for achievement of DLIs - would largely cover the selection of consultancies, both firms and individuals, besides some goods. A detailed capacity review of Federal and provincial EPI Cells was undertaken which focused on assessment of the capacity of the agency to carry out the different phases of procurement. The assessment looked into the organizational aspects, skills of the staff, quality and adequacy of supporting and control systems, and suitability of the laws, rules and regulations applicable to the agency. As a result of the project implementation the entity shall have an extended exposure to the Bank's and other procurement systems which would in turn assist in enhancement of procurement function will result in cost savings: (i) by re-examining requirements, and where appropriate challenging demand at source, so as to avoid procurement in excess of needs; (ii) reducing end of life disposal costs; visible, efficient and trustworthy supply chain operations. The combined effect of these measures will supplement the financial sustainability of vaccine procurement. Following are the details of the assessment of the Federal EPI Cell, including a summary of the mitigation measures proposed.

20. The Federal Expanded Program on Immunization (EPI) Cell will be responsible for carrying out the procurements under the TA component of project. Federal EPI is a permanent establishment working as an administrative unit of the Ministry of National Health Services, Regulations and Coordination (MONHSRC). It has a documented legacy of independently performing the procurement function for various vaccines and associated items and administrative procurement through Public Procurement Rules 2004 (PPR-2004). The National Program Manager is vested with some financial powers; delegated by the Principal Accounting Officer to perform support the

[19] Guidelines: Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits and Grants January 2011," "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers January 2011.

functions of procurement. Presently EPI Cell has staffing capacity constraints as the key procurement staff is not on EPI's regular payroll but supported through GAVI. The EPI Cell has taken commendable steps by initiating, *inter alia,* recruitment of professional regular procurement staff in regular staff cadre.

21. *Procurement Cycle Management:*On annual basis, the entity[20] runs a full-cycle National Competitive Bidding (NCB)for procurement of vaccines and ancillary items. Thus the entity has extensive exposure to large value and volume procurement. Based on the quality of documentation, notwithstanding the absence of a dedicated and trained procurement resource, the procurement cycle management was determined to be adequate for the purposes of procurement envisaged under NISP to be consistent with World Bank standards adequate.

22. *Procurement Planning:* A realistic procurement plan is prepared as a matter of course in the agency based on the requirements, justifiable quantities, realistic market prices, timing of delivery, storage and approved formally by the NPM. The entity sends Procurement Plan (PP) to Public Procurement Regulatory Authority PPRA in July-Aug for publication in a freely accessible website. The PP of 2013 appeared to be free from all splitting and other violations. However there was no evidence whether the PP is also put through checks for collusion or other red flags. The World Bank could assist the entity in such reviews as the supplier base (notwithstanding other factors) has continued to remain small and has not substantively changed over a long period of time.

23. *Advertisement, Pre-bid/proposal Conference and Bid/Proposal Submission:* Bids/proposals are consistently advertised in national daily newspapers and uploaded on PPRA websites and are easily accessible to potential bidders. The publications are in conformity with principles of the Bank's Guidelines. Timely and non-ambiguous clarifications to bidding/proposal documents are provided to all potential bidders. Mostly bidders attend in person - otherwise bidders send email/facsimiles which are responded to. The entity does not hold a pre-bid/proposal conference but involves potential suppliers at the planning stage. The bid documents are made available to all interested bidders without prescribing any pre-conditions. The number of bids received has been reasonable as compared to the number of bidding document purchased/number of pre-qualified bids and the bid sold and bid received is consistent.

24. *Bidding Documents:* Bidding documents containing instructions to bidders, pre-qualification, shortlisting, and evaluation criteria along with a very elementary draft contract agreement were developed in 2008 and are still in use. Presently a scoring approach on a two envelope method is the main approach for procurement of syringes and vaccines. For off-the-shelf items where technical specifications and qualification criteria can be defined in most granular detail, the pass/fail criteria would ensure transparency, whereas the current scoring method with two temporally apart technical and financial proposals may compromise the integrity of process.

25. *Evaluation and Award of Contract:* The Secretary of MONHSRC has constituted a Procurement Committee and a Technical Evaluation Committee with very clearly defined Terms of Reference. However the members are largely drawn from the ministry or its controlled subsidiaries and do not have "independent eyes and ears". The members may have acquired skills through learning but the additional presence of an area specialist would probably be helpful. Evaluations are well documented and contracts are awarded in time and are broadly consistent with the procurement guidelines.

[20] The term "entity" refers to the Federal EPI cell with MONHSRC – which is still managing procurement on behalf of subnational governments by following the procurement processes mandated by Federal Government's Public Procurement Rules which were enunciated in June 2004

26. *Review of Procurement Decisions and Resolution of Complaints:* Complaints are reported to be rare however redress is provided through provisions of PPR-2004 and some guidance is also provided in Standard Bidding Document (SBD). The complaint management system appeared to be lacking a formal structure and would need some support for improvement.

27. *Contract Management and Administration:* Adequate mechanisms are in place for procurement and/or contract monitoring. The supplies and payments generally follow the time periods agreed in contract agreement. There was no evidence of downgrading specifications, or compromise on delivery schedule or excessive changes in scope or price.

28. *Procurement Oversight:* The procurement decisions are regularly reviewed by Auditor General of Pakistan. Various reports are regularly submitted to National Accountability Bureau and Public Procurement Regulatory Authority. Transparency International also maintains a regular horizontal fiduciary oversight. Additionally the controlling ministry, in performing the principal accounting function, incrementally reviews all procurement and contract administration decisions. It also complies with the government's regulations for Code of Conduct and Anti-Corruption. The accountability for procurement decisions is well documented in the notified instructions - however these are not freely accessible to all of the staff of EPI due to the absence of any intranet facility. However the entity could benefit from further advice from the World Bank, including relevant technical literature to further improve in this key area.

29. *Record-keeping:* Based on a walkthrough of a completed procurement cycle it was determined that record of proceedings was available. However with an overall improvement in the procurement capacity of EPI, the completeness of procurement records and files would be better assured. In addition overall availability of data on numbers, types, values and dates of contracts awarded and names of awardees, will improve.

Summary of Proposed Mitigation Measures

Issues		**Action**	**Timeline**	**Responsibility**
(a)	Empowerment	Delegation of administrative and financial powers to National Program Manager	By Negotiation	MoF and MONHSRC
(b)	Improving Procurement Planning & Monitoring	Bank will provide hands on support for adequate planning and monitoring of Procurement Plan including use of simple IT tools	By Negotiation	Bank and EPI
(c).	Upfront Actions	Hiring/identification of respective Procurement Specialist	By Negotiation	EPI
(d)	Procedural clarity	Development of Procurement Operations Manual	By Negotiation	EPI and Bank
(c)	Bid Evaluation Capacity	(i) Providing detailed SOPs and workflows in POM (ii)Training	(i) By Negotiation (ii) Ongoing	EPI and Bank
(d)	Market Constraints	(i) Adequate packaging (ii) Wide circulation	(i) By Negotiation (ii) Ongoing	EPI with Bank's assistance

Issues		Action	Timeline	Responsibility
(e)	Transparency	(i) Functional web site (ii) Intranet (iii) Disclosure of procurement information on website (iv) Procurement Clinics with focus on detecting red flags	After effectiveness As required	EPI
(f)	Complaints	Independent complaint redressal mechanism	After effectiveness	MONHSRC

IV: Environmental and Social (including safeguards)

30. The project has prepared, in accordance with the OP 4.01, an environmental and social management plan (ESMP) to address the potentially negative environmental and social risks and impacts of the proposed activities. A summary of the environmental and social risks identified in the ESMP and their mitigation is presented in the table below.

<table>
<tr><th>Project Activities</th><th>Significant Aspects</th><th>Mitigation Measures</th></tr>
<tr><td rowspan="3">Storage, administration, constitution, reconstitution and temperature control of vaccines</td><td rowspan="3">Ineffective vaccines causing epidemic of the respective disease (e.g. measles, Hepatitis B), and/or increased occurrence of the disease leading to increased (child) mortality and morbidity (e.g. measles, Hepatitis B, Tetanus, TB)</td><td>Use of revised National EPI Policy and Strategic Guidelines for vaccine administration, management (including procurement, quality and supply) and storage
Provision of trainings on vaccine administration and management to be provided to district health staffs including, but not limited to accredited EPI service providers including vaccinators, nurses, dispensers, Lady Health Visitors (LHVs), Medical Technicians (MT), Female Medical Technicians (FMT), mid-wives, Lady Heal</td></tr>
<tr><td>Lack of awareness on environmental and health issues hence created (project team, staff at the project facilities, project partners, NGOs, patients and others).</td><td>Providing trainings to all relevant stakeholders as per their roles and responsibilities in the process of immunization, on injection safety and disposal.</td></tr>
<tr><td>Medical waste generated as a result of immunization campaigns</td><td>Waste generated from the facilities at the district and sub district levels.</td><td>Use of the Hospital Waste Management Rules 2005 and National EPI Policy and Strategic Guidelines for proper waste management.
Using personal protective equipment (PPE) while collecting and disposing of waste
Provision of information posters at waste collection and storage sites indicating safe handling and disposal
All containers, safety boxes, and waste bags to be</td></tr>
</table>

Project Activities	Significant Aspects	Mitigation Measures		
				collected and sent for pit burial[21]Conducting monitoring of waste handling, storage and disposal to ensure proper implementation of waste management system.
			Lack of resources for waste management.	Provision of WHO pre-qualified Auto-disable (AD) syringes, safety boxes, and other necessary equipment/materials needed for proper waste management/disposal. Construction of safe disposal burying pits
			Lack of awareness among the project staff, district health authorities and facilities staff, healthcare extension workers, and others.	Development of awareness material Conducting trainings of the project staff and district health authorities and facilities staff, healthcare extension workers on hospital waste management as per their roles and responsibilities. Ensure safe disposal by burying the waste into pits
		Possible Adverse Events Following Immunization (AEFI)	Continued risk of infections, denial by communities to continue with immunization, and/or increased child morbidity	Development of efficient AEFI reporting and surveillance system, as per guidelines of the revised National EPI Policy and Strategic Guidelines, and system for recording response following an AEFI. Conducting trainings of the project staff and health care extension workers on reporting and managing AEFIs.
		Capacity to minimize environmental and social risks associated with the	Untrained human resource	Providing appropriate trainings to all stakeholders congruent with their roles and responsibilities in the

[21] As per current practice, pit burning and burial may continue till the end of first year of NISP. After that the ESMP will be revisited in accordance to the recommendations of the District Action Plans for Immunization Waste Management.

<table>
<tr><th>Project Activities</th><th>Significant Aspects</th><th>Mitigation Measures</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>above three activities</td><td></td><td>project with due consideration of sustainability of project components after its completion.</td></tr>
</table>
Handling and Disposal of Wastes for Vaccine Extension Workers at Community level
<table>
<tr><th>Type of Waste</th><th>Handling of Material Prior to Use</th><th>Handling of Used Material/Waste</th><th>Storage/Disinfectio of Waste</th></tr>
<tr><td>Used syringes,
Used gloves</td><td>Extension workers/field staff should:
Always use WHO pre-qualified AD syringes and ensure non-reuse
Avoid accidental pricking.
Avoid leaving unpacked syringes/sharps unguarded.

In-charge should:
Provide posters at needle exchange places indicating the methods of use and cleansing and disposal of waste.</td><td>Collect the sharp waste generated in dedicated safety boxes for safe disposal.</td><td>Wear non-pierceab gloves when handlir the sharps.
Transfer sharps puncture-resistant safety boxes.
Disinfect (him/herse & used equipment) per recommende guidelines ar procedure provide by NISP.</td></tr>
</table>
Handling and Disposal of Wastes for Tertiary (District/Tehsil) level Healthcare Facilities (BHUs/RHCs)
<table>
<tr><th>Type of Waste</th><th>Handling of Material Prior to Use</th><th>Handling of Used Material/Waste</th><th>Storage/Disinfection of Waste</th><th>Final Disposal</th></tr>
</table>
</td></tr>
</table>

[22] As per current practice, pit burning and burial may continue till the end of first year of NISP. After that the ESMP will be revisited in accordance to the recommendations of the District Action Plans for Immunization Waste Management.

Project Activities	Significant Aspects	Mitigation Measures

Sharps Syringes Gloves Cotton Bandages Cloths Other stuff used in vaccination procedures	Always use WHO pre-qualified AD syringes and ensure non-reuse Avoid accidental pricking Avoid leaving unpacked syringes/sharps unguarded Provide posters and guidelines at visible places demonstrating recommended methods of material usage and disposal of waste	Collect the sharp waste generated in dedicated safety boxes for safe disposal. Collect used gloves, masks, waste cotton, bandages, and other waste contaminated with child's fluids in dedicated bags	Wear non-pierce able gloves when handling the sharps and needle containers. Transfer sharps in puncture-resistant safety boxes Collect and store all infectious materials in separate dedicated bags. Disinfect (him/herself & used equipment) as per recommended guidelines and procedure provided by NISP.	All containers, safety boxes, and waste bags to be collected, buried and burnt using a dedicated pit

31. **Institutional arrangements for ESMP implementation**. Overall coordination and implementation of ESMP will be the responsibility of National Program Manager, EPI who will designate an ESM Focal Point (FP) to coordinate on his/her behalf. Provincial EPI Managers will also designate similar ESM Focal Points at each province level, who will provide support to the federal level ESM FP. Each partner hospital/tertiary healthcare units will also nominate a focal person to ensure implementation of ESMP.

32. The primary responsibilities of the national level ESM FP will be:

- Effective implementation of ESMP.
- Ensure that cold chain equipment, AD syringes, safety boxes, waste management stuff and disinfectant equipment/chemicals are being made available to the provinces
- Coordinate with focal person of partner hospital/tertiary healthcare unit to ensure implementation of ESMP.
- Conduct the monitoring tasks and maintain all reports and records.
- Coordinate and ensure development of training material and implement of trainings sessions.
- Coordinate and ensure development of awareness material
- Conduct environmental compliance audit for the program

<table>
<tr><th>Project Activities</th><th>Significant Aspects</th><th>Mitigation Measures</th></tr>
<tr><td></td><td></td><td>

Commission annual third party validations of partner hospital/tertiary healthcare unit
Prepare Quarterly Progress Reports (QPR) for the entire project.

33. The responsibilities of the provincial level ESM FP will be as follows:

Coordinate with focal person of partner hospital/tertiary healthcare unit to ensure implementation of ESMP.
Coordinate with focal person of partner hospital/tertiary healthcare unit to ensure availability of cold chain equipment, AD syringes, safety boxes, waste management material and disinfectant equipment/chemicals
Conduct monitoring tasks in coordination with national level FP and submit reports to National Program Manager, EPI.
Implement training sessions in provinces
Facilitate and coordinate third party validations in the province.
Prepare provincial QPRs

34. The responsibilities of the partner hospital/tertiary healthcare unit will be as follows:

Identify a focal person to ensure implementation of ESMP
Maintain the record of use of all recommended equipment including AD syringes, safety boxes, waste management stuff and disinfectant equipment/chemicals
Prepare Monthly Immunization Waste Management Reports (MIWMR)
Tally the records with the permanent registers maintained by the vaccinators
Conduct monitoring tasks as assigned under Table 4 and submit reports to relevant line authorities as per ESMP.
Ensure implementation of training session in coordination with national and provincial EPI offices.
Coordinate with relevant national and provincial managers for environmental monitoring and reporting.
Prepare QPR and MIWMR for the facility

35. In order to ensure effective implementation of the mitigation measures tabulated above, ESMP monitoring will be carried out in accordance with the following arrangement:
ESMP Monitoring
<table>
<tr><th></th><th>Monitoring parameters</th><th>Monitoring Tool</th><th>Frequency of Monitoring</th><th>Reporting Frequency</th></tr>
</table>
</td></tr>
</table>

Project Activities	Significant Aspects	Mitigation Measures					
		1	Vaccine storage and cold chain equipment management	Temperature Charts Vaccine Vial Monitors (used to monitor potency of vaccines)	Daily monitoring at the facility level	Monthly reporting of district wide assessment of vaccine stores	Cold Technician, Surveillance Coordinator Provincial Manager
		2.	Availability and use of AD Syringes	Inventory and stock lists available at static EPI Centers at UC level (number of AD syringes issued per vaccinator) EPI Tally Sheet (to tally the number of syringes used versus total vaccinated) Daily and Permanent Register maintained by Vaccinators at UC level (to tally the number of syringes used versus total vaccinated) Immunization Performance Reports (IPR)	Daily at the UC level Monthly at the District Level	Daily at the UC level Monthly at the district level (IPR)	Vaccinators District Surv Coordinator charge Facility
		3.	Availability and use of Safety boxes	Inventory and stock lists available at static EPI Centers at UC level (number of safety boxes issued per vaccinator) Immunization Performance Reports (IPR) Quantities of safety boxes received per health facility (numbers to be recorded Health Facility Waste Management Plan[23])	Daily at the UC level Monthly at the District Level	Daily at the UC level Monthly at the district level (IPR)	Vaccinators District Surv Coordinator charge Facility

[23] Hospital Waste Management Plan is required to be developed by each health care facility as per requirements of Hospital Waste Management Rules, 2005, Government of Pakistan

Project Activities	Significant Aspects	Mitigation Measures

4.	Immunization waste disposal including sharps and safety boxes	Timetables and activity sheets describing collection of waste, its quantities and disposal as per Health Facility Waste Management Plan	Weekly	Weekly	Waste Mana Officer / Ope the waste facility
5.	Possible AEFI reports and response	AEFI entries in the Permanent Register at the UC level AEFI Surveillance Reports at the district and provincial level	Daily at the UC level Weekly at the district and provincial levels	Bi weekly basis	In Healthcare (DHQH/BHU District Surv Coordinator, Provincial Manager
9.	Training sessions	Training Plans Training workshop reports Training Modules Attendance Sheets	Bi Annually	Bi Annually	Provincial Manager/Nati Program M EPI

V: Monitoring & Evaluation

36. The EPI Programs at the Federal and Provincial levels face an array of challenges to fully functionalize a results-based culture, which requires an effective monitoring and evaluation (M&E) system. The key areas to strengthen M&E include: Data quality, On-line reporting, Data validation, Surveillance, LQAS, Regular dissemination of results to the public and the media for accountability, and Third Party Evaluation. Currently the monitoring of routine EPI services by the province and district is weak and almost non-existent. No structured approach is followed to monitor the field activities, and feedback is not very effective. The existing MIS of the EPI although timely is lacking in terms of reliability and validity usually in the form of over reporting and lack of internal consistency. At present the data is generated by the vaccinators in the course of fieldwork and is aggregated at District level from where it is sent to the provincial directorate in the first week of the next month. At the provincial directorate the data is aggregated for the whole province and cumulative coverage figures are generated. The feedback system is currently not functioning.

37. There is a need to review and revise the existing micro plans, data reporting systems and analysis of the data to ensure an acceptable level of quality within the reports generated by the EPI cells. With the assistance of technological advancements, (i.e. android solutions, GPRS Tracking systems) live data will flow from the lower to the higher levels helping in timely compliance of data reporting and in efficient area mapping of the catchment area for micro-planning exercise. These tools have been successfully applied in the Polio Eradication Program and elsewhere.

Project Activities	Significant Aspects	Mitigation Measures
		38. At present there is inadequate capacity to manage vaccine logistics and cold chain effectively, and data for decision making on vaccine supply management is very limited, resulting in virtually no visibility into vaccine supply chain performance below the national level. With the introduction of new vaccines into the country the costs have escalated significantly requiring that there is an effective monitoring system at all levels. In recognition of the challenges with vaccine management, the federal and provincial governments have identified the need for a web-based Vaccine Logistics Management System (vLMIS) as a priority for mitigating poor data visibility challenges across the supply chain. An effective and sustainable vaccine vLMIS will ensure adequate quality and quantities of vaccines are available at the service delivery point and will give access to demand forecasting, capacity planning, analysis and modeling based on consumption; accurate, timely and routine consumption and stock status data; and real-time supply chain management capabilities covering from point of origin to point of consumption throughout the logistics cycle. The national development of this system is through the USAID DELIVER program, supporting the EPI Coordination and Planning Resource Centre. This will be replicated at the provincial levels. The main objectives of the Resource Centre are: • Support hosting of web-based LMIS applications for health commodities logistics data in a central repository and to keep servers up and running 24x7 to serve all provincial & regional health and population departments; • Liaison and coordination with all provinces and regions for all EPI matters and implementation of web-based vaccine LMIS up to Union Council level; and • Support the provinces and regions for improving vaccine and cold chain logistics management system across the country. 39. The vLMIS has been developed and is being tested in collaboration with federal, provincial and district governments and development partners. It has been launched in 54 prioritized and high risk districts of Pakistan and later will be extended to all districts of the country by year 2 of implementation. 40. Data quality is a major issue in the program with little or no credence given to the administrative data reported by the program even by the program itself, thus there is a need to substantially overhaul the data reporting systems and consolidation and analysis of the data to ensure an acceptable level of quality within the reports. At present there is a discrepancy in program reported data and the survey data due to lack of a proper MIS, with limited monitoring and oversight by the EPI Cell and EDO(H) s/DSVs. This will be addressed through establishment of automated MIS; validation by the District Health office by having LQAS sampling of at least 30% of the Union councils every month by the DSV, ASV/TSV and district health managers. Regular assessment of the data quality at different levels using the standard WHO Data Quality Self-assessment tool will be used to identify the gaps in the routine immunization data monitoring and reporting system. Information will be generated through analysis of the online reports submitted through the

Project Activities	Significant Aspects	Mitigation Measures
		monitoring systems and surveys. For the provincial level analysis of data quality, the following surveys will be compared for validation: a) Concurrence between LQAS, b) LQAS and Third party (district and province), c) Administrative data and third party, d) Administrative data, vLMIS and LQAS. This information would be widely shared through feedback newsletters, web updates, press releases and news updates. The feedback information would also importantly inform the provincial review meetings. Collated data would also be disseminated locally and nationally for the purposes of advocacy and to generate political attention and motivation for program improvement. The feedback reports would highlight the achievements of the good performing districts and UCs to improve staff motivation. The data generated through the monthly reports will also be analyzed at the district level and the analysis report reviewed by the District Review Committee. 41. The capacity for surveillance is to be greatly enhanced, with the function taken up by provinces/regions and the Federal EPI cell providing technical and logistic support. Similarly the provinces would report surveillance data to the federal EPI cell who would collate such data on monthly basis. (Zero report included). In order to strengthen disease surveillance in the country, the national core capacities for surveillance and outbreak response, will be strengthened to implement all surveillance systems. The goal of EPI surveillance activities is a well-functioning and sustained EPI and vaccine preventable disease (VPD) reporting system in 3 years to ensure VPD surveillance, online reporting and response. Currently, the detailed case information are arranged at higher level compilation and reported by age group and immunization status for acute flaccid paralysis (AFP) which is running /financed by WHO. 42. A monthly AEFI (Adverse Events following Immunization) surveillance system was introduced to Pakistan as a separate system and needs to be integrated and strengthened. The EPI reporting system collects data from basic health unit, rural health centers, Tehsil (sub district) hospitals, district hospital and some teaching hospitals. The Adverse Events Following Immunization (AEFI) data will be monitored at district level and by the facility in-charge. At the provincial level it will be reviewed by the epidemiologist. Initial training has been conducted and steps to integrate AEFI and VPD reporting into the regular reporting system will be a mainstay of the assessment of immunization service delivery. Online reporting will be available in the third year of implementation. 43. The Federal EPI cell will be responsible to arrange for the independent 3rd party evaluation for the program. A panel design set-up on quarterly basis (25% districts each time) will be put in place for the purposes of assessment of immunization coverage in a province across all districts using a 30 cluster method. The results will form the basis for performance based bonuses to the staff of the program at the Union Council/district level and will inform achievement of the disbursement linked indicators at the provincial level. The Federal and the Provincial EPI cells will prepare a semiannual DLI Results Report (the format of the DLI results report to be agreed with the Bank) for the previous six months, ending December and June of each year. This report will be shared with the bank by the end of

Project Activities	Significant Aspects	Mitigation Measures
		January and July for the Bank's biannual implementation review. th Workers (LHWs) and Medical Doctors
Use of syringes for immunization	Sharp waste (environmental hazard) generated due to immunization campaigns leading to increased risks of patient to patient infections as well as immunization staff safety	Ensure use of WHO pre-qualified Auto-Disable (AD) syringes for conducting vaccination. Using personal protective equipment (PPE) while handling sharps Provision of information posters at needle exchange places indicating safe handling Collecting the sharp waste generated during the immunization in dedicated safety boxes for safe disposal. Using pit[24] burial for all sharp waste generated
	Lack of resources for safe disposal of sharps.	Procuring WHO pre-qualified Auto-Disable (AD) syringes and safety boxes

[24] Pits should ideally be located at places away from the reach of general public especially children.

Annexure-III
Program description

Background

EPI was initially launched as a pilot in major urban areas from 1976-78. In 1978 the program was initiated across the country starting from all district headquarters using static centers with gradual expansion into rural areas. An evaluation in 1982 exposed weaknesses in the static center only approach and the program was redesigned and launched as a component of the Accelerated Health Program (AHP) which included control of diarrheal diseases and training of traditional birth attendants as the other two components. In AHP the service delivery model was changed to outreach which is the same mode which persists today. The AHP was evaluated in 1984 by an International commission and declared successful. EPI has since then continued with essentially the same human resource and management structures.

The requirement for having a specific project to support the immunization program has been established due several critical factors: firstly, the design of the project has not been reviewed and new technologies have not been adopted over time, secondly the program has so far not met its original objectives of achieving 80% plus immunization for all children (as evinced by the recent outbreaks and consequent deaths of children due to measles) and thirdly, so far the program has not been able to achieve polio eradication – a high priority goal for Pakistan. To further complicate the situation the 18th constitutional amendment has increased the responsibility of the provinces for the health sector and as such new capacities and potentially new structures need to be created to enable the provinces to carry out these devolved responsibilities.

The current National Immunization Support Program (NISP) is designed as a one off management and structural reform of EPI particularly addressing its management and accountability. It will revamp the infrastructure, review and reorganize the management structures, review the human resource requirements and adjust accordingly and streamline the reporting mechanisms to enable real-time reporting of data as well as enhance analytic capacities to inform program management and policy.

Goal:
The overall goal of the project is to contribute **"**To reduce the morbidity and mortality due to Vaccine Preventable Diseases (VPDs) in children under 5 years and pregnant women".

Project Specific Objective
The specific objective of the project is "*to increase the equitable coverage and quality of services for immunization against vaccine preventable childhood illness - including poliomyelitis - in Pakistan"*

Key Performance Indicators:
The measurement of the success of meeting of the objective will be done through the authentic data collection on the basis of these key program indicators: percentage of children fully immunized between 12-23 months disaggregated by gender, income, province and district, revised computerized UC level micro plans available for UCs at district and provincial level, percentage of Union Councils assessed for validity are cleared (80% age appropriate vaccination), districts reporting on vLMIS with at least 80% timeliness

&completeness, online surveillance including zero reporting for VPD & AEFI system for Health facilities within district, proportion of DHOs have attended MLM courses, percentage of functional cold chain equipment as per specifications at ALL health facility levels, detailed supervisory plans available for all district supervisors at the provincial level, percentage of online supervisory monitoring reports submitted to higher level and percentage increase in proportion of parents retaining immunization card, increase in expenditure on public awareness campaigns through electronic media disaggregated by provinces, percentage increase in number of parents with children under 1 year of age can state the date for next immunization.

Program Components

The project during the five years will focus on the following three components 1) Strengthening Management, Governance and Stewardship Functions with objective a) to strengthen the management capacity (including; information management, procurement & logistics, planning, research) of the and provincial EPI cells for effective implementation of immunization activities b) to establish the technical frameworks including policy, standard operating procedures, guidelines, physical standards, for effective coordination and involvement of all stakeholders for immunization c) to strengthen and enhance coordination at all levels including community based workers, private sector, CSOs/NGOs and line departments d) to improve performance management through introducing a system of accountability and incentives for better performance e) to develop and introduce a robust M&E mechanism, including annual independent 3rd party monitoring and evaluations and f) to establish functional and effective surveillance systems for Vaccine Preventable Diseases and Adverse Events Following Immunization. The outcomes of this component will be evidence based Annual and Monthly plans, dissemination of analytic and administrative reports, better coordination amongst all stakeholders, enhanced use of Technology based systems to improve management functions, timely reports and feedback at all levels, scientific evidence of the status of routine immunization, functional VPD Surveillance and AEFI systems, waste Management and injection safety and annual award ceremony recognizing high achievers.

2) Service Delivery improving with objective to a) increase access and availability of EPI services to the communities including urban and hard to reach areas b) improve human resource management and ensure equitable distribution c) strengthen supply chain management and ensure supply of vaccines at delivery points d) implement enhanced online micro-plans at the UC level e) ensure adequate non salary resources for effective program implementation and f) reorganize the supervisory systems for EPI. The outcomes of this component will be the detailed micro-plans with clearly defined catchment populations and responsibilities, appropriately stored vaccines and other related supplies available, adequate skilled human resource available for immunization and private sector and civil society organization involvement in service delivery.

3) Demand side interventions with objective to a) empower communities for accessing immunization services through active involvement of CSO, LHWs and CMWS, religious leaders and the private practitioners b) promote positive behaviors for acceptance and seeking of immunization services using an adequate mix of interventions and c) introduce innovative demand creation strategies for poor families through **voucher scheme (Annexure-11)** and evidence based high level advocacy for Immunization service delivery and financing. The outcomes of this component will be the Increased service delivery at fixed sites due to change in health seeking behaviors, Increase in demand and utilization of EPI services by the

communities, trials of demand side innovation including; voucher scheme for immunization and incentives for community mobilization and health workers, school based interventions, etc., enhanced media coverage of positive stories regarding Immunization and availability of a menu of locally proven interventions for improving demand behaviors in the population.

Federal and provincial coordination mechanism

The program will be rigorously monitored by the government and development partners[25]and civil society organizations. The Federal EPI Cell shall arrange for bi-annual review meetings with participation of provinces, federating units and development partners to assess program performance against possible milestones and agreed targets and address vulnerable areas for improvements.

There will be quarterly review meetings at provincial level formalized as a provincial monitoring and technical committee chaired by the Secretary Health to evaluate the routine and polio eradication, measles and neo-natal elimination performance in the province. The oversight by provincial committees will be supplemented by monthly review meetings held at the district level.

ANational EPI Council will be established which includes Federal EPI Manager, Provincial Program Managers and Federating Managers; and its functions will include quarterly review meetings for building consensus on decisions, resource allocation, policy review and setting guidelines, decisions on new vaccines including research projects informing new vaccine introduction, campaign planning & review and resource mobilization.

The Council at Federal level will be responsible for national standard setting, monitoring, consolidation of plans, reports, surveillance, logistics data, data analysis, vaccine reviews, trainings (development of updated modules and manuals, guidelines), review meetings, advocacy, coordination (development partners, international and interprovincial), technical support, operational research, litigations and national coverage surveys)

Similarly monitoring and evaluation mechanism will consist of desk based work and will be carried out primarily by the provinces and district. The activities will mainly consist of vaccine utilization versus reported coverage, trend of immunization in the UC, work performed compared to planned activities during campaign, reported coverage versus supervisory reports from a) district supervisors, and b) provincial supervisors, administrative reports versus evaluated coverage, third party reports, other national regional surveys. During these meetings the latest technological approaches which have been successfully applied in some areas of the country will be more broadly introduced.

An effective and sustainable vaccine logistics management information system (vLMIS) will ensure adequate quality and quantities of vaccines are available at the service delivery point. The internal monitoring of the routine immunization activities will be complimented and validated annually by independent 3rd party monitoring to be conducted by firms hired on competitive basis by the federal EPI cell.

[25]Development partners include Technical Agencies: World HealthOrganization (WHO), UNICEF, as well as Bilateral Financiers, UnitedStatesAgency for InternationalDevelopment (USAID), Department for Foreign Affairs and Trade (DFAT) Australia, Japanese InternationalCooperationAgency (JICA), Department for International Development (DFID) United Kingdom, and Multilateral partners GAVI, Bill and Melinda Gates Foundation, and the World Bank

Implementation Arrangements

The provincial Expanded Program for Immunization (EPI) cell will be responsible for the program implementation at districts level. It is envisaged that overall project management and monitoring will be the responsibility of the provincial EPI.

Annexure-IV

Governance and Management Reforms, Strengthening Management and Provincial Coordination

The provincial EPI cell will ensure their presence and facilitate the holding of structured bi-annual program review at district level. There will be notified Committees within the departments of health. The Provincial EPI Cells will ensure that these committees are convened on a regular basis (at least bi annually) and disseminate the minutes on their websites. These committees will also review the physical and financial progress as well as annual work plans including procurement and training plans. Bi-annual review meetings of provincial coordination committee chaired by Secretary Health along with monthly review meetings at district level for the purpose of monitoring, supervision, planning, reporting, data analysis, HR management, trainings, coordination, data validation etc.

District Coordination

The provincial EPI Cells shall ensure that quarterly coordination meetings are held at the district level with representation from all sections of the health department as well as relevant officials from the line departments. The minutes of these meetings shall be made available on the provincial websites. The responsibilities at the district level include: Monitoring, Supervision, Planning, Reporting, data analysis, surveillance, Logistics, Financial management, Vaccine management, HR management, Trainings, Review meetings, Health Education, Social mobilization, Advocacy, Coordination, engagement of CSO and Private sector and Data Validation

Program Review

A formal, iterative program review process will be instituted ensuring that EPI program data will be reviewed at each level in a highly structured and focused manner. A template or format will be designed for recording the discussions and decisions of the meeting so that performance issues are highlighted in a very tangible and measurable manner. Subsequent review meetings will quantify the status of implementation of the previous decision and recommendations, thus turning the whole exercise into a spiral cycle model. The review must be conducted in such a way that each Union Council (UC) is assessed against the standard of the expected program targets and VPD surveillance data

Provincial Review

There will be quarterly review meetings at provincial level formalized as a provincial monitoring and technical committee chaired by the Secretary Health to evaluate the routine and eradication and elimination performance in the province. At the provincial level, monitoring of the routine immunization activities will be carried out in a structured way at different levels i.e. through analysis of the reports submitted from district and below tiers. For this purpose, strengthening of the provincial EPI cells will be carried out through recruitment of additional human resources (an EPI coordinator, a monitoring & evaluation specialist and a data analyst), along with procurement and commissioning of the requisite hard and software. The monitoring unit at the provincial EPI will have the primary responsibility to collate and analyze the data generated from across the province, to a) give feedback to district and sub-district levels and provide guidance for corrective action in response to any anomalies found, and b) these reports would also be submitted for review by the regional review committees meetings, that will be held periodically according to defined TORs

District Review

The oversight by provincial committees will be supplemented by monthly review meetings held at the district level. Membership will be composed of the district task forces, which are chaired by the district coordination officer, and the executive district officer (Health) who will act as Secretary of each respective district. The composition can also be determined by the competent authority at the district level.

Data Quality

Data quality is a major issue in the program with little or no credence given to the administrative data reported by the program even by the program itself, thus there is a need to substantially overhaul the data reporting systems and consolidation and analysis of the data to ensure an acceptable level of quality within the reports.

Regular assessment of the data quality at different levels using the standard WHO Data Quality Self-assessment (DQA) tool would be used to identify the gaps in the routine immunization data monitoring and reporting system. Information would be generated through analysis of the online reports submitted through the monitoring systems and surveys. This information would be widely shared through feedback newsletters, web updates, press releases and news updates. The feedback information would also importantly inform the provincial review meetings. Collated data would also be disseminated locally and nationally for the purposes of advocacy and to generate political attention and motivation for program improvement.

The feedback reports would highlight the achievements of the good performing districts and UCs to improve staff motivation. The data generated through the monthly reports will also be analyzed at the district level and the analysis report reviewed by the District Review Committee.

For the provincial level analysis of data quality, the following surveys will be compared for validation.

- Concurrence between LQAS
- LQAS and Third party (district and province)
- Administrative data and third party
- Administrative data, vLMIS and LQAS

Monitoring

Currently the monitoring of routine EPI services by the province and district is weak and almost non-existent. No structured approach is followed to monitor the field activities, and feedback is not very effective. The existing MIS of the EPI although timely is lacking in terms of reliability and validity usually in the form of over reporting and lack of internal consistency. At present the data is generated by the vaccinators in the course of fieldwork and is aggregated at District level from where it is sent to the provincial EPI in the first week of the next month. At the provincial directorate the data is aggregated for the whole province and cumulative coverage figures are generated.

The feedback system is currently not functioning. The monitoring of the activities will consist of desk based work and will be carried out primarily by the provinces and district. The activities will mainly consist of: Vaccine utilization versus reported coverage, Trend of immunization in the UC, Work performed compared to planned activities during campaign, Reported coverage versus supervisory reports from a) district supervisors & b) provincial

supervisors, Administrative reports versus evaluated coverage, Third party reports and other national regional surveys.

Reporting

In order to help in the monitoring and supervision of the field activities, the latest technological approaches which have been successfully applied in some areas of the country, will be more broadly introduced. This will help in better micro-planning and preparation of monitoring and supervision plans. It will also help in keeping a track of the field staff to assess if they are following their approved tour plans.

With the assistance of the technological advancements, (i.e. android solutions, GPRS Tracking systems) there will be live data flow from the lower to the higher levels thus reducing the margin of errors and helping in timely compliance of data reporting. The latest technological advancements will also help in better area mapping of the catchment area for micro-planning exercise as has been demonstrated with current polio eradication efforts.

On Line Reporting

The Union Council Level reports will be submitted electronically up to the provincial level using the proposed revised micro plan format.

Cold Chain vaccine)

At present there is inadequate capacity to manage vaccine logistics and cold chain effectively, and data for decision making on vaccine supply management is very limited, resulting in virtually no visibility into vaccine supply chain performance below the national level. With the introduction of new vaccines into the country the costs have escalated significantly requiring that there is an effective monitoring system at all levels. In recognition of the challenges with vaccine management, the federal and provincial governments have identified the need for a web-based Vaccine Logistics Management Information System**(see details in Annexure-9**) as a priority for mitigating poor data visibility challenges across the supply chain.

Third party evaluation

Provincial EPI cell will be responsible to arrange for the independent 3rd party evaluation for the program. However, it will engage the district in the process for selecting the firm for 3rd party monitoring & evaluation and will define a transparent process and SOPs for the accomplishment of this activity during the course of implementation of the project.

A panel design set-up will be put in place for the purposes of assessment of immunization coverage in a province across all districts. The panel will be set-up on quarterly basis picking out 25% districts each time using a simple 30 cluster method to have reliable estimates of vaccine coverage at all levels. The internal monitoring of the routine immunization activities will be complimented and validated annually by independent 3rd party monitoring to be conducted by firms hired on competitive basis by the federal EPI cell. The results of the 3rd party validation and evaluation will also form the basis for performance based bonuses to the staff of the program at the Union Council initially and then the district level, wherever it is being piloted. The third party evaluations will also inform achievement of the several of the NISP disbursement linked indicators at the provincial level.

Surveillance (VPD and AEFI)

The goal of EPI surveillance activities is a well-functioning and sustained EPI and vaccine preventable disease (VPD) reporting system in 3 years to ensure VPD surveillance, online

reporting and response. Currently, the detailed case information are arranged at higher level compilation and reported by age group and immunization status for measles.

The capacity for surveillance is to be greatly enhanced, with the function taken up by province and districts cell will providing technical and logistic support. Similarly the district would report surveillance data to the provincial EPI cell who would collate such data on monthly basis (zero report included). In order to strengthen disease surveillance in the country, the provincial core capacities for surveillance and outbreak response, will be strengthened to implement all surveillance systems.

Monthly AEFI (Adverse events following Immunization) surveillance system was introduced as a separate system and needs to be strengthened. The EPI reporting system collects data from basic health unit, rural health centers, tesil/taluka (sub district) hospitals, district hospital and some teaching hospitals. The Adverse Events Following Immunization (AEFI) data would be monitored at district level and by the facility in-charge. At the provincial level it will be reviewed by the epidemiologist. Initial training has been conducted and steps to integrate AEFI and VPD reporting into the regular reporting system will be a mainstay of the assessment of immunization service delivery. The online reporting will be available in 3 years of implementation.

Annexure-V
EPI Coverage Evaluation Survey

Performance Evaluation

Consequent upon operation of the (Accelerated health program) AHP/EPI, from Jan, 1982 the Government of Pakistan, Ministry of Health is continuously arranging EPI Audit and Review through national and international evaluators and auditors for the whole country. The purpose of the audit and review is to assess the progress of the EPI in Pakistan and to evaluate other aspects concerning training, health manpower, cold chain system, logistics and health delivery system etc. The last cluster survey of EPI was carried out by the third party in 2006 in the country.The present PC1 proposes to hold performance evaluation of the Program by a third party appointed by the competent authority in the 2nd year and 4th Year of the project.

Need and Rationale for Coverage Evaluation Survey

International organizations, World Bank, Global Alliance for Vaccine & Immunization (GAVI) and others have been assisting the Federal and Provincial Governments in achieving its goals for EPI for planning of new initiatives and achieving 100% EPI coverage necessitates district based coverage evaluation through an independent, reliable and credible Third Party.The EPI Coverage Evaluation Survey (CES) will be conducted scientifically and methodically for gathering information to ascertain the exact antigen coverage at the district level in the provinces of Sindh.

Coverage Evaluation Survey (CES)

Immunization Coverage is the proportion of individuals in the target population who have been immunized. *An immunization coverage survey is a survey of small numbers of individuals to determine their immunization status.* Such a survey includes visiting homes for gathering information on immunization through recall and verification through examining immunization records (e.g. cards). This is done in a systematic way so that a sample of homes needs to be surveyed in order to obtain valid results for a larger population.

The CES facilitates in:

- Validating the reported results of routine immunization system.
- Reflecting on number of children who were immunized correctly.
- Highlighting reasons of immunization failure and providing an insight to common causes of low coverage.
- Providing a base line of EPI coverage and is a helpful tool in future planning.

Specific objectives of CES are:

- To evaluate immunization coverage of children 12-23 months of age, especially including their immunization status of BCG, Pentavalent3, Measles
- To estimate the timeliness of full immunization.
- To assess the number of children fully immunized before the age of one year.
- To calculate the dropout rates.
- To assess the BCG-measles, OPV1+Penta1+ Pneumo1-OPV3+Penta3+Pneumo3 dropout rates
- To determine the TT coverage of mothers of infants (0-11month) of age.

- To identify the factors leading to incomplete or non-immunization.
- To find out the sources of health service utilization for immunization
- To assess the coverage in last Polio Immunization Round

Methodology

Cluster Sampling Technique (CST) given in the WHO manual, *"Immunization coverage cluster survey reference manual, 2004"* is adopted for assessment of EPI coverage as per requirement of the terms of reference (TOR). This technique allows a small number of the target population to be sampled while providing data, which are statistically valid.

All the districts of province will be included in the survey universe. The composition and number of districts will be based on the situation of province.The assignment is phased as follows:

a) Design phase
b) Data collection and field work phase
c) Data analysis and reporting phase

Survey Design and Sampling

Sampling will be entrusted to Federal Bureau of Statistics (FBS), Government of Pakistan which is the custodian of national data on sampling units. Sample is drawn in two stages in accordance with WHO Manual[26]. Primary sampling units (PSU) are the randomly selected clusters in each district. The number of clusters per district and number of interviews per cluster in each category are based on reported coverage of the district. The districts will be divided into 3 categories A, B and C. Category A districts are those which have a high reported coverage and assigned 30 clusters, category B have medium reported coverage and assigned 40 clusters, whereas category C districts have low reported coverage hence are assigned 50 clusters each.

Target Population

As recommended in the WHO standardized CST the age groups of children included in the survey are as a) age range of children 12-23 months for evaluating the immunization coverage among children against the nine target diseases b) age range of children 0-11 months for evaluating the Tetanus Toxoid coverage among their mothers and whether children were protected against neonatal tetanus at birth.Children aged 12-23 months are the most commonly chosen target population. The 12 month period is chosen to represent the births in a 12 month or a one year period (an annual birth cohort). The survey thus represents the most recent performance of the immunization system so the youngest possible children are chosen.

However the age range cannot be too young or some of the children in the survey will not yet be eligible for vaccination and the resulting survey results will be lower than they actually are.The reason the age range of 0-11 months is used for evaluating TT coverage is that this is the information about the most recent immunization activities (that is, those that occurred within the past year) and the protection of the most recently born children and their mothers.

[26] Immunization Coverage Cluster Survey Reference Manual, 2004, World Health Organization

The following is the Proposed Time Line for the CES

Sr.No	Activity	Responsibility	1st Survey (tentatively 4th Qs of 2015 & 3rd Q 2016)	2nd Survey (tentatively 1st Q of 2018)
1	Modification of the TORs, Selection Criteria and advertisement	EPI, Federal Unit		
2	Advertisement in the Press	EPIFederal Unit		
3	Last date for submission of bids	Firms		
4	Evaluation of the technical proposals	Chairman TAPC		
5	Opening of the financial proposal & selection of firm	Chairman TAPC		
6	Signing of the contract	PD-EPI		
7	Payment of 1st installment after approval of chairman TAPC	EPIFederal Unit		
8	Inception meeting	Firm		
9	Review of data collection tools	Core group for CES		
10	Data collection	Firm		
11	Presentation of draft report to NPM EPI/ Core Group & draft report sharing meetings.	Firm		
12	Feedback from the core group	Core group for CES		
13	Submission of Final Report to NPM-EPI	Firm		
14	Final Payment	EPI, Federal Unit		

Annexure-VI

Fund Flow Mechanism Provincial Governments

The Provincial Department of Finance will allocate funds in the Annual Development Plans (development budget) through annual budgetary allocation covering both donor(s) and counterpart funds. The provincial EPI Cells will prepare PC1 documents to ensure that sufficient resources are available to achieve the program objectives and meet the agreed DLIs. The operational budget for EPI shall be made part of the regular budget at the district level and expenditures monitored by the provincial EPI Cells to ensure progress. Requisitions for all new staff positions required for EPI shall be prepared and submitted to the finance department for creation of the posts on the regular budget. The Finance Officer in the provincial EPI cell (DGHS Office) will assist the program in designing and implementing and adequate financial management system and head the finance function of the project.

Development Partner Financing

Federal EPI cell will also be responsible for processing and submitting of withdrawal application on behalf of all four provinces. The Federal EPI Cell will consolidate all the financial reports into one national program report. The EPI Cell will also consolidate the DLI achievements for the four provinces and federating units and submit the consolidated withdrawal application to the Bank for disbursement to the federal and provincial accounts. Each provincial EPI cell will be responsible for independent program implementation, with coordination being provided by the federal body. Biannually, federal EPI cell will submit a Withdrawal Application duly signed by an authorized representative of EPI cell along with Interim Financial Reports IFRs and DLI results report to the Bank for disbursements and documentation of expenditure.

For DLI Based Disbursements, the Bank will disburse funds to the Federal and Provincial Governments Consolidated Fund - Account No. 1 (Non-Food) biannually, consequent to the achievement and verification of the agreed DLIs. A one-time advance, if required of US$___ will be provided upon project effectiveness against forecasted EEPs for the next one year. The advance will be subsequently documented against relevant actual EEPs conditional on achievement of DLIs. The Bank will reimburse eligible expenditures as reported in the biannual IFRs capped to the price of DLIs achieved. Disbursement from the credit proceeds in US Dollars will be translated to Pakistani Rupees by the State Bank of Pakistan, and the local currency shall form the transaction basis for the operation's accounting and reporting.

The template of Interim Financial Reports (IFRs) will be agreed during negotiations and will be used to report advances and actual project expenditure incurred against the eligible expenditure supported by the Bank under the program. IFRs will be prepared from the government accounting system through DOH terminal available at each province and will be validated by the DOH before approval by the respective Department of Finance. The IFRs will be due for submission to the Bank within 30 days of the end of the 6 months period ending December 31 and June 30, for each year financial year.

Expenditure that the Bank will reimburse upon achievement of DLIs are referred as EEPs that are a part of the Federal/ Province's own recurrent and development budget of the eligible activities in respect of EPI activities. These expenditures are clearly identifiable in the government budget, FMIS and the Chart of Accounts. The Bank funds would not be separately

tracked and the Bank will accommodate withdrawal applications from the Credit and Grants as long as the overall expenditures eligible under the EEPs are more than or equal to the amount to be withdrawn from the Credit/ Grants.

Repayment of Credit

The provinces will be responsible for the share of IDA credit they receive through the program as communicated by the Planning Commission and the Finance Division. The arrangement from the Federal Government will be an on lend on the same terms and conditions.

Annexure-VII
Environmental and Social Management Guideline (ESMG)

Background

Childhood immunization against vaccine preventable diseases presents a highly cost effective intervention, delivering significant reductions in morbidity and mortality from inexpensive and standardized interventions. It remains one of the most fundamental competencies of public health programs. In line with international standards, the Expanded Program on Immunization (EPI) in Pakistan aims to immunize all children between 0-23 months against nine vaccine preventable diseases that include infant Tuberculosis, Poliomyelitis, Diphtheria, Pertussis, Neonatal tetanus, Hepatitis B, Haemophilus influenza type b (Hib), Pneumococcal (PCV10) and Measles. Newer vaccines which will expand EPI are in the process of roll out (rotavirus vaccine, inactivated Polio vaccine). Immunization coverage in Pakistan, however, has stagnated and the proportion of children who are fully immunized is somewhere between 43 to 62 percent; and this figure varies considerably across geographic and social and political boundaries. The regrettable deficits in immunization coverage are reflected in the continued incidence of endemic polio transmission and the recent measles outbreaks. Plans to expand routine immunization to include delivery of new vaccines will present additional challenges to existing capacity.

The current political context presents both challenges and opportunities for improving EPI performance. After dissolution of the federal Ministry of Health under the 18th Amendment to the Constitution in 2010, the federal role in national planning and coordination in health needs further definition. Federal functions have been fragmented among several entities. The management of health services, including immunization, has been devolved to the provinces. While the stewardship function for EPI at the federal level has been moved to the Ministry of National Health Services, Regulation and Coordination (MoNHSRC), the extent to which federal roles like policymaking, oversight, and monitoring and evaluation will be managed through federal unit that remains unclear. While there are concerns about the capacity of provincial governments, the devolution presents clear opportunities for increased access, accountability, ownership and equity in immunization programs. Devolution is a stimulus, particularly to provincial Departments of Health and their management.

The project is in response to a particular set of temporary requirements resulting from devolution of the federal responsibility for immunization programs to the provinces under the 18th amendment to the constitution. It therefore focuses on building provincial level capacity for EPI implementation, while supporting a limited set of competencies in coordination and reporting at the federal level.

Legal and Policy Framework

The present ESMP has been developed after reviewing the relevant promulgated environmental legislation and guidelines of Pakistan and the World Bank's safeguard policies. These legislations and safeguard policies, and their relevance to the proposed project.

Stakeholder Consultation

Stakeholder consultation to identify perceived impacts and associated mitigation measures is an integral component of an ESMP design and development process, and hence was carried out for this project as well. Consultations were conducted with stakeholders identified in partnership

with the project team, and consisted of NGOs, federal government, and relevant Bank experts.The consultations continued while preparing the present ESMP, and continuous review and comments were sought from key professionals to add robustness to it.

Federal Environment Protection Agency

A meeting was held with the Director General, EPA on 28th January, 2014 to seek his advice on identifying the environmental issues associated with the project, as well as suggestions for mitigation measures. He identified immunization waste collection and disposal as the primary issue associated with the project, along with limited capacity and knowledge towards associated environmental hazards. He did not favor pit burial, since it can lead to groundwater contamination, and suggested incineration as a better option. He offered Environment Protection Agency (EPA) support in developing the training modules, and conducting the same keeping in line with the Hospital Waste Management Rules, 2005. For remote areas, same trainings can be imparted using a travelling training program, where dedicated staff and vehicles can be used for the purpose.

Federal EPI Cell

A meeting was held with the National Program Manager and his team, Federal EPI Cell on 6th February, 2014. In addition to the immunization activities, he emphasized multiyear, multi-sectoral programs that would target eradicating the sources of viruses. Municipal waste management for improved hygiene and sanitary conditions, awareness about spread of communicable diseases, baselines to measure impacts of immunization activities, and effects of physical environment on immunization programs were the other issues raised by him.

Civil Society Organization

Comprehensive feedback from civil society was received through a workshop organized by WB on the 5th of February, 2014. Representatives from eight national and regional NGOs and from UNICEF, GAVI Alliance, and National EPI Program were present to discuss a range of issues associated with vaccination service delivery, barriers to immunization, challenges associated with gender, remoteness and marginalization of a community and environmental hazards associated with such campaigns. In addition to the workshop, focused interviews were held with Civil Society Human and Institutional Development Program (CHIP), National Rural Support Program (NRSP) and LEAD Pakistan. Following is the summary of the discussions with the civil society:

Environmental Dimensions

- Use of sharp instruments and their improper disposal can lead into epidemics and environmental hazards
- Pit burial is the usual practice being followed, but with varying degree of compliance (relatively better at urban facilities than rural)
- Roles of private sector and NGO’s in waste collection and disposal needs to be considered
- Use of expired vaccines, or where vaccines become ineffective due to improper temperature control, can cause epidemics as well as mistrust amongst the beneficiaries

- Recycling of hospital waste has been reported and is in practice. This must be discouraged by all means
- Hospital waste associated with immunization campaigns need to be disposed off in a proper manner
- Adverse events that might follow due to immunization need to be documented and reported.
- General sanitary conditions play a vital role in the success of immunization campaigns. Parallel investments need to be made into this sector

Social dimensions

- In many cases language barrier can be a major obstacle, where the care provider does not speak the local language
- Limited number of vaccinators and how the gender of the vaccinator can be a major factor in terms of access to women in the community. The teams need to have male and female vaccinators
- Low literacy levels inhibit immunization
- Women's dependency for commuting and limitations on mobility of women to access the service and existing power structures at the household level
- Access to remote areas with difficult geographic terrain and security issues
- Political interference incidence where the LHWs from different political parties were not allowed in the community
- Communication discourse: It was shared that there are major gaps in communication and sensitization of the community which is crucial for ownership.
- It was also shared that integrated health packages are received more in comparison to the EPI as there was also trust build within the communities and that was one of the core factors for bonding sustainable partnerships

Significant Environmental and Social Aspects and Mitigation Measures

This section describes the environmental and social aspects associated with the project activities, as suggested by the stakeholders as well as the project team

Cold chain management for vaccine effectiveness

Vaccines need to be stored at recommended temperatures for them to remain effective. Also the quantity to be administered is the key for it to work on a child or a mother. The campaign might not achieve its targets of disease(s) elimination, as well as causing mistrust amongst the communities (occurrence of disease despite vaccination), if the cold chain breaks. The project activities involving administering vaccines using sharps and injections pose a high risk to the health workers as well as the community at large. They can cause epidemics, as well as transfer communicable diseases from a host population to another. Epidemics have an impact on virus genetics, and mutations can be caused. Such mutations can cause imbalance within a particular ecosystem, especially with symbiotic relationships, and can be detrimental to other organisms/species survival. Hence, the issue is both environmental as well as a public health issue.

Mitigation

Cold chain management, in accordance to the National Expanded Program on Immunization (EPI) Policy and Strategic Guidelines has to be ensured at all levels. Vaccines shall be stored at standard temperatures in official EPI store only. They should not be stored for more than a period of six months at federal level, three months at the provincial level, one month at the district and fifteen days at the facility level. Standard stock ledger with name of the vaccine, quantity in doses, vial size, manufacturer, expiry date, batch/lot number, date of receive and supply to be maintained at all level and updated regularly. Reconstituted vaccine must be discarded six hours after reconstitution or at the end of immunization session, whichever comes first.

Disposal of Sharps and Immunization Waste in general

Despite many efforts taken by the government and civil society organizations, medical waste and sharp disposal remains a challenge for the hospital industry and environmental managers. Current medical waste management practices shows that medical waste is not regulated and not always disposed in an efficient manner. The hazards associated with improper waste disposal by any healthcare facility operation are mostly caused by not following the infection control protocols, not using proper personal protective equipment (PPE), and not employing proper procedures for waste collection, transportation, storage, and final disposal. In addition, recycling of medical waste also poses very serious health risks for the workers involved in recycling and also consumers using the recycled products. Moreover, safety of staff handling sharps such as syringes and needles is at risk if proper procedures are not followed. Air and water quality deterioration is another associated potential impact if the waste is disposed by burning and/or burial.

Mitigation

Immunization waste is required to be managed in accordance to the legal framework of Pakistan, specified under the Hospitals Waste Management Rules 2005. Auto disable (AD) syringes are recommended by WHO to be used for immunization purposes. Safe disposal of these syringes is absolutely necessary from a public health and environmental point of view. Once used, these syringes must be disposed into customized Safety Boxes, as per National EPI Policy as well as WHO recommendations. Current immunization activities are being carried out in accordance to the WHO recommendations, and AD syringes and Safety Boxes are being used. Waste disposal can be carried out by using pit burial method[27].

Adverse Events Following Immunization (AEFI)

There is a possibility of reactions, allergies or any other side effects associated with immunization. Such adverse events need to be reported and critically evaluated so as to ascertain their cause, as well as to identify means to minimize their occurrence. Currently AEFI are reported diligently, but there is a need to improve the information flow from UC level to provincial and national levels.

[27]In the first phase of the project, Waste Disposal Site has to be a dedicated pit used for waste burial and burning (designed and constructed in accordance to Hospital Waste Management Rules, 2005 and/or National EPI Policy and Strategic Guidelines). Recommendations for hospital waste management for NISP project duration will be a part of the District Level Action Plan for Immunization Waste

Mitigation
An effective and efficient AEFI recording and reporting needs to be in place, from the vaccinator to the national program management levels.

Knowledge of Environmental and Social Risks associated with Immunization
Generally, there is limited capacity to address the environmental and social risks associated with activities associated with immunization, especially with regards to the above mentioned aspects. This limitation in itself poses a risk of project failure, and hence needs to be addressed effectively at all project levels.

Mitigation
Appropriate training program needs to be devised for all stakeholders involved, congruent to their roles and responsibilities.

Environment Enhancement
A vital aspect associated with the sustainability of immunization campaigns is the condition of the surrounding physical environment, in terms of sanitation facilities, and levels of personal hygiene. Many viruses breed in sewage, while others are transmitted due to touch and living conditions in close confinement (communicable diseases). Epidemics and communicable diseases are common in rural, relatively poorer areas of Pakistan, where the general literacy is low combined with minimal sanitation infrastructure.

An immunization campaign will be more successful if there are parallel investments in sanitation schemes, as well as in educating households about risks associated with communicable diseases. This includes building infrastructure (covered drains, municipal waste treatment plants,) as well as capacity building of communities into basic hygiene and that of sanitary staff into municipal waste management.

NISP will contribute towards building knowledge amongst communities on communal medicine and hygiene through its training programs discussed later in the document.

Action Plan for Immunization Waste Management
Immunization waste management across Pakistan remains a challenge, especially at the Tehsil and Union Council levels. As most of the primary level healthcare facilities do not have effective systems and procedures in place, nor have infrastructure to manage and dispose-off infectious waste. Hence immunization campaigns and/or other hospital treatments involving sharps and other infectious wastes, can lead to public health risks, unless the waste is efficiently managed and taken care of.

It is proposed under NISP, to prepare a two to three years comprehensive action plan in order to tackle this issue, and suggest workable and practical solutions. A year wise breakdown of activities is proposed as under:

Year 1; Documentation of current practices and identification of workable solutions
Regional workshops on documenting current practices and systems currently in place for infectious waste management;Identifying best practices from within the country as well as the South Asian region. Documenting the results and dissemination to relevant stakeholders in the government, academia and civil society

Year 2; District Action Plans prepared and notified
District Action Plans to be prepared on the basis of the above mentioned to Identification of short, medium and long term milestones and action points from within the plans and notification of the Plans by the respective provincial health departments and Appointment of provincial immunization waste management coordinator in each province.

Year 3; Implementation of the District Action Plans and Immunization Waste Management Systems in place
Provision of resources for the short term actions points of each provincial plan, execution of the plans, especially of the short term actions that can be dealt with in the NISP lifetime and equipment, systems and procedures in place for immunization waste management, under the monitoring and coordination of Federal EPI Program.

Social and Gender Aspects
According to research countries with the higher gender development index have greater coverage of immunization According to Global Gender Gap Index Pakistan ranks 135/136, Gender Inequality Index 123/148 and Social Institutions and Gender Index 55/86. This is also related to the education levels of mothers and their socio economic status. As part of the ESMP there are various social and gender related dimensions that need to be considered and mitigations to be designed to expand vaccine coverage and make vaccination equitable in Pakistan.

The unique needs of the child care givers needs to be explored in the context of the country to facilitate equitable access to services. There are inter-provincial disparities and even disparities within the provinces. Research proves that poor education indicators in this case lower literacy levels result in poor vaccine coverage. In case of Pakistan with relatively better education indicators for males there is need for engagement of men with targeted advocacy to increase coverage of vaccine.

Equal access is another key to improving equitable vaccine coverage (GAVI Alliance – Gender and Immunization 2013). One of the major issues that need to be addressed is the access of the beneficiaries to the provision of services, in this case the ease of access to the immunization and access of the mothers and fathers to the health facilities. With the existing patriarchal structures and gendered dynamics women have limited access to household financial resources and cannot access healthcare. Although they are the caretakers in the house it is the men who are the decision makers therefore inclusion of men and boys can increase the coverage of the immunization and effect access.

In majority of the cases women are dependent on males for basic decisions including commute and mobility. They are also usually escorted by male members of the household to travel outside the house. Thus decision making ability including basic decisions that is, mobility, finances, resource allocation and access to services are made by either the male of the household or elderly. This dependency creates bottlenecks for women to access the services for their children. Mobile vaccine services where the service provider reaches the doorstep can be one of the ways to mitigate this implication. Female headed households usually fall in the last quintile and can be further excluded due to their low socio economic status resulting in limited access to basic services.

Provider's attitude towards the women beneficiaries is another crucial factor that results due to the social stereotypes and gender related norms in the society. In the conservative societies due to limited interaction of males and females there are taboos attached to women's interaction with male care givers thus creating limitations for females to access the services. This coupled with gender discrimination and harassment further exasperates the issue.

Time poverty and feminization of poverty are some of the significant factors that need to be considered and addressed in the context of the project. There are a large number of females in the informal economy and during the crop sharing seasons etc the opportunity cost of taking the children to the health care units is very high for the female and male workers. Moreover with the existing workloads including (caretaking, nurturing, reproductive and productive roles) women face multiple challenges in equitable access to vaccination of children. Flexible schedules tailored to the availability of the females can be one of the mitigations that can be proposed in the project design and implementation.

Politicization of immunization and the various connotations attached with the Polio vaccination result in fear and rumors that are attached to vaccine provision particularly in the northern and conflict afflicted areas. There is resistance to immunization that is demanded by men but carried out by women. In the communities with the various stereotypes attached the cost of getting vaccinated can result in exclusion from the community. A gender sensitive behavior and communication strategy can address such issues.

The existing power structures and the reinforcement of women's care taking and nurturing roles is another negative impact that needs mitigation. Through the engagement of females as the primary care givers their nurturing roles is reinforced and with the existing workload this is additional burden on the females, burden that can be shared by the male members of the household provided there is social mobilization around engagement of men as care takers .

Gender based violence in form of domestic violence can hamper women's access to the health unit. In some cases the shame and taboos attached to disclosure of domestic violence results in the segregation of women that in turn can affect the immunization of children.

Gender discrimination and harassment at workplace between the male and female workers can also be negative externality that needs specific action. There is a code of conduct developed by the government of Pakistan to address such issues: Harassment of Women at Workplace Act 2010. Mitigations include ensuring that there should be separate bathrooms for females with prayer facilities, protection of women against sexual harassment at workplace, separate waiting unit and care units for women and children and equal access to health care service providers.

Inclusion of the disabled persons (parents) is another factor that needs affirmative action. The disabled individuals might face greater difficulties in accessing the services and the same goes for the minorities from the religious and ethnic backgrounds.

Consultations with the beneficiaries need to ensure that women's participation and representation is there and sex disaggregated data is collated when it comes to the beneficiaries. Moreover gender inclusive grievance redress mechanisms need to be in place to ensure transparency and accountability.

Institutional Arrangements for ESMP Implementation

Overall coordination and implementation of ESMP will be the responsibility of Provincial and Federating Units Program Managers, EPI who will designate an ESM Focal Point (FP) to coordinate on his/her behalf. District EPI Managers will also designate similar ESM Focal Points at each union council level, who will provide support to the provincial level ESM FP. Each partner hospital/tertiary healthcare units will also nominate a focal person to ensure implementation of ESMP. The primary responsibilities of the provincial level ESM FP will be to conduct financial management of the ESMP and effective implementation of ESMP, ensure that cold chain equipment, AD syringes, safety boxes, waste management stuff and disinfectant equipment/chemicals are being made available to the provinces, Coordinate with focal person of partner hospital/tertiary healthcare unit to ensure implementation of ESMP, conduct the monitoring tasks and maintain all reports and records, coordinate and ensure development of training material and implement of trainings sessions, coordinate and ensure development of awareness material, conduct environmental compliance audit for the program, commission annual third party validations of partner hospital/tertiary healthcare unit, prepare Quarterly Progress Reports(QPR) for the entire project.

The responsibilities of the district level ESM FP

Coordinate with focal person of partner hospital/tertiary healthcare unit to ensure implementation of ESMP, coordinate with focal person of partner hospital/tertiary healthcare unit to ensure availability of cold chain equipment, AD syringes, safety boxes, waste management stuff and disinfectant equipment/chemicals, conduct monitoring tasks in coordination with provincial level FP and submit reports to National Program Manager, EPI, implement training sessions in provinces, facilitate and coordinate third party validations in the province.
Prepare provincial QPRs.

The responsibilities of the partner hospital/tertiary healthcare unit

Identify a focal person to ensure implementation of ESMP, maintain the record of use of all recommended equipment including AD syringes, safety boxes, waste management stuff and disinfectant equipment/chemicals, prepare Monthly Immunization Waste Management Reports (MIWMR), tally the records with the permanent registers maintained by the vaccinators, conduct monitoring tasks and submit reports to relevant line authorities as per ESMP, ensure implementation of training session in coordination with national and provincial EPI offices, coordinate with relevant national and provincial managers for environmental monitoring and reporting and prepare QPR and MIWMR for the facility

Annexure-VIII

Program Management Structure

The EPI program in Pakistan has been an exceptional case of federal and provincial coordination in service delivery: the federal government has been responsible for securing and provision of vaccines and logistics, setting targets and monitoring and reporting to International partners on results, and the provincial government has been responsible for operational costs of the program including salaries, supervision and maintenance of the cold chain. There have been inputs from the UN Technical Agencies on provision of training and reviews of the program.

After the recent devolution of legislative functions the roles and responsibilities are being clarified with technical guidance, currently the Program is overseen at the federal level by the Ministry of National Health Services Regulation and Coordination and at the provincial level it forms a part of the departments of health. There are still some residual responsibilities at the Federal level enumerated later. The issue of procurement of vaccines and logistics is still under discussion between the federation and the provinces and till the next NFC award the provinces have requested the federation to continue procurement while they build up their capacity before coming to a decision on the future arrangements.

Program Management

There is no province EPI policy and strategy and where required the province follows the guidelines given in the national EPI policy. The provincial EPI headquarter is highly understaffed with only three technical positions. However UNICEF and WHO supports the provincial EPI management.

The employees do not have job descriptions and EPI standard operating procedures are either outdated or are not available. There is no system to assess and enhance EPI staff competencies. The program faces a great deal of political interference which encourages staff to escape from work. Districts do not have dedicated EPI management positions. Around 80% of union councils reportedly develop annual micro plans however their quality is generally compromised. After devolution the federal government continues to provide vaccines (until 2015) however the province has not yet taken any step to include vaccines in the budget line item.

Human Resource Management

The EPI program does not have human resource management policy. Although EPI is a vertical program however the EPI provincial headquarter does not have any direct control over the EPI human and other resources in the districts. The marked shortage of field staff is evident as there is only 0.65 skilled immunization staff available for 10,000 populations. Despite the fact that on an average each union council has services of 2.3 vaccinators (compared to official allocation of 2 vaccinators), the overall deficit in EPI skilled human resource is estimated at 25%.

The skilled EPI staff had received multiple training for routine immunization and campaigns however the mid-level managers did not received any EPI training for the last 4 to 5 years except orientation at the time of introducing PCV in 2012-13. The vaccinators, on joining the EPI program, do not receive any structured training.

Costing and Financing

The budgetary constraint is an issue in the province. There is shortage of EPI funds especially for POL and other operational expenses. The immunization program mainly depends upon external resources from donors (WHO, UNICEF, GAVI, etc.) and domestic development funds. Hence, the main issue is financial sustainability. The provincial government mainly covers salaries and overheads for immunization through regular/non-development funds. For securing development funds, the EPI program prepares and submits the PC-1 document to the provincial government and after its approval, EPI program gets funds. Due to government procedures and formalities, this process always takes longer. Once the PC-1 is approved, the timely release of funds remains a challenge. The preparation of good quality PC-1 is also an issue due to lack of managers' training in PC-1 development and absence of provincial cMYP. Provincial EPI has developed and submitted EPI PC-1, but not yet approved by the Executive Committee of National Economic Council (ECNEC).

Vaccine, Cold Chain and Logistics

EPI program does not forecast the requirement of vaccine and injections but Federal EPI Cell calculates and provides vaccine to the provinces. Provincial EPI program receives adequate quantity of vaccine and injection supplies. However, the buffer stocks at provincial and district level are not sufficient. Supply and distribution system at provincial level is weak due to lack of capacity of staff handling supply and distribution and no computerized system. EPI program does not regularly develop supply cycle and distribution plan for vaccine and injections. For distribution of vaccines and injections to the districts, provincial immunization program has vehicles both refrigerated and non-refrigerated but these vehicles are not sufficient for timely distribution. There is inadequate and improper storage capacity for vaccine and other related logistics as no purpose built warehouses including cold storage spaces available in Provincial and divisional. Most of the cold rooms are very old and need to be replaced. EPI program also faces lot of issues related to the vaccine management including lack of Effective Vaccine Management (EVM) assessment, shortage and standardization of cold chain equipment and lack of cold chain equipment maintenance & repair plan. The provincial and divisional cold chain maintenance workshops need strengthening and improvement. Stable power supply is also a major problem.

Immunization Services Delivery

Province is taking efforts for the improvement of immunization services; however, there are still lots of issues that need special attention in order to provide effective immunization services in the province. According to recent PDHS 2013, sixty six percent of children are fully immunized[28]. Challenges in the provision of immunization services lie mainly at the implementation level. These include i) deficient and low quality outreach sessions due to staff political and in absenteeism, no defaulter lists and no health education sessions, ii) UC micro-plans are not implemented due to lack of supervision and follow-up from provincial and district level. There is less number of fixed EPI centers in urban areas particularly in Mega cities. The size of population in urban areas including slums is increasing rapidly (more than 100,000 in some UCs). There is a huge force of LHWs at the community level but its involvement especially in routine immunization is low. The existing EPI staff especially vaccinators are not sufficient to provide routine immunization. Frequent polio SIAs are also affecting routine immunization, as EPI staff's involvement in PEI activities is increasing.

[28]Pakistan Demographic and Health Survey, 2013.

Monitoring, Surveillance and Reporting

Monitoring: Monitoring and supervision could play a vital role in the success of immunization system if planned and conducted in a well-organized and effective manner. However, at present the monitoring and supervision system is weak at all levels. Monitoring and supervision plans are not prepared regularly, and even if plans are prepared, these plans are not implemented. Monitoring and supervision visits are being carried out at supervisors' own will and discretion. There is no established mechanism of reporting, feedback and action on these visits. The coverage data is always inflated, as there is lack of accountability and no feedback mechanism in place. There is no data validation on regular basis.

Surveillance and reporting**:** The main purpose of EPI surveillance is a well-functioning and sustained EPI and vaccine preventable diseases (VPD) reporting system that could be used for decision making at the managerial level in order to improve the EPI services. However, in reality it is not doing as it was envisioned. There are several issues that lead towards not performing well of the surveillance system. These include: lack of ownership and accountability, lack of training for immunization and management staff on VPD surveillance, no feedback and error rectification mechanism in practice, lack of monitoring and supervisory visits and no use of data for decision making by the management. Punjab government has introduced online disease surveillance system (Dashboard), which is very effective for tehsil and above levels but few more fields need to be created. It is therefore suggested that Federal and Federating unitsmay introduce similar system in the province for effectiveness of surveillance system.

Demand Generation, Communication and Advocacy

In addition to the programmatic issues, other factors those are further contributing towards the low immunization coverage are lack of awareness among community regarding the importance and benefits of immunization, little involvement of community and political leadership, lack of capacity of immunization staff in social mobilization and evidence based communication strategies are not developed and implemented.

Health Information management

The DoH is using the same information systems that are used in other parts of the country like district health information system (DHIS), vaccine preventable diseases surveillance system (VPD) and other program specific information systems mostly used by the vertical programs including EPI. All these information systems are collecting data from BHUs, RHCs, THQs, DHQs and other health facilities. In-charges or designated persons at these facilities compile data, prepare report and submit to the EDO Health. After compilation at the district level, EDO Health submits reports to the respective officials at the provincial level, for example DHIS reports to the Director MIS and EPI reports to the Provincial EPI Manager. There are several issues in these reporting systems including low reporting rate, no feedback or error rectification mechanism in practice and lack of coordination among various systems. The information generated by these systems is not used for decision making by the management. In addition to these, also there are issues in terms of quality and reliability of data.

Surveillance and Reporting

The EPI program does not have designated surveillance staff at provincial and district level. The districts do not receive any feedback or instructions for corrective actions and the surveillance data is hardly utilized for decision making.

Demand Generation, Communication and Advocacy

Provincial EPI program desires to develop a communication strategy and an effective plan to generate demand; however, they are constrained due to lack of funds. All demand generation activities are supported by partners and donors in the province.

Monitoring and Evaluation

To monitor the progress on achievement of EPI program objectives, specific indicators set for each objective in the M&E framework will be used which is developed to assist the EPI program management in tracking its progress and achievements. The M&E framework utilizes the program generated information as well as results of independent surveys and assessments. To monitor the progress on achievement of EPI program objectives, specific indicators set for each objective in the M&E framework will be used. The M&E framework is developed to assist the EPI program management in tracking its progress and achievements. Tool will be used to track and assess the performance of the immunization program.

For the purpose of monitoring the program progress, the M&E framework utilizes the program generated information as well as results of independent surveys and assessments. The program generated information includes Routine Immunization reports, minutes of meetings and notifications, job descriptions, standard operating procedures, EPI and HR policy documents; PC1s, communication materials and plans, annual EPI plans, concept papers, training reports, monitoring reports, assessment reports, feedback documents, etc.

Annexure-IX

Program performance

Review and Impact Assessment Committee

Federal EPI has a wide-rangingmonitoring and evaluation system. Monthly reports generated at the district level through EPI Information system are collated and analyzed at the Federal level. Coverage of each antigen are then calculated and disseminated to all the stake holders in quarterly review meetings.

Vaccine preventable disease (VPD) surveillance is also going on, though in its infancy at present but with the induction of human resource as proposed the surveillance quality would improve tremendously. The reporting on Adverse Events Following Immunization (AEFI) will also be improved in the future plans. Balochistan has reasonable AFP (Acute flaccid paralysis) surveillance systems in the country. It confers to all the international standards and captures the polio affected children with in 7days of the onset of paralysis. In 2005 WHO EMRO set up nation-wide surveillance for bacterial meningitis and Rota Virus at five sentinel sites throughout Pakistan using conventional culture methods. Out of which Punjab has two sentinel sites. The system is working in coordination with the National Institute of Health Laboratory. Community surveillance can be supported by LHWs, RSPN and CSOs in their catchment areas, where they report any VPD and AEFI.

Monthly and quarterly review meetings in the province are held intermittently at each level of the system. Starting from Health Centre, it goes up as monthly inter-district, quarterly inter-district and then quarterly inter-provincial meetings. The purpose of the review is to assess the progress, problems and challenges of the EPI in province and to evaluate other aspects concerning training, health manpower, cold chain system, logistics and health delivery system etc. It will also help resolve any bottleneck in the implementation of the project.

The program is also evaluated through various surveys and studies that are carried out periodically by third parties and by other departments such as Pakistan Health and Demographic Survey by NIPS, Pakistan Health Survey by PMRC, Pakistan Social and living Measurement Survey by Statistical Division. EPI carries out every 3 years a comprehensive District Coverage Evaluation Survey by a third party that gives an in-depth analysis at the district and sub district level of the country. This PC1 also contain survey budget twice in its life.

The present PC1 is prepared with a view to enhance integration and coordination between various stakeholders and donors. This requires in-Depth Program Review of various aspects of the EPI including service provision, coverage, surveillance, monitoring mechanisms, inventories etc. In this regard an Impact Assessment or review Committee is proposed that will be responsible for carrying out the periodic monitoring the progress of the Program to resolve governance issues.

The committee will be headed by the Secretary Health with membership of Secretary Public Health, Secretary Finance, Chief Health P&D, Director General Health Services, Program Manager LHW Program, National Program Manager (Secretary) and one member each from

World Bank and other development partners and Co-opted members (any) with permission of Chairman. The committee will meet quarterly and do the desk reviews of all the programmatic and financial reports of the program. Committee will also carry out field visits to various parts of the province to verify the progress and help resolve any issues if any. The impact assessment frame work is given below:

Annexure-X

Results Based Framework for National Immunization Support Program

Objectives/Activity	Indicators	Baseline	Source	Target					Remarks/ Assumptions
				Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	
Goal :									
To reduce the morbidity and mortality due to Vaccine Preventable Diseases (VPD) in children under 5 years and reduction in tetanus morbidity in pregnant women	Under 5 mortality rate	89	PDHS	86	84	80	76	74	
Project Objectives:									
To strengthen and improve routine immunization coverage by supply/demand-generation activities and management reforms.	95% of children fully immunized between 12-23 months disaggregated by gender, income, province and district		PDHS/ PSLMS	60%	70%	80%	90%	95%	
Component 1: Strengthening Management, Governance and Stewardship Functions									
Output 1: Institutional capacity of federal, Provincial and District EPI cells strengthened	Revised computerized UC level micro plans for 80% of UCs at district and provincial level			35	55	65	75	95	
	80% of Union Councils assessed for validity are cleared (80% age appropriate vaccination)			60	70	80	90	95	
	95% of reported outbreaks/ notifiable diseases countered with an appropriate response by the system			70	80	90	100	100	
	Annual 3rd party monitoring and evaluation reports disseminated			1	1	1	1	1	
	Insert coordination and surveillance output								
Component 1: Strengthening Management, Governance and Stewardship Functions Activities:									
Capacity building for management of EPI	Technical framework and policy guidelines for LHWs involvement as			x					

	social mobilizer and further involvement as vaccinators subject to fully trained in vaccinations and follow standards of vaccine wastage rates								
	CSO/Private Sector involvement notified and implemented				x				
	100% critical positions filled at provincial level by skilled staff with appropriate qualifications and experience (FM, procurement, M&E, Surveillance, Data Management, Epidemiologist)								
	100% of districts reporting at least 01 month buffer stock available within the district (source: LMIS)				x				
Strengthening Information Management and reporting system	80%age of districts submitting online routine monthly reports to provinces by agreed timelines				x				
	100% of districts receiving feedback on reports from provincial directorate			x					
	IT-based solutions (surveillance, monitoring, reporting)functional in 80% districts				x				
	GPRS tracking of vaccinators, supervisors at all levels functional in 80% of districts			x					
Strengthening Procurement and Logistics systems	Strengthening national 80% laboratory capacity for VPD and AEFI surveillance			x					
	100% quarterly meetings of the provincial vaccine management committee held (LMIS) at provincial and district levels				x				
	100% districts reporting on vLMIS with 80%				x				

	timeliness & completeness								
Strengthening National and Provincial Coordination Mechanisms	Number of planned bi-annual meetings of provincial coordination committee held chaired by Secretary health			x					
	Evidence of Coordination mechanism and at least one indicator for measuring success of this coordination agreed with Polio Task force			x					
	No. of bi-annual review meetings held at federal level			2					
	No. of quarterly review meetings held at provincial/regional level			4					
	No. of monthly review meetings held at district level			4					
Studies and Technical Assistance	No. of research projects conducted and reports available including reviews of new vaccine introduction			2					
	Sero conversion studies		x						
Performance Management Mechanism	50% number of UCs validated for immunization coverage by provincial office having more than 80% and less than 50% coverage		x						
	80% number of UCs validated by districts having less than 40% coverage			x					
	80% of districts reporting UC level verified coverage			x					
	80% of UCs within district meeting the minimum criteria for participation in competition			x					
	80% of districts competing for performance bonuses				x				
Monitoring & Evaluation	Contract with 3rd party for independent monitoring and evaluation reports			x					

	available								
Surveillance and AEFI	% of UCs having a functional VPD surveillance system reporting online							90 %	
	Online surveillance for VPD & AEFI zero reporting system for 80% of all HF within district				x				
Component 2: Improving Service Delivery									
Output 2: Increased access and utilization of routine immunization services	80% proportion of population having access to EPI services (fixed or outreach) within 30 minutes walking distance at least once a month					x			
	80% of UC with at least 02 skilled staff capable of providing immunization					x			
	% of UCs has no vaccines out of stock					x			
Component 2: Improving Service Delivery Activities									
Increasing access to routine EPI services through revisiting mix of fixed and mobile services	%age of HF without EPI centers							0%	
	% of UC without EPI centers							0%	
	Ratio of children immunized by fixed centers versus Outreach teams							50 %	
	Dropout rates: DPT3-DPT1							<10%	
	Measles 1-DPT3							<10%	
Focused service delivery for mobile/refugee population	Population uncovered by EPI services/vaccinators/EPI program							100%	
	% of population covered in collaboration with LHWs			50%					
NGOs/CSOs /Private Sector contracting in urban and hard to reach areas	% of population covered in collaboration with NGOs/CSOs			20%					
	Number of private institutions providing immunization services in urban areas			100 %					
	No. of contracts with			1					

	NGOs/CSOs for provision of immunization services in urban slums awarded								
	% of immunization services through private sector/NGOs/CSOs by urban/rural			100 %					
Capacity building for improved service availability	% of sanctioned posts for vaccinators			50%					
	% of vaccinators(HF staff, LHWs)givenrefresher/technical trainings				100 %				
	% MLM courses (6) held at provincial level annually			x					
Supply Chain Management	At least 95% of functional cold chain equipment as per specifications at ALL health facility levels				x	x			
	80% of districts/tehsils having alternate electric supply available at all EPI stores				x				
Enhanced online micro plans	90% of immunization sessions held as per micro plan							x	
	90% of EPI staff working according to the approved tour plans							x	
	90% of UCs with notified immunization teams in districts						x		
Integration of immunization services into regular health systems	80% of immunization staff having access to functional transport	100% vaccinators and 100% supervisors							
Adequate resources available for immunization activities in regular budget	100% of vaccination staff satisfied with workload/performance			x	x				
Supervisory systems for EPI	80% of online supervisory monitoring reports submitted to higher level					x			
	80% of districts with full complement of			x					

	supervisory staff available								
	100% detailed supervisory plans available for all districts			x					
Component 3: Demand Generation									
Output 3: increased demand for routine immunization services, specially by the disadvantaged groups	10% increase in proportion of parents retaining immunization card				x				
	(absolute value province-wise) expenditure on public awareness campaigns through electronic media disaggregated by provinces				x				
	25% number of districts implementing immunization Voucher Scheme per province				x				
Component 3: Demand Generation Activities									
Communication for development	100% Annual review of communication strategy held at provincial level			x					
	80% of districts reporting tools/messages and printed materials available			x					
Building partnerships for immunization	Number of meetings with provincial assembly members/standing committee on education/health			2	2	2	2	2	
	Number of meetings with Line departments especially education			2	2	2	2	2	
	Notification of EPI text to be included in curriculum				x				
Garnering support of all strata of society					x				
Implementing demand side interventions	% of UCs within district meeting the minimum criteria for participation in voucher scheme			25%	50%	75%	85%	95 %	
	Child voucher			x					
	% of the poorest quintile enrolled in the voucher scheme			20	40	60	80	10 0	
	% of parents having			20	40	60	80	10	

	knowledge of the voucher scheme							0	
Advocacy	Briefing notes prepared for provincial assembly members			X					
	No. of talk shows held			2	2	2	2	2	
	Notification of President Pediatric Association provincial as member of provincial coordination committee			x					
	No. of advocacy sessions conducted with policy makers by private sector/CSOs			2	2	2	2	2	
Social Mobilization	90% of parents with children under 1 year of age who can state the date for next immunization			40%	60%	80%	90%	95 %	
Grievance Re-dressed Mechanism				x					

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Annexure-XI

Scaling-Up of Vaccine Logistics Management Information System (vLMIS)

Introduction:

In May 2013, the USAID DELIVER PROJECT was assigned a task by Government of Pakistan to strengthen the vaccine logistics system in Pakistan. The system is destined to strengthen the logistics and inventory management of vaccines in a comprehensive manner to meet the needs of an automated logistics information management system for the vaccines and cold chain equipment other logistics. Initially vLMIS is being implemented in two phases. During the first phase of implementation 54 high risk districts have been selected across the Pakistan. Out of which vLMIS has been implemented in 08 districts i.e. Hyderabad, Kambar, Kashmore, Larkana, Shikarpur, Sukkur, Ghotki and 03 towns Baldia, Gadap and Gulshan-e-Iqbal of Sindh.

For the purpose more than 280 officials of Health Department and EPI program were trained or oriented on vLMIS. This includes policy makers, senior and mid-level managers, EPI focal persons, store in-charges and store keepers, DSV, ASV, Vaccinators and data entry operators.

The main objective of training program is to cost effectively implementation of vLMIS in high risk districts of province and build district level technical capacity to use, analyze and report vaccine logistics data through the vLMIS application.

The training program will be followed by the provision of hardware support and internet connectivity devices at data entry sites in each district. The DELIVER provincial staff and master trainers are extending technical support and supervising the data entry process through regular field monitoring and supervisory visits.

Scaling Up of vLMIS:

Keeping in view the appreciation by health department and EPI, as a result of improved visibility of data and reporting rate of successful implementation of vLMIS in priority districts, it is high time that vLMIS should be scaled up throughout in province. Looking at the districts' administrative details and phase one implementation experience, it is expected that 25-30 officials from each district need to be trained or oriented on vLMIS. For regular reporting of data, computers and internet connections would be required in remaining districts of Sindh. Additional resources would also be required in terms of technical support, monitoring and supervision and operational cost.

Allocation of Resources:

In presence of strong political, policy and program level support and commitment, scaling up of vLMIS to remaining districts of province is mainly dependent upon availability of resources. There is adequate staff available in all the districts which can play a pivotal role in implementation of vLMIS in these districts. The financial aspect of scaling up of vLMIS is a critical to ensure required resource from the government allocations for system sustainability.

Annexure-XII

Statement Showing Posts, Basic Scale, Requisite Qualifications, Experience and Job Description

S.N	Name of Post	No. of Posts	Qualification/Experience for Post	Job Description
1.	Deputy Director Monitoring & Evaluation (BS-18)	01	M.Sc. Statistics or Economics MPH or equivalent recognized qualification by PMDC 7Years' experience in BS-17 in public health programs. Computer Skills will be Preferred.	Head of the M&E Department Plan and implement M&E activities Develop all kind of tools for M&E Coordinate with provinces and districts Compilation of data and its distribution to the concerned quarters Feedback to the districts on data analysis To work under direct supervision of Provincial Manager EPI
2.	Assistant Director M&E (BS-17)	08	M.Sc. Statistics or Economics MPH or equivalent recognized qualification by PMDC 5 Years' experience in BS-17 in public health programs. Computer Skills will be Preferred.	Plan and implement M&E activities Develop all kind of tools for M&E Coordinate with provinces and districts Compilation of data and its distribution to the concerned quarters Feedback to the districts on data analysis To work under direct supervision Deputy Director
3.	EPI Coordinator/ Epidemiologist (BS-17)	45	MBBS or equivalent qualification recognized by PMDC. Experience in preventive programs will be preferred.	To work under supervision of Provincial and Districts Managers. She/he will assist them for carrying outassigned duties under his/her job description andwill also take part in other program related activities at field level as and when required by the

				Provincial Manager
4.	Provincial Superintendent Vaccination. (BS-17)	08	Bachelor or intermediate with 10 years working experience in EPI. He/she will be promoted on performance basis from already working District Superintendent Vaccination	He/she will provide technical assistance and guidance to the District EPI Cells in order to train them to establish proper supervision, monitoring and reporting system. He/she will also train district staff for planning vaccination sessions at union council level in accordance with Reach Every District approach (RED). She/he will work under the direct supervision of the Provincial Manager.
5.	District Superintendent Vaccination (BS-16)	15	Degree either Bachelor or intermediate with 5-10 years working experience as Tehsil/Taluka Superintendent Vaccination or according to the needs/requirements of the post. He/she will be promoted on performance basis from already working Taluka Superintendent Vaccination	He/she will assist Distinct Officer Health in planning vaccination sessions at union council level and assist his supervisors in compilation of reports of vaccination performance and disease surveillance for onward submission to provincial and federal levels. He/she will also monitor performance of his supervisors and field staff on up raising the immunization coverage more than 90% at every union council level and even for other field related activities as and when required basis.
6.	Vaccinators (BS-6)	100	He/she must have a minimum of 10 years of schooling, be more than 18 years of age. All recruited vaccinators must be permanent residents of the areas of posting from same union council.	Vaccinators will be recruited with the target of having at least two vaccinators for every union council. Newly recruited vaccinators will undergo for on job training for six months before administration of EPI injections,
7.	Dy. Director (Surveillance)	01	M.Sc. Statistics MPH or equivalent	Head of the Surveillance Department

	(BS-18)		qualification recognized by PMDC 5 years' experience in BPS-17 in public health Program or equivalent experience in reputable private sector/ UN organization Experience in disease Surveillance will be preferred.	Plan and implement surveillance activities Develop all kind of tools for surveillance Coordinate with provinces and districts Compilation of data and its distribution to the concerned quarters Feedback to the districts on data analysis Any other duty assigned by Provincial Managers EPI.
8.	Assistant Director Surveillance (BS-17)	08	M.Sc. Statistics or Economics MPH or equivalent recognized qualification by PMDC 5 Years' experience in BS-17 in public health programs. Computer Skills will be Preferred.	Plan and implement Surveillance activities Develop all kind of tools for Surveillance Coordinate with provinces and districts Compilation of data and its distribution to the concerned quarters Feedback to the districts on data analysis To work under direct supervision Deputy Director
9.	Dy. Director (Training) (BS-18)	01	M.Sc. Statistics MPH or equivalent qualification recognized by PMDC 7 years' experience in BPS-17 in public health Program or equivalent experience in reputable private sector/ UN organization	Head of the Training Department Plan and implement capacity building activities in the province Coordinate with provinces and districts for need assessment Any other duty assigned by Provincial Manager EPI.
10.	Assistant Director (Training) (BS-17)	08	MBBS or equivalent qualification in Social Sciences recognized by PMDC. Extra qualification and experience in capacity building of workers will be preferred.	To work under supervision of Deputy Director Training and assist him for carrying out assigned duties under his/her job description. Any other duty assigned by Deputy director.
11.	Administrative Officer	01	Master degree with five years'	To work under direct

	(BS-17)		experience in BS-17 or Graduate with seven years' experience in BS-17 of working in the managerial/ administrative cadre of health institution/ program. Computer skills will be preferred	supervision of Federal and Provincial Managers EPI and assist them for:- Supervision of Administration Department Supervision of Accounts, Transport, Maintenance and Security Section. Dealing with all administrative matters. Supervision of maintenance of personal files/record of officers/officials of EPI. Convening of program meetings, workshops and seminars. Preparation of minutes/proceedings of meetings, workshops and seminars. Dealing with audit teams during the Program's audit with the assistance of staff of all concerned sections. Any other duty assigned by Provincial Manager EPI.
12.	Assistant Administrative Officer (BS-16)	02	Graduate. Three years' experience as Assistant of any Ministry	To work under supervision of Administrative Officer to assist him/her in administrative and account matters of the department.
13.	Data Managers (BS-14)	18	Diploma (Computer) or equivalent qualification recognized by HEC. Three years' experience in maintenance of office data.	He/she will assist Deputy Directors M&E, Surveillance and Administrative Officer. She/he will be responsible for compilation of reports of immunization performance, BMS, Rotavirus and AEFI. He will also assist his Supervisors and get in touch with the provinces for timely collection and compilation of data relating to Vaccine Preventable Diseases (VPD). He/she will be promoted on performance basis among

				already working as post of Statistical Assistant or its equivalent.
14.	Transport Superintendent (BS-16)	01	Graduate or Intermediate. Three years' experience as Transport Supervisor	Assist Administrative officer in detainment of vehicles within and outstation movements. He/she will also assist administrative Officer in repair and maintenance of vehicles
15.	Transport Supervisor (BS-11)	01	Intermediate. Three years' experience in vehicle detainment	Will assist Transport Superintendent in clearance of vehicle documents, detainment and repair and maintenance of vehicles
16.	Mechanics (BS-11)	04	Intermediate with Diploma in Motor Mechanics. Three years' experience preferable	Will assist Transport Superintendent in repair and maintenance of vehicles
17.	Driver (BS-5)	10	Middle pass holding required driving license. Three year driving experience	Will work under supervision of Transport Superintendent
18.	Sub-Engineer (Civil) (BS-16)	01	Diploma (Civil) or equivalent qualification recognized by HEC. Three years' experience in civil maintenance of office buildings.	To work under supervision of Administrative Officer. Responsible for civil maintenance of EPI office buildings and warehouses of EPI. Prepare periodic maintenance plan of the buildings. Any other duty assigned by Provincial Manager EPI.
19.	Supervisor Horticulture (BS-14)	01	10 years schooling with three year experience in plants and flowers	He/she will assist Sub-Engineer Civil in beautification office building
20.	Accounts Officer (BS-17)	01	M.Com or MBA Finance with three years or B.com/ BBA with five years' experience in account matters in BPS-16 in health program /institution. 3 years' experience in relevant field Computer skills preferable.	To work under direct supervision of Provincial Manager and assist him/ her in carrying out assigned duties pertaining to Accounts Section of program and:- Prepare budget, cash plan in consultation with the

				Program Management) Deal with all budgetary matters including reconciliation, releases and expenditures Examination of all financial claims before submission for approval by the Competent Authority. Preparation of replies to audit observations. Maintenance of Cash Books in accordance with the rules, regulations and procedures of the Government of Pakistan and Donor Agencies so that financial monitoring reports are easily prepared from the accounts record. Liaison with AGPR for early settlement of claims and payments of bills. Any other duty assigned by Provincial Manager EPI.
21.	Assistant Accounts Officer (BS-16)	02	Graduate or Intermediate with three years' experience in handling accounts of public and private departments	He/she will assist account officer in maintaining the books of accounts of EPI and prepare financial monitoring reports, including budgets, reconciliation of expenditure and submit the same to the Department of Health and Accountant General of Punjab (AGP) with the approval of the Accounts Officer (DDO) and Project Director. He will maintain and ensure financial discipline.
22.	Cashier (BS-14)	01	Intermediate with three years' experience in relevant field	He/she will maintain books of accounts of EPI and prepare financial monitoring reports, including budgets, reconciliation of expenditure and submit the same to

				Ministry of Health and Accountant General of KPK (AGP) with the approval of the Accounts Officer (DDO) and Provincial Program Manager. He will maintain and ensure financial discipline.
23.	Procurement Officer (BS-17)	01	Master degree with five years' experience in BS-17 or Graduate with seven years' experience in BS-17 of working in the managerial, administrative, purchase and procurement cadre health institution/ program. Experience in purchase and procurement of health institution/ program or equivalent experience in reputable private sector/ UN organization Computer skills will be preferred	To work under direct supervision of Federal and Provincial Managers EPI and assist him for:- Supervision of purchase/procurement and store sections Update regarding status of stock of vaccines and logistics needed by the Program Preparation of plan for purchase of procurement of all logistics for EPI. Distribution plan of EPI logistic components to provinces and other health departments. Supervision of maintenance of purchase/ procurement, storage and distribution record including report and returns. Liaison with provincial health departments for their logistic needs. Any other duty assigned by Provincial Manager EPI.
24.	Store Officer (BS-17)	01	Graduate. Five years' experience of handling stores and procurement services of the health institution in BS-16 or equivalent experience in reputable private sector/ UN organization	To work under direct supervision of Federal and Provincial Managers to assist in carrying out his/her assigned duties pertaining to stores of EPI as under:- Update on stock position of vaccines and logistics needed

			Computer skills preferable	by the Program. Ensure proper vaccine management and avoid wastage at all levels through close coordination with In-Charges of Provincial and District Stores. Responsible for all matters related to the Store and maintain liaison with his/her Provincial and District counterparts. Ensure timely supplies of vaccines and logistics in accordance with the agreed quarterly plan. Assist provincial stores in getting certification. Develop work plan for the provinces/areas and districts. Keep in touch with the Manager, Procurement and Logistics, and inform him of the availability of storage space for vaccines and other logistics. Any other duty assigned by Provincial Manager EPI
25.	Assistant Store Officer (BS-16)		He/she have a degree either bachelor or intermediate with 5 years working experience as store keeper. He/she will be promoted on performance basis from already working store keepers.	The Assistant Store Officer will assist the Store Officer in meeting WHO requirements for certification of the store. He will be responsible to computerize all store related data according to the VSLIM software developed for this purpose and suggest improvements and amendments if required. He/she will also be responsible for every store related matter for all provinces/areas i.e. ensure timely supplies of vaccines and logistics in accordance

				with the agreed plan.
26.	Store Keeper (BS-11)		He/she have a degree either intermediate or 10 years schooling with 5 years working experience stores..	Store Keeper will assist the Store Officer and the Assistant Store Officer in obtaining clearance and transportation of vaccine and logistics from the ports of entry. He will keep the Store Officer and the Assistant Store Officer informed of the availability of space in the Stores for vaccines and other logistics. He/she will also be responsible for all matters concerning the Store and the supply of vaccines and other logistics to the Provinces/Areas.
27.	Health Education Officer (BS-17)	01	Master Degree in Journalism or Mass Media Communication or equivalent qualification recognized by HEC. 5 years' experience in relevant field Computer skills are preferable.	To work under supervision of Federal and Provincial Managers EPI and assist him to:- Plans Health Education of general masses and public for motivation to EPI activities. Conduct training of health personnel and paramedics. Create health awareness amongst general public through all components of media. Any other duty assigned by Provincial Manager EPI.
28.	Media Production Specialist (BS-17)	01	Master degree in Journalism or Mass Media or equivalent qualification recognized by HEC 3 years' experience in relevant field Computer skill preferable.	To work under supervision NPM EPI and assist him to:- Plans for preparation of media programs and print material on EPI activities. Writing of small stories for public in the press. Preparation of jingles on EPI. Health Education of general

				masses and public for motivation to EPI activities. Conduct training of health personnel and paramedics. Training to medial on EPI. Any other duty assigned by Provincial Manager EPI.

Annexure-XIII

Performance Based Voucher Scheme below is proposed for Immunizationas new innovation for the provinces and federating units.

The voucher will be targeted at the poor as a targeting instrument like Poverty Score Card of the Benazir Income Support Program. The population in lowest 20% group will be targeted for vouchers.

The type of voucher proposed is a well-child voucher, this voucher would be redeemable by the parents of the child that the child has received all immunizations as per schedule, has been screened for malnutrition at least every six months, mother has attended health awareness sessions held at the health facility or in the community on hand washing, child nutrition and disease prevention. This voucher will be given to children under two years of age and frequency of payouts will be bi-annual depending on production of verifiable records by the parent.

To implement the vouchers a voucher management agency shall be hired which shall be tasked with distribution of the voucher on the basis of verification of eligibility and payouts and maintenance of record.

Voucher programs are part of a 'demand-side' approach to healthcare financing.
The vouchers for this scheme (remaining valid for 24 months) will be targeted at the very poor and poor. For the first category i.e. very poor, the targeting instrument will be the Poverty Score Card (PSC) of the Benazir Income Support Program (BISP). For the second category, database of PSC will be matched with NADRA to generate a list of beneficiaries.

In order to test a women's eligibility, the distributors will generate a questionnaire designed as a poverty identification tool which will have been adapted to local circumstances because of differences of poverty characteristics. According to a decided cut-off and by looking at the score of the questionnaire, a list of patients will be generated for the second category in the scheme.

The population targeted for the vouchers will be based on a detailed assessment keeping in view the fiscal space and capacity of the district to implement the scheme. The registration and verification of pregnant women is done through NADRA and PSC (if applicable) and a voucher will be issued to the beneficiary. In case of well child voucher, the mother's information will be used. The enrolment process will start with a computer based enrolment system, mobile enrolment stations of NADRA/VMA will be set up at local centers.

The stations will be equipped with software and hardware required to collect an individual's family data and biometrics. PSC from BISP will also be used to enter the individual's data. In case of the second category, vouchers with an information pamphlet will be issued to the beneficiary at a predefined cut-off and after analyzing the filled in questionnaire along with NADRA verification. The most important feature of the voucher scheme will be the cashless and paperless transactions at the empanelled hospitals and transparency in the disbursement mechanism to the beneficiary

The voucher scheme includes child within 18-24 months of age and also children born three months prior to the scheme are eligible. This voucher will be redeemable by the parent of the child at an amount of Rs 1000/- by the Voucher Management Agency (VMA), provided that the child has received all immunizations as per schedule along with the counseling sessions which will be mandatory for the mother to attend. The child has to receive full immunization by attending 6 sessions over a period of 15 months. The mother has to attend 6 sessions of hygiene awareness and nutrition counseling over a span of 15 months held at the health facility.

For well child voucher scheme and the first aspect of safe delivery voucher, their sessions will be equipped with data management software for record keeping of the ANC & PNC visits along with records of the sessions held. Authorized personnel will be present at the session to verify each beneficiary by counter checking their CNIC and vouchers. The frequency of payout would be annually depending upon production of verifiable attendance record i.e. signed voucher by the parents, 100% attendance of sessions.

Voucher Management Agency

The VMA is responsible for the project coordinating services as well as providing the facility of overall health management and insurance services having reliable IT management systems, tracking systems and the database program. The VMA will record the pin codes of the vouchers given to distributors. The VMA will request advances by Directorate of Health (DoH) based on expected need of disbursements. DoH will only disburse money to the VMA after the provision of a performance bond as a guarantee by the VMA.

Payment from the VMA to the service providers is conditional on service providers making available relevant documentation and the VMA vetting claims. The VMA will provide DoH through verification agent an electronic file for all interventions billed and vetted claims. The flow chart below outlines the mechanism of the voucher scheme along with the key responsibilities of the VMA.

Disbursement mechanism to Beneficiary

A claim processing mechanism based on mobile phone banking and cashless transactions for the patients will be implemented. The cashless system will be available to all registered beneficiaries in all hospitals, on the list of approved private and public hospitals, irrespective of its location and the area of residence of the beneficiary.

At the end of all sessions for the well child and pregnant women, the voucher along with a pin code is presented to a local VMA stations. The pin code is sent at the end of all sessions and visits via SMS to the beneficiary. On the verification of pin code and CNIC by the VMA personnel, the beneficiary will be given the due amount through ‘easy paisa’ service. The payout for the well child voucher takes place 12 months after the first session.

Independent verification and evaluation

An independent verification and evaluation agent will be selected utilizing the Bank’s guidelines. The agent will execute an impact evaluation of the project and also audit the VMA’s reports that trigger disbursement of payments on a quarterly basis.

The project's operational risks will be shared between the medical service providers and the VMA. The VMU will have to incur in costs related to voucher production and sales, as well as voucher administration up-front. They will only be able to recover that cost if vouchers are actually sold and output delivery has been confirmed by the independent verification agent.

Monitoring to detect abuse of the voucher scheme

Voucher schemes can be abused or misused in a variety of ways, including counterfeiting, collusion between providers and voucher bearers or distributors, black market sales, bribery, over servicing, provider moral hazard, and adverse selection.

Registration will be done on the basis of CNIC/NADRA computerized information system so it can automatically flag redeemed vouchers that have not yet been printed or distributed. Service providers may be tempted to shift patients from lower to higher-paying categories, even if it means providing services the patients do not merit according to the management protocol. To monitor this misuse of voucher schemes, periodical review a sample of cases from each provider that qualified for the higher payments, to ensure that it meets the established criteria.

Evaluation

The voucher schemes shall be designed with an inbuilt component of evaluation. For this purpose, during the preparatory phase, academic institutions from the country as well as from abroad will be involved and a reputable institution will be engaged in partnership with a local academic institution during project formulation and design.

A historical plot of selected mortality and morbidity indicators specially for out of pocket health expenditure, health facility utilization rates, public budget utilization per capita shall be prepared, a baseline to ascertain current rates shall be established and additional districts shall be taken as controls where either of the two or comparable interventions are not being implemented.

After one year of implementation in the main district the pilot shall be expanded to one of the controls. This will allow for a multistage design for the evaluation. In addition in a smaller subset of the pilot a health diary to record health utilization and expenditures shall be introduced for at least 300-400 households and maintained throughout implementation with regular follow-up visits and defaulter tracing to create a household based prospective cohort. The pilot will also have a mid-line after one and a half and impact evaluation at three years to provide evidence for replication or expansion of the scheme in other districts.