



# Project Administration Memorandum

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Project Number:  
Loan 2178-PAK

September 2006

## Pakistan: TA Loan and Technical Assistance Grant for Infrastructure Development Project

The project administration memorandum is an active document, progressively updated and revised as necessary, particularly following any changes in project costs, scope, or implementation arrangements. This document, however, may not reflect the latest project changes.

**Asian Development Bank**

## **CURRENCY EQUIVALENTS**

(as of 11 March 2006)

Currency Unit	–	Pakistan rupee/s (PRs/PRs)
PRs1.00	=	\$0.0165
\$1.00	=	PRS 60.50

## **ABBREVIATIONS**

ADB	–	Asian Development Bank
ADF	–	Asian Development Fund
BOT	–	build-operate–transfer
CSPU	–	Country Strategy and Program Update
EAD	–	Economic Affairs Division
EIA	–	environmental impact assessment
IA	–	implementing agency
IEE	–	initial environmental examination
IMU	–	Infrastructure Management Unit
IPP	–	Independent power producer
JBIC	–	Japan Bank for International Cooperation
KESC	–	Karachi Electricity Supply Company
LAR	–	land acquisition and resettlement
MOC	–	Ministry of Communications
MOF	–	Ministry of Finance
MOLG	–	Ministry of Local Government
MOPS	–	Ministry of Ports and Shipping
MOR	–	Ministry of Railways
MOWP	–	Ministry of Water and Power
MTDF	–	Medium-Term Development Framework
NEPRA	–	National Electric Power Regulatory Authority
NHA	–	National Highways Authority
NTDC	–	National Transmission and Despatch Company
NWP	–	national water policy
OCR	–	ordinary capital resources
PC I	–	Planning Commission Document I
PC II	–	Planning Commission Document II
PDD	–	Planning and Development Division
PPIB	–	Private Power and Infrastructure Board
PPIF	–	Public Private Infrastructure Financing Facility
PPP	–	Public-private partnership
PR	–	Pakistan Railways
PRSP	–	poverty reduction strategy paper
SOIE	–	state-owned infrastructure entity
TA	–	technical assistance
TAP	–	Technical Assistance Program
TOR	–	Terms of reference
TSDI	–	transport sector development initiative
WAPDA	–	Water and Power Development Authority
WSS	–	Water sector strategy

## **NOTES**

- (i) The fiscal year (FY) of the Government ends on 30 June. FY before calendar year denotes the year in which the fiscal year ends, e.g. FY2004 ends on 30 June 2005.
- (ii) In this report, "\$" refers to US dollars.

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**PAKISTAN: TECHNICAL ASSISTANCE LOAN AND TECHNICAL ASSISTANCE GRANT  
FOR INFRASTRUCTURE DEVELOPMENT PROJECT  
LOAN 2178-PAK (SF)**

**PROJECT ADMINISTRATION MEMORANDUM  
PROJECT PROCESSING HISTORY**

<b>MILESTONE EVENT</b>	<b>DATES</b>
a. Fact-Finding	25 November – 2 December 2004
b. Management Review Meeting (MRM)	29 April 2005
c. Appraisal	-
d. PC II approval	March 2005
d. SRC	17 May 2005
e. Financing negotiations	13-14 July 2005
f. Board circulation	28 July 2005
g. Board Consideration and Approval	18 August 2005
h. Loan Agreement signing	12 September 2005
i. Loan Effectiveness	9 February 2006



## DESIGN AND MONITORING FRAMEWORK<sup>1</sup>

Design Summary	Performance Targets/Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
<b>Impact</b> The population of Pakistan has access to increased and improved infrastructure services in the power, transport, and water resources sectors.	Increased amount of infrastructure services in Pakistan in the power, transport, and water resources sectors.  Sector Indicators: 15% net increase in generation capacity.  10% of additional roads.	Pakistan Energy Sector Yearbook.  Statistics provided by PPIB.  New licenses for power generation projects issued by NEPRA.  Annual reports from the new Water Resources Council.  Annual reports for the Provincial Irrigation and Power Departments.  Statistics provided by Government ministries and research institutions.	<b>Assumptions</b> Continued focus by the Government on infrastructure development to reach its economic growth and poverty alleviation targets.  Private developers and investors view the investment climate conducive.  Identified projects reach financial close and are implemented.  Government will approve the recommended changes in policies and regulations.
<b>Outcome</b> Detailed enhanced infrastructure investments policies, plans, and projects are available and ready for consideration and implementation by non-public developers and investors.	Sequenced action plan to address the investment constraints by end 2006.  At least 7 subprojects with primary focus on sector planning, project identification, development, and implementation.  At least 15 infrastructure projects prepared for financing by nonpublic sources.	Government policy statements and regulatory determinations.  Statistics provided by PPIB, Government ministries and research institutions.  New licenses for generation projects issued by NEPRA.  Periodic progress reports IMU.  Project completion reports.	<b>Assumptions</b> Actual implementation of the policies and regulations recommended under the TA Loan.  The identified projects reach financial close and are implemented.  <b>Risk</b> Civil society groups oppose the defined projects and/or investments.
<b>Outputs</b> 1. Identification and prioritization of constraints for investments in infrastructure projects. Recommendations of new policies and regulations for	Diagnostic study identifying constraints for nonpublic investments in infrastructure, leading	Consultant's Diagnostic study of the constraints.  Signed Subproject Agreements and	<b>Assumptions</b> Government agencies are able to retain qualified staff.  Sufficient resources,

<p>infrastructure investments are enhanced.</p> <p>2. Power sector: NTDC and the new distribution companies have increased capacities, and feasibility reports for generation projects are ready for financing.</p> <p>3. Transport sector: NHA's PPP planning and project preparatory capacities are enhanced, and road, port, and railway feasibility reports are ready for financing.</p> <p>4. Water resources sector: enhanced sector structure and project feasibility reports available for financing.</p>	<p>to at least 2 sub-projects removing identified constraints.</p> <p>At least 2 institutional capacity building subprojects and 5 feasibility reports for the power sector.</p> <p>At least 3 institutional capacity building subprojects and 5 feasibility reports for the transport sector.</p> <p>At least 3 institutional capacity building subprojects and 5 feasibility reports for the water resources sector.</p>	<p>respective PCRs.</p> <p>Improved policies and regulations as issued by the Government.</p> <p>Pakistan Energy Sector Yearbook (issued annually), PPIB statistics, and Power System Statistics issued by WAPDA.</p> <p>Progress reports</p> <p>ADB review missions</p>	<p>equipment, and management available in each infrastructure agency.</p> <p>Effective operation of the EA, IAs, and Infrastructure Management Unit.</p> <p>Sufficient environmentally sound pipeline of infrastructure projects can be identified.</p> <p>Land disputes and resettlement issues can be resolved.</p> <p><b>Risk</b> Delays in project identification, development of terms of references, feasibility study exercise, and project implementation of infrastructure projects.</p>
<b>Design Summary</b>	<b>Performance Targets/Indicators</b>	<b>Data Sources/ Reporting Mechanisms</b>	<b>Assumptions and Risks</b>
<p><b>Activities with Milestones</b></p> <p>1.1 Contract consultants for the IMU by 1 August 2006.</p> <p>1.2 Identify the current constraints preventing investors to provide funding for infrastructure projects, through a diagnostic study to be completed by 1 October 2006.</p> <p>1.3 Define subprojects and activities to strengthen identified constraints that negatively affect the investment climate and the sustainability of investment options in infrastructure sectors by end 1 November 2006,</p> <p>1.4 Completed at least 3 sub-projects removing identified constraints by end 2007.</p> <p>2.1 Prepare at least 5 Project Feasibility studies by end 2007 under Power component.</p> <p>2.2 Complete at least 2 institutional capacity building subprojects by end 2008 under Power component.</p> <p>3.1 Prepare at least 5 Project Feasibility studies by end 2007 under Transport component.</p> <p>3.2 Prepare at least 3 institutional capacity building subprojects by end mid-2008 under Transport component.</p> <p>4.1 Prepare at least 4 Feasibility studies by mid-2008 under Water component.</p> <p>4.2 Prepare at least 3 institutional capacity building and policy development subprojects by end 2007 under Water component.</p>			<p><b>Inputs</b></p> <p>ADB - \$25.0 million in ADF loan – 600 person months of international and 1,500 person months of domestic consultants</p> <p>ADB – SSTA of \$150,000 - 32 person months of domestic consultants</p> <p>Project Management – 25 ADB review missions, and 16 person-months of ADB staff oversight.</p> <p>Government in-kind contribution of - \$8.67 million</p>

ADB = Asian Development Bank, EA = executing agency, IA = implementing agency, SSTA = small-scale technical assistance TA = project/program preparatory technical assistance.



## **I. PROJECT DESCRIPTION**

### **A. Project Area and Location**

1. The Technical Assistance Loan (TA Loan) will constitute a key intervention for strengthening and further consolidating the long-term development partnership between Asian Development Bank (ADB) and Pakistan in the area of infrastructure development, and it indicates ADB's continued high level commitment to increase infrastructure services. The TA Loan will (i) strengthen the environment for, and improve the sustainability of, infrastructure investment; (ii) outline an infrastructure investment program for the short, medium, and long-term; and (iii) prepare specific investment and institutional capacity interventions for the infrastructure sectors. Infrastructure and utility sector projects will promote economic growth and reduce poverty. The investments will be technically feasible, financially and economically viable, and compliant with the Government and ADB's environmental and social operational policies and procedures. Assistance will be provided through (i) strategic framework definition, (ii) investment environment strengthening measures, (iii) capacity building, and (iv) preparation of feasibility studies. The infrastructure sectors covered under the Project are power, transport, and water resources.

### **B. Objectives and Scope**

2. The overall objective of the TA Loan is to assist the Government of Pakistan (the Government) define, plan, prepare, and implement a program for infrastructure development consistent with the Medium-Term Development Framework (MTDF), and thus reduce poverty.

3. The scope of the TA Loan is to (i) assist the Government create an enabling environment for infrastructure investments for domestic public and private participation as well as bilateral and multilateral agencies, and (ii) increase infrastructure services in Pakistan, by improving institutional capacities to plan, develop, and implement infrastructure projects, and by implementing an infrastructure investment program in the power, transport, and water resource sectors.

### **C. Project Components**

4. The TA Loan will consist of four components. One component will focus on strengthening the infrastructure investment enabling environment. The other components will each cover a major infrastructure sector: power, transport, and water resources. Under each sector component the TA Loan will help prepare, as appropriate, (i) project feasibility studies, (ii) project detailed designs, (iii) project bidding documents and evaluation, (iv) capacity building and development of public-private partnership (PPP) models for the financing, construction, and operation and maintenance of infrastructure facilities, and (iv) institutional capacity building and policy development. The TA Loan will help enhance the capacity of the Infrastructure Management Unit (IMU). The TA Loan will accommodate projects intended for downstream ADB public and private sector financing, as well as for non-ADB-financed projects. The subprojects can be divided into three categories—institutional capacity building, project preparation, and policy and institutional development.

#### **a) Enabling Environment for Infrastructure Investments**

5. This component will (i) assist the Government identify the constraints on infrastructure investment, (ii) develop subprojects and define activities to remove identified conditions that negatively affect the investment climate and the sustainability of investment options in infrastructure sectors, and (iii) execute the subprojects addressing the constraints. The financial allocation to this component from the TA Loan is \$1.25 million. The diagnostic work related to defining constraints and identifying solutions will be supported by a small-scale TA of \$150,000. The Government and ADB have identified a need to improve and supplement the skills of the IMU. This subcomponent will provide assistance to the IMU for (i) implementing the infrastructure strategy, (ii) planning and coordinating the infrastructure sectors, (iii) implementing project preparatory activities, and (iv) monitoring activities.

**b) Power**

6. Subprojects were identified by the Government through its presentations and interaction with line agencies and State Owned Enterprises. ADB supports the development of the subprojects as they will focus on areas requiring attention and improvement. The financial allocation to the component under the TA Loan is \$6.75 million, to be distributed among the subprojects, which will cover either project preparation or institutional capacity building.

7. The power sector subprojects are expected to (i) address shortcomings in and improve power generation, (ii) augment and expand transmission and distribution systems, (iii) build the capacity of the National Transmission and Despatch Company (NTDC), and (iv) build the institutional capacities of the eight new distribution companies. A list of pre-defined power sector subprojects is in Appendix 16, including the corresponding subproject descriptions and outline Terms of Reference (TORs).

**c) Transport**

8. The primary tasks of the TA Loan are to provide resources to assist the Government prepare transport sector projects, and to build sustainable institutional capacities of transport sector ministries and agencies. The Government identified, and ADB agreed to, subprojects to improve certain areas of the transport sector. The allocated \$11 million will be distributed among the subprojects.

9. The subprojects cover (i) road project preparatory facilities, (ii) railway project preparatory facilities<sup>1</sup>, (iii) a model concession and project preparatory facility for a PPP pilot project in national highways and motorways, (iv) capacity building for the National Highway Authority (NHA), (v) policy development and capacity building for the Ministry of Railway (MOR) and Pakistan Railways (PR), and (vi) policy development and capacity building for Ministry of Ports and Shipping (MOPS).

**d) Water Resources.**

10. The primary task of the TA Loan is to build capacity for water resources planning, development, and management within the concerned federal and provincial agencies, so that over the medium term, they can most effectively start preparing and implementing major dams and other large water infrastructure. The TA Loan for the water sector will support implementation of a Technical Assistance Program (TAP) that is being prepared under ADB TA

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<sup>1</sup> Subject to agreement between the Government and ADB on the development of a reform program and a plan.

at the request of the Government.<sup>2</sup> The TAP builds from the ADB-supported water sector strategy (WSS) and draft national water policy (NWP), and reflects the outcome of significant policy dialogue with the Government. The TAP will strengthen the institutional framework and build new capacity for strategic planning and policy analysis to bolster overall management of water resources. The TAP will build professional capacity and skills at the federal and provincial levels by assisting the Government with the following activities: recruiting staff; designing and implementing a capacity development program; providing short- and long-term national and international consultants; providing funds to contract needed studies and related activities to centers of expertise in Pakistan; and providing funds to establish and equip the unit and make it fully functional. The TAP will cover (i) developing water resource analytical and planning capacity of sector institutions, (ii) improving the technology for and management of decision support systems, and (iii) strengthening and reforming the institutional and legal arrangements. Of the \$6 million allocated to the water resources component, \$4 million will support the TAP.

11. The remaining \$2 million will be used by provincial agencies to prepare proposals for small, quick-gestation subprojects for irrigation and water resources, with an indicative amount of \$500,000 allocated to each province.<sup>3</sup> All activities supported through the TA Loan funds at the provincial level, including all projects to be prepared through the feasibility studies, will have to be within the capacity of the provincial governments to implement and manage. During fact-finding for the water resources sector component of the TA Loan, the provincial governments, represented by departments of irrigation and power, planning and development, and finance, identified numerous projects and management programs in various stages of preparation that could be supported through the TA Loan. Many of the proposed feasibility studies identified in the different provinces were similar in scope, and included small storage structures, development of spate irrigation systems, capacity building, and groundwater management.

## II. COST ESTIMATES AND FINANCING PLAN

### A. Cost Estimates

12. The total project cost is estimated at \$33.67 million equivalent, including interest during implementation. The foreign exchange cost is estimated at \$18.49 million, while local currency costs are estimated at \$15.18 million. The total cost includes interest during implementation of \$0.34 million, which will be paid by the Government. The cost estimates are inclusive of taxes and duties to be financed by the Government. The amounts associated with taxes and duties are immaterial as they only relate to minor equipment purchases under each subproject. The concern of forward recurrent costs related to operation and maintenance is not an issue as none of the interventions under the project require continuous financing. However, it is an issue for the follow-on loans, and recurrent costs concern will be incorporated as part of the TOR for each relevant subproject.

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<sup>2</sup> ADB. 2004. *Technical Assistance to the Islamic Republic of Pakistan for the Water Sector Irrigation Development*. Manila (TA 4435-PAK approved for \$300,000 in November 2004).

<sup>3</sup> Large dams and major, federally-executed water projects will not be prepared; rather, this is expected to follow upon the institutional and human resources capacity to be developed under the TA Loan. Separate projects for major canal and irrigation rehabilitation at the provincial level will be prepared under ADB grant-financed project preparatory TAs.

**Table 1: Project Cost Estimates**  
(\$ million)

Item	Foreign Exchange	Local Currency	Total Costs
Enabling Environment for Infrastructure Investors/ IMU	0.85	0.80	1.65
Power Sector Component	4.92	4.08	9.00
Transport Sector Component	8.14	6.54	14.68
Water Resources Sector Component	4.24	3.76	8.00
Interest during Implementation	0.34	0.00	0.34
<b>Total</b>	<b>18.49</b>	<b>15.18</b>	<b>33.67</b>

Source: Asian Development Bank estimates.

## B. Financing Plan

13. ADB will provide a TA Loan of \$25 million equivalent, about 75% of the total project cost, to cover the entire foreign exchange costs, except for the interest during implementation, as well as 44% of the local currency costs. However, the split between foreign and domestic currencies should be seen as the best possible indicative estimate available, as it may change during implementation because of better knowledge about the use of international and domestic consultants in each subproject. The Government will finance the remaining \$8.67 million (about 25%), which will cover local currency counterpart financing as well as the \$0.34 million for interest during implementation in foreign exchange. The Government financing is expected to cover items such as (i) remuneration of counterpart staff, (ii) local travel, (iii) equipment (vehicles, computers, software, etc.), (iv) surveys and data gathering, (v) taxes and duties, and (vi) other miscellaneous costs, of which most will be provided in kind and accordingly the availability of counterpart financing should thus not be an issue.

14. The Ministry of Finance (MOF) will be responsible for repaying the TA Loan. The Government's financial position indicates sufficient internally generated resources with a corresponding balance of payments to support timely repayments of the ADB loan. Should MOF need to recover a proportional amount of the loan repayment from each sector agency, the amounts could be reduced at source.

**Table 2: Financing Plan**  
(\$ million)

Item	Foreign Exchange	Local Currency	Total Costs
Asian Development Bank	18.15	6.85	25.00
Government	0.34	8.33	8.67
<b>Total</b>	<b>18.49</b>	<b>15.18</b>	<b>33.67</b>

Source: Asian Development Bank estimates.

15. ADB will provide a loan of \$25 million equivalent from ADB's Special Funds resources, with a term of 32 years, including a grace period of 8 years, with an interest rate of 1% per annum during the grace period and 1.5% per annum thereafter, and such other terms and conditions as will be set forth in the loan and project agreements.

16. Although no cofinancing is envisioned in conjunction with the TA Loan, cofinancing from official (loan and grant) and commercial sources may be mobilized for the follow-on projects, which will be developed under the TA Loan. Cofinancing from commercial sources may benefit from ADB's credit enhancement, including ADB's guarantee instruments, and will be presented

in conjunction with the processing of follow-on projects. The Government may also consider further financing of each component, and ADB has no objection to such additional financing.

### **III. IMPLEMENTATION ARRANGEMENTS**

#### **A. Executing and Implementing Agencies**

##### **a. Project Management and Coordination**

17. The IMU was established within the Planning and Development Division (PDD) to manage the increased activity resulting from the Government's focus on infrastructure. The IMU will be responsible for implementation of all components, day-to-day operations of the TA Loan, and coordination with ADB. The IMU will have a director of at least the joint secretary level, and experts with substantial experience in various infrastructure sectors as well as overall planning exposure. The IMU will steer infrastructure development and coordinate with all involved Government ministries and agencies. It will report to the Secretary of the PDD, and it will discuss, review, and approve the program on utilizing the TA Loan, including approval of subprojects. The TA Loan will provide assistance so the PDD can perform executing agency functions through the IMU. The IMU will be responsible for developing each component's program, overseeing the implementation, and monitoring the progress of the individual subprojects within the four components. The IMU will assist each implementing agency (IA) prepare and submit on time Planning Commission Approval Document 1 (PC I) and Planning Commission Approval Document 2 (PC II) as required, as well as recruit consultants on time, inclusive of development of requests for proposals and selection of consultants. Each IA will be responsible for its subproject's detailed activities and implementation, and will report the progress to the IMU. The reporting requirements are to be developed by the IMU in coordination with the respective IAs and ADB. The TA Loan structure and flow chart are in Appendix 2. The EA/IMU will submit the proposed approved subprojects to ADB for review and approval. The format of the subproject proposal is in Appendix 4.

18. Each IA will nominate a subproject director, acceptable to ADB, to administer the subproject. Each subproject director will be responsible for overseeing social, resettlement, and environmental issues as well as engineering, financial, and economic aspects required to execute the subproject. Each subproject director will have the resources and facilities to implement their respective subprojects.

19. The TA Loan aims to ensure timely implementation and use of its resources by allowing reallocation of funds between the four components should they be constrained by the original allocation. Any reallocation will be determined by the IMU in close consultation with the sectors and ADB. Line ministries will be responsible for handling the federal and provincial aspects of the TA Loan.

#### **B. Project Management and Organization (Component-specific)**

##### **a. Enabling Environment for Infrastructure Investments**

20. This component will be implemented by the IMU. The IMU will share the consultants' findings with a wide spectrum of stakeholders, and enlist assistance from ministries and agencies when the interventions to remove investor constraints have been prepared.

## **b. Power Sector**

21. As each subproject has been identified, inclusive of its IA (Appendix 16), the focus will be on implementation. Each IA is responsible for developing the detailed TORs and for presenting them to the IMU and ADB for approval. Where appropriate, the IMU will seek input and concurrence from MOWP before approval and calling for expressions of interest. The IAs will be responsible for short-listing consultants, evaluating proposals, and preparing the documents for approval of the selection by IMU and ADB.

## **c. Transport Sector**

22. As each subproject has been identified, inclusive of its IA (Appendix 17), the focus will be on implementation. Each IA is responsible for developing the detailed TORs which will be submitted to IMU with the subproject application form for approval. Where considered necessary by IMU and ADB, the IMU may seek guidance from the Transport Coordinating Committee for newly proposed projects other than those pre-defined during appraisal. The IAs will be responsible for short-listing consultants, evaluating proposals, and preparing the documents for ADB concurrence.

23. NHA will be the main IA for the roads sub-component, including PPP projects, MOR for railways, and MOPS for ports. The IAs will (i) maintain the quality of work programs, (ii) monitor the level of project utilization to ensure consistency with national development objectives, and (iii) supervise the consultants' work.

## **d. Water Resources**

24. The MOWP will be the IA for the TAP that will be developed under TA No. 4435-PAK<sup>4</sup> to develop irrigation and will assist in preparation of the detailed TOR and costing for the activities covered under the \$4 million of the TA Loan allocated to the TAP. A TAP steering committee will oversee development and implementation of the TAP, provide policy guidance, and monitor and evaluate the TAP's impact. The TAP steering committee will meet at least semiannually and have representation from Ministry of Water and Power (MOWP), the PDD, MOF, Economic Affairs Division (EAD), and the Indus River System Authority, among others.

25. Component activities will require approval by the EA and ADB. The provincial agencies that avail themselves of TA Loan funds will be the IAs and responsible for developing proposals for funding, the PC-I or PC-II, detailed TORs, recruiting consultants, and monitoring and evaluating outputs with support from the IMU. Once the TA Loan is approved, provincial agencies will formally be solicited for proposals. Within 6 months after all proposals have been received, the agencies will select activities that will use TA Loan funds. Provisionally, \$500,000 is earmarked for each province.

## **C. Subproject Selection Criteria**

26. An objective of using the TA Loan modality is to ensure increased Government ownership of its institutional capacity building and project preparatory program and activities. As the subprojects are implemented, ADB is expected to find increased capacities to address substantial project preparatory and sector issues. The overall objective of selecting subprojects

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<sup>4</sup> Under ADB. 2004. *Technical Assistance to the Islamic Republic of Pakistan for TA 4435-PAK: Water Sector Irrigation Development*. Manila (TA 4435-PAK, approved for \$300,000 in November 2004).

was to engage the Government authorities in identifying and evaluating candidate subprojects. In selecting subprojects, the Government aims to adopt the Planning Commission's (PC) integrated approach to infrastructure development. It will use the following criteria (i) the subproject must be based on a sector strategy, master plan, or road map, (ii) it must be in line with ADB's objectives as stated in the current CSP and CSPU, (iii) it must be organizationally and/or technically feasible, (iv) it must be financially and economically viable and sustainable, (v) it must be prepared in accordance with ADB's *Environment Policy (2002)* and meet the Government's environmental requirements; (vi) it must be in accordance with ADB's social policies and operational procedures including *Policy on Involuntary Resettlement*, and a resettlement plan will be prepared under each subproject and measures will be taken in accordance with ADB's *Policy on Indigenous People*, if required and (vii) it must be completed during the project period. The standard subproject application procedures and proposal form, to be used by IAs when applying for funding of a subproject, are provided in Appendices 3 and 4.

27. A number of the identified subprojects are project preparatory facilities for projects included for ADB financing in the 2005–2006 CSPU<sup>5</sup>, and the subprojects are expected to form the backbone of ADB's infrastructure assistance to Pakistan beyond the current planning framework. The TA Loan modality is important to ensure the establishment of a healthy lending and non-lending program for ADB. It is also a strong link between the Government infrastructure development program and ADB's CSPU development process. The complementarity is a result of successful dialogue between the Government and ADB on ADB's operational program for Pakistan.

28. The power and transport sectors have preselected all subprojects as part of the processing of the TA Loan, identified IAs, and prepared outline TORs. They have also ensured that the IMU has sector competence and the resources to help the IAs implement their subprojects. Sector-specific criteria are given below.

29. All follow-on projects, arriving from successfully implemented subprojects, selected for financing by ADB (as part of ADB's lending operations) must have their feasibility studies reviewed by the EA and ADB. To qualify for full-scale project processing, the follow-on project will be (i) technically feasible; (ii) economically and financially viable and sustainable; (iii) in accordance with ADB's *Environment Policy (2002)*; (iv) in accordance with ADB's *Policy on Involuntary Resettlement*, and (v) in accordance with ADB's *Policy on Indigenous People*.

#### IV. IMPLEMENTATION SCHEDULE

30. The TA Loan will be implemented over 4 years from the date of loan effectiveness, which was on 9 February 2006. The original implementation schedule is provided in Appendix 8 together with the revised and mutually agreed implementation schedule. Each subproject will have an independent implementation schedule within the TA Loan's overall implementation period, which will be a part of the subproject agreement. ADB will monitor the overall implementation performance of the EA as presented in Appendix 8.

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<sup>5</sup> Project selection criteria for these projects are also reflected in the 2005–2006 CSPU, as a result of the policy dialogue between ADB and the Government.

## **V. COST ESTIMATES AND FINANCING PLAN DURING IMPLEMENTATION**

31. The IAs will prepare a detailed Project cost estimates of foreign exchange costs and local costs for their respective components, in the format shown in Appendix 4. A detailed financial plan for the Project, with estimated financing requirements each for the major Project components, will also be prepared. These tables will be revised and updated annually, or more often if necessary, based on progress with contract awards and actual implementation of the Project, and attached to the quarterly progress reports to ADB. The IAs will also prepare annually the projected contract awards and disbursements under the Project on a quarterly basis for one year ahead, in the format shown in Appendix 7.

## **VI. CONSULTANT RECRUITMENT**

32. The IAs, in coordination with the IMU, will be responsible for selecting and engaging the consultants, which could be international or domestic firms and individuals, to provide the required services, including as per the TORs for each subproject, which include (i) development of strategy to enhance the enabling environment for infrastructure investments; (ii) preparation of the subproject feasibility studies; (iii) preparation of the subproject detailed designs; (iv) preparation of the subproject bidding documents and evaluation; (v) institutional capacity building; (vi) development of a public-private modality for financing, constructing, and operating and maintaining infrastructure facilities; and (vii) preparation of environmental, poverty, and social assessments and, if required, a resettlement plan, an indigenous people's development plan. The process will follow ADB's *Guidelines on the Use of Consultants*, and other arrangements satisfactory to ADB for the engagement of consultants. ADB will review and approve the processing of the consultant recruitments.

33. Each IA will be responsible for monitoring the consultants for each subproject, in consultation with IMU. Each IA will provide logistical support to the consultants and review their outputs. Consultants, whether individuals or firms, may be contracted for several subprojects within one or more sectors as long as they are first-ranked. Each consultant contract is viewed as an independent event and is subject to evaluation by the IA, review and approval by the EA/IMU, and agreement by ADB. If the IA and/or IMU evaluate the consultants' performance as unsatisfactory, the IMU reserves the right to terminate them and recruit new ones, subject to ADB's agreement. For the first year of implementation, about 100 and 200 person-months of international and domestic consulting services, respectively, are required for a combined feasibility and engineering study, including procurement assistance, for the priority subprojects. Tentative estimates for the whole TA Loan are approximately 600 and 1,500 person-months of international and domestic consulting services, respectively.

34. The consultant firms will be engaged using ADB's quality- and cost-based selection procedures or quality-based selection (QBS) procedures, whichever is best suited for the subproject. QBS is required where technical expertise is the overriding requirement. Two or more QBS contracts could be required in the transport component.

35. The outline TORs for all subprojects are in the respective component sections. These will be reviewed and enhanced by the IAs, and additional refinements are expected before issuance of the request-for-proposal documents, which will include the detailed TORs.

## **VII. PROCUREMENT**



36. All goods and services under the TA Loan will be procured in accordance with ADB's *Guidelines for Procurement*. The IAs will determine the required goods and services, and submit their requests for ADB approval. As most subproject procurements are expected to be for routine office and administrative equipment of an estimated value of less than \$100,000 and most efficiently acquired off the shelf, direct procurement procedures are recommended. Supply contracts for equipment of more than \$500,000 will follow international competitive bidding, while contracts of \$500,000 or less will follow international shopping procedures.

## **VIII. DISBURSEMENT PROCEDURES**

37. TA Loan disbursement will be in accordance with ADB's *Loan Disbursement Handbook*, as amended from time to time, and detailed arrangements between the Government and ADB. The loan proceeds will be paid disbursed directly to the consultants based on approved contracts under the direct payment procedure. A signed withdrawal application must be submitted by the IMU to ADB together with the consultant's claim or invoice. The statement of expenditure procedure will be used to reimburse eligible expenditures for any individual payment transaction up to \$50,000 equivalent.

## **IX. PROJECT MONITORING AND EVALUATION**

38. Each IA will monitor and evaluate project performance in accordance with the TORs and the project framework. Primary monitoring targets will be agreed on between the IMU and IAs per subproject, and these targets will be used by the IAs and reported to the IMU and ADB in accordance with the established reporting schedule

## **X. REPORTING REQUIREMENTS**

### **A. Quarterly Progress Report (QPR)**

39. The IMU will monitor project and subproject executions to provide a basis to identify the areas for infrastructure development. The IAs will submit quarterly progress reports on project implementation, which the IMU will consolidate. The reports should indicate, among other items, (i) progress made against established targets, (ii) problems or issues encountered and remedial actions taken or proposed to resolve them, and (iii) proposed project activities as well as progress expected during the implementation period, including details on contract awards and disbursement projections. The format of the report is to be determined.

40. The progress reports are expected to summarize sufficient information to enable the Government, IMU, IAs, and ADB to monitor the most recent progress, identify issues, and ensure compliance with the subprojects' objectives. Consultants are expected to prepare detailed reports for the IAs and the IMU as well as for ADB's review missions. The progress reports will contain an executive summary of the detailed reports, with format and content allowing ADB staff members to readily capture key information for inputting into the project performance report. This will serve as the main tool for monitoring project implementation performance within ADB.

### **B. Subproject Reports**

41. Each subproject requires quarterly reports to be prepared by the supervising IA, and be submitted to the IMU. The format for the subproject report is provided in Appendix 5.

### **C. Project Completion Report (PCR)**

42. Each IA will prepare a completion report for each subproject within 3 months of complete disbursement of the subproject. The report should contain detailed information concerning the subproject's implementation and outcome. It will evaluate how effectively the subproject has assisted the infrastructure developments of the respective sector and its contribution to national development objectives. The TA Loan project completion report will be provided by the IMU within 3 months of completed disbursement. The format of the report is in Appendix 12.

### **D. Evaluation of Feasibility Reports and Final Consultant Reports**

43. The IMU and ADB will review and comment on the consultants' draft final feasibility reports. ADB will be engaged throughout the progress of the institutional capacity-building subprojects, especially those that have policy dialogue and sector reform elements, and it will ensure that IMU is duly informed of the interactions between ADB and the respective IAs. As these subprojects will vary in nature, it will be up to the ADB sector divisions to monitor, evaluate, and guide the IAs and ministries, and engage them in policy dialogue. ADB will review and comment on the consultants' reports prepared as part of the subprojects, and at the end of the subproject ADB will provide comments on the quality of the feasibility.

## **XI. ACCOUNTING AND AUDITING REQUIREMENTS**

44. ADB will regularly review (i) the TA Loan; (ii) the use of facilities, IAs, and subprojects, to prevent significant fund underutilization; (iii) the approval of additional IAs; and (iv) the need for fund reallocation, if any. A midterm project review is expected to be undertaken halfway through the TA Loan implementation, to assess implementation, progress, and achievements.

45. The IAs will maintain separate records and accounts to identify financing resources received and expenditures made on the TA Loan, including the equipment and services financed out of the loan proceeds and local funds. These TA Loan accounts and financial statements as well as the state-owned enterprise procedure will be audited annually in accordance with sound auditing standards by auditors acceptable to ADB. The Government will submit annual audited reports and related financial statements to ADB within 6 months after the end of each fiscal year.

## **XII. MAJOR COVENANTS**

46. The covenants, and other assurances, which have been agreed among the Government, IAs, and ADB, to be complied with against the dates shown where applicable are in Appendix 14.

## **XIII. IMPLEMENTATION OF THE ACCOMPANYING SMALL SCALE TECHNICAL ASSISTANCE (SSTA)**

47. Since the TA Loan aims to improve the enabling environment for investment in infrastructure, the Government requested ADB to provide a small-scale TA to identify and develop solutions for immediate obstacles. The small-scale TA will have two elements that will be implemented in succession: (i) undertake a diagnostic review of the environment for investment in infrastructure, which will result in a list of investment constraints; and (ii) design interventions to remove these constraints. The interventions will be funded by the enabling environment component of the TA Loan. Domestic consultants will be hired, providing a total of

32 person-months, and will have skills in assessing investment climate and experience in enhancing infrastructure investments. The \$150,000 small-scale TA will be financed on a grant basis from ADB's TA funding program. The outline of the small-scale TA is in Appendix 13.

#### **XIV. KEY PERSONS INVOLVED IN THE PROJECT**

48. The following are the key persons responsible for the implementation/administration of the project.

##### **For the Borrower/Executing Agency**

<b>Name</b>	<b>Position</b>	<b>Address</b>	<b>Contact Numbers</b>
Lt. Gen. Muhammad Zubair	Executive Director, Infrastructure Management Unit		
Khalid Waheed	IMU		
Abdul Waheed	IMU		

##### **For the Asian Development Bank**

<b>Name</b>	<b>Position</b>	<b>Email Address</b>	<b>Contact Numbers</b>
Fred Roche	Director, Agriculture, Environment, and Natural Resources Division, South Asia Department (SAAE)	froche@adb.org	Tel No. (63-2) 632 6908 Fax No. (63-2) 636-2391
Thevakumar Kandiah	Director, Energy Division, South Asia Department (SAEN)	tkandiah@adb.org	Tel No. (63-2) 632 6301 Fax. No. (63-2) 632-2338
Kazuhiko Higuchi	Director, Transport and Communications Division, South Asia Department (SATC)	khiguchi@adb.org	Tel No. (63-2) 632 6806 Fax No. (63-2) 636-2340
Thomas Panella	Sr. Water Resources Specialist, SAAE	tpanella@adb.org	Tel No. (63-2) 632 6277
Rune Stroem	Principal Energy Specialist, SAEN	rstroem@adb.org	Tel No. (63-2) 632 6342
Hiroaki Yamaguchi	Transport Specialist, SATC	hyamaguchi@adb.org	Tel No. (63-2) 632 6745
Asad Aleem	Programs Officer, Pakistan Resident Mission (PRM)	aaleem@adb.org	Tel No. +92 51 282 5011 to 5016
Anicia Quijano-Rullan	Associate Operations Analyst, SAEN	arullan@adb.org	Tel No. (63-2) 632 6457
Teresita Mella	Associate Project	tmella@adb.org	Tel No. (63-2) 632

	Analyst, SATC		6894
Cynthia Rosario Razon	Assistant Project Analyst, SAAE	crazon@adb.org	Tel No. (63-2) 633 4622

## **XV. ANTICORRUPTION**

49. During project processing, the Government was informed of the ADB anticorruption policy, particularly the section on fraud and corruption, as stated in ADB's Guidelines for Procurement and Guidelines on the Use of Consultants.

50. The ADB Office of the Auditor General is the point of contact to report allegations of fraud and corruption among ADB-financed projects or its staff. Within that office, the Anticorruption Unit is responsible for dealing with all matters related to allegations of fraud and corruption. ADB's Anticorruption Policy Handbook has been provided separately to the EA and is also available on ADB's website at <http://www.adb.org/anticorruption>.

## **XVI. SAFEGUARDS COMPLIANCE**

### **A. Specific Assurances**

51. In addition to the standard assurances, the Government has given the following specific assurances, which will be incorporated into the legal documents:

- (i) The Government will ensure that the TA Loan and all its subprojects and follow-on projects will be prepared in accordance with (a) the Government's applicable environmental laws and regulations; and (b) ADB's Environment Policy (2002).
- (ii) The Government will ensure that for subprojects and follow-on projects entailing land acquisition and resettlement, resettlement plans are prepared in accordance with (a) the Government's applicable laws and policies, and (b) ADB's Involuntary Resettlement Policy (1995) and relevant resettlement procedures. Adequate measures to avoid or minimize land acquisition and resettlement will be incorporated into subproject and follow-on project designs. The Government will ensure that (a) measures will be prepared in accordance with the Government's applicable laws and regulations related to indigenous peoples, and (b) ADB's Policy on Indigenous Peoples (1999) and relevant procedures of indigenous peoples are incorporated into subproject and follow-on project designs.
- (iii) The Government will provide adequate resources and facilities to implement the TA Loan and all its subprojects effectively through the EA and IAs.
- (iv) Each IA will appoint a competent subproject director, acceptable to ADB, for the duration of the subproject, which will have capacities to oversee social, resettlement, environmental, and sector aspects of the relevant subproject.
- (v) The Government will ensure that the EA and each IA will enter into a Subproject Agreement for execution of the relevant subproject.

- (v) The Government will ensure that the EA and each IA will enter into a Subproject Agreement for execution of the relevant subproject.
- (vi) The Government will ensure that all draft final feasibility study reports related to the TA Loan will be submitted to ADB for review.

**B. Conditions for Loan Disbursement**

52. No disbursement shall be made under each subproject unless its Subproject Agreement has been duly executed, to the satisfaction of ADB.

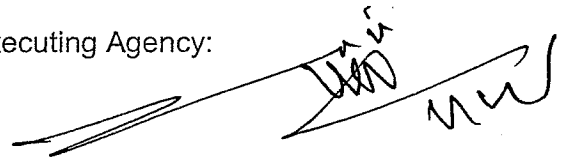
**AGREED**

For the Asian Development Bank



Rune Stroem  
Mission Leader/Principal Energy Specialist  
Energy Division

For the Executing Agency:



Lt. Gen. Muhammad Zubair  
Executive Director  
Infrastructure Management Unit (IMU)

Date: 17 May 2006

**LIST OF APPENDICES**

1. Project Organization Structure
2. Loan Structure and Flow Chart
3. Subproject application and procedures
4. Form of Subproject Proposal
5. Subproject Progress Report
6. Subproject Agreement between IMU and IAs
7. Contract Awards and Disbursement Format
8. Implementation Schedule (Master)
9. Audit Letter
10. Disbursement Letter
11. Procedures to Recruit Consulting Firm (under QCBS)
12. Pro-forma of the Project Completion Report
13. Outline of the small-scale TA (SSTA)
14. Major Loan Covenants
15. Enabling Environment for Infrastructure Investments Component
  - A. Description, Cost Estimates and Financing Plan
  - B. List of Subprojects
  - C. Detailed Implementation Schedule
  - D. Terms of Reference of the Consultants (TORs)
16. Power Sector Component
  - A. Description, Cost Estimates and Financing Plan
  - B. List of Subprojects
  - C. Detailed Implementation Schedule
  - D. Terms of Reference of the Consultants (TORs)

17. Transport Sector Component
  - A. Description, Cost Estimates and Financing Plan
  - B. List of Subprojects
  - C. Detailed Implementation Schedule
  - D. Terms of Reference of the Consultants (TORs)
18. Water Sector Component
  - A. Description, Cost Estimates and Financing Plan
  - B. List of Subprojects
  - C. Detailed Implementation Schedule
  - D. Terms of Reference of the Consultants (TORs)

## ORGANIZATIONAL CHART SECTOR COMPONENTS

### TA LOAN FOR INFRASTRUCTURE DEVELOPMENT

#### ADMINISTRATION AND PROJECT IMPLEMENTATION

- Planning and Development Division
- Infrastructure Management Unit
  - Project Director
  - Project Staff

#### Enabling Environment for Infrastructure Investments

- Allocation: \$1.25 million  
SSTA: \$150,000
- Diagnostic Study identifying investment constraints
- Preparation of subprojects removing constraints
- Execute subprojects removing constraints
- Implementing agency: IMU

#### **Power Sector:**

- Allocation : \$6.75 million
- Subprojects : 7
  - Institutional
  - Capacity Building : 2
  - Project Preparation : 5
- Implementing Agencies
  - MOWP
  - NTDC
  - PPIB
  - PC

#### **Transport Sector:**

- Allocation : \$11.0 million
- Subprojects : 8
  - Institutional : 2
  - Capacity Building : 1
  - Project Preparation : 5
- Implementing Agencies
  - NHA
  - MOLG
  - MOR
  - MOPS

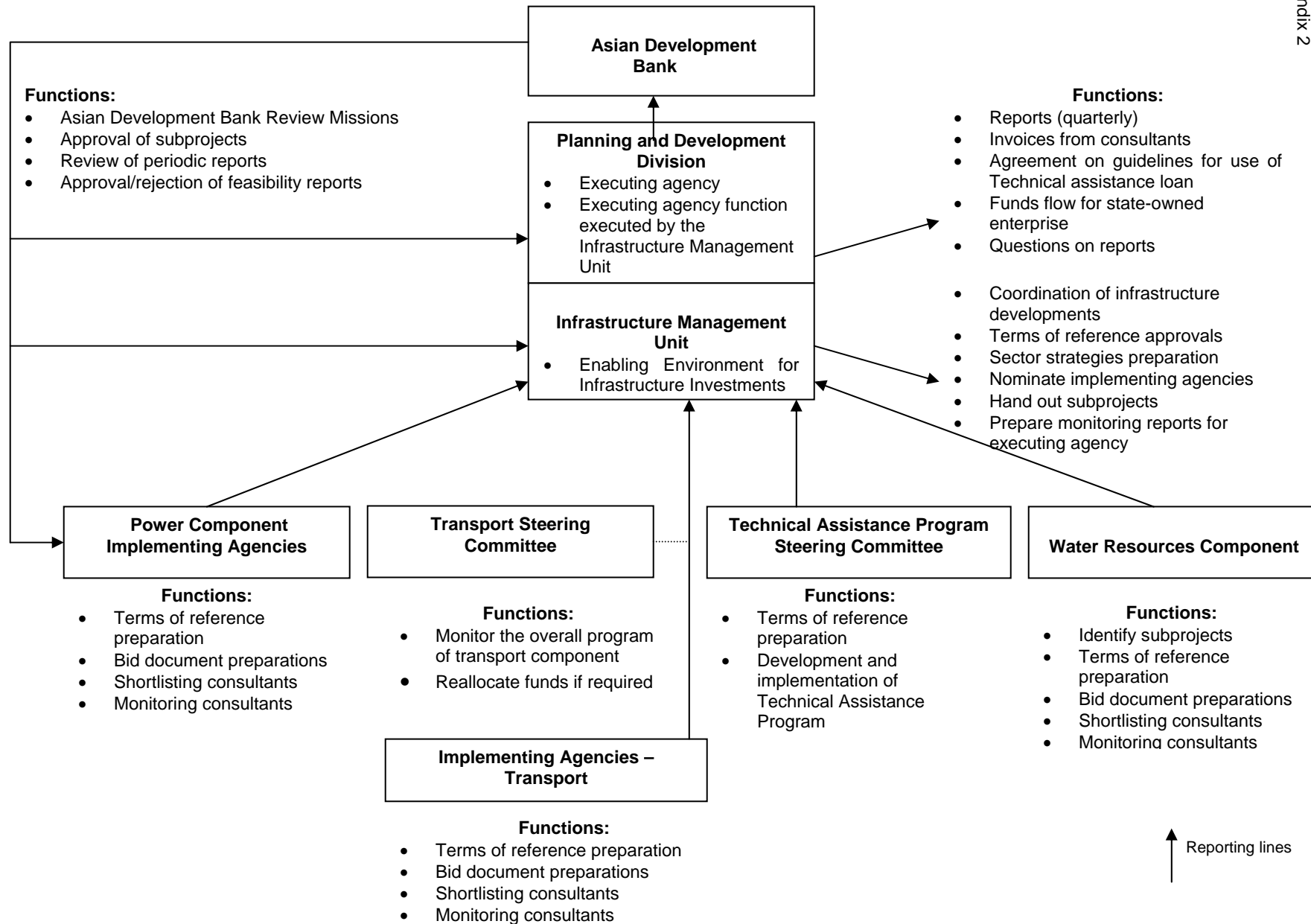
#### **Water Sector:**

- Allocation : \$6.0 million
- Subprojects : 6
  - Institutional : 1
  - Capacity Building : 1
  - Project Preparation : 4
- Implementing Agencies
  - MOWP
  - Provincial Irrigation and Power Departments of Balochistan, Punjab, Sindh and NWFP

IMU = Infrastructure Management Unit, MOLG = Ministry of Local Government, MOPS = Ministry of Ports and Shipping, MOR = Ministry of Railways, MOWP = Ministry of Water and Power, NHA = National Highway Authority, NTDC = National Transmission and Despatch Company, PC = Planning Commission, PPIB = Private Power and Infrastructure Board.



## PAKISTAN: INFRASTRUCTURE TECHNICAL ASSISTANCE LOAN PROJECT FLOW DIAGRAM



## SUBPROJECT APPLICATION PROCEDURES

There are two categories of subprojects, and there is a clear definition between pre-defined subprojects and non-predefined subprojects, and each of the categories has been clearly described below. Each IA is required to follow these procedures in order for the subprojects to be considered for financing.

### A. Pre-defined subproject

#### 1. A subproject is considered pre-defined when:

- (i) the subproject is listed in the RRP and the Project Administration Manual;
- (ii) implementing agencies (IAs) have been identified and draft outline TORs Included in supplementary appendices;
- (iii) outline TORs included in the original Supplementary Appendix B and in the PAM.

#### 2. Procedures to be followed when submitting a subproject application:

Step 1: IA to submit to IMU the following information:

- (i) cover letter
- (ii) subproject proposal form (Appendix 4)  
- excluding the cost estimate and TORs.
- (iii) detailed PC II application form

Step 2: Consideration by IMU and ADB for the first 3 subprojects in each sector.

Step 3: Submission of detailed PC-II application to Country Development Working Party (CDWP) by IMU.

Step 4: Subproject Agreement to be entered into between IA and IMU.

### B. Non-predefined subprojects:

#### 1. Procedures to be followed when submitting a subproject application:

Step 1: IA to submit to IMU the following information:

- (iv) cover letter
- (v) subproject proposal form (Appendix 4)

Step 2: Consideration by IMU for approval of the subproject application. The IMU informs the IA of its decision.

Step 3: IA to submit of detailed PC-II application to CDWP with copy furnished IMU.

Step 4: Subproject Agreement to be entered into between IA and IMU.

### SUBPROJECT PROPOSAL FORM

1. The IA will prepare the following proposal per subproject for utilizing of the TA Loan inclusive detailed cost estimates.

1. Name of the Project and IA:	
2. Project Description: (short and concise)	
<ul style="list-style-type: none"> <li>• Background:</li> <li>• Purpose:</li> <li>• Components:</li> <li>• Expected results:</li> </ul>	
3. Project Areas:	
4. Development Plan: (Reference to Government Development Plan or sector strategies and/or plans.)	
<ul style="list-style-type: none"> <li>• Development Plan:</li> <li>• ADB lending program (CSP/CSPU):</li> <li>• Other agreement:</li> </ul>	
5. Cost Estimates and Proposed Financing Arrangements:	
6. Facility Type	(i) Institutional Capacity Building (ii) Feasibility Study (iii) Detailed Design and Bidding Document (iv) Procurement Assistance
<ul style="list-style-type: none"> <li>• Expected year of ensuing loan/ investment:</li> <li>• Expected amount of ensuing loan/ investment:</li> </ul>	
7. Contact Details:	Name of Project Director: Address: Email: Phone:
8. Clearances:	
<ul style="list-style-type: none"> <li>• Name and signature of the Head of IA:</li> </ul>	
<ul style="list-style-type: none"> <li>• Date approved by the Head of IA:</li> </ul>	
<ul style="list-style-type: none"> <li>• Name and signature of the Director of EA:</li> </ul>	
<ul style="list-style-type: none"> <li>• Date approved by the Director of EA:</li> </ul>	
9. ADB-Funded PPTA Number and Title, if any:	
10. Status of PPTA or Feasibility Study (if applicable):	
<ul style="list-style-type: none"> <li>• PPTA or feasibility study duration:</li> <li>• Draft final report:</li> <li>• Environmental impact assessment:</li> <li>• Resettlement plan:</li> <li>• Other studies:</li> </ul>	
11. Status of investment project processing (if applicable):	
<ul style="list-style-type: none"> <li>• Status of PPTA or feasibility study:</li> <li>• Date of fact-finding mission:</li> <li>• Date of expected approval:</li> <li>• Expected commencement of facility use:</li> </ul>	

ADB = Asian Development Bank, CSP/CSPU = country strategy and program/country strategy and program update, EA = executing agency, IA = implementing agency, MOU = memorandum of understanding, PPTA = project/program preparatory technical assistance.

2. The IA will provide the EA with detailed terms of reference for consulting services and the detailed cost estimates.

**Table A8.1: Sample Format of Cost Estimates**

(\$)			
Item	Foreign Exchange	Local Currency	Total Cost
<b>A. Asian Development Bank Financing</b> (about 75%)			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants			
Number of Person-Months			
ii. Domestic Consultants			
Number of Person-Months			
b. International and Local Travel			
c. Reports and Communications			
2. Equipment (computer, printer, etc.)			
3. Surveys			
4. Miscellaneous Administration and Support Costs			
5. Contingencies			
<b>Subtotal (A)</b>			
<b>B. Government Financing</b> (about 25%)			
1. Office Accommodation and Transport			
2. Remuneration and Per Diem of Counterpart Staff			
3. Others			
<b>Subtotal (B)</b>			
<b>Total</b>			

## **PRO FORMA OF THE SUBPROJECT PROGRESS REPORT**

### **A. Introduction and Basic Data**

Provide the following:

- Subproject number/ID, title, borrower, implementing agency (ies);
- total estimated subproject cost and financing plan;
- status of subproject financing including availability of counterpart funds and cofinancing;
- dates of subproject application submission, subproject approval, and subproject agreement signing;
- original and revised (if applicable) subproject contract expiry date, closing date and elapsed period based on original and revised (if applicable) closing dates; and
- date of last ADB review mission of the subproject.

### **B. Utilization of Funds (ADB Loan/Grant and Counterpart Funds)**

Provide the following:

- cumulative contract awards financed by the ADB loan, cofinancing, and counterpart funds (commitment of funds to date), and comparison with time-bound projections (targets);
- cumulative disbursements from the ADB loan, cofinancing, and counterpart funds (expenditure to date), and comparison with time-bound projections (targets); and
- reestimated costs to completion, need for reallocation within ADB loan categories, and whether an overall project cost overrun is likely.

### **C. Subproject Purpose**

Provide the following:

- status of subproject scope/implementation arrangements compared with those in the report and recommendation of the President (RRP), and whether major changes have occurred or will need to be made;
- an assessment of the likelihood that the immediate development objectives (project purpose) will be met in part or in full, and whether remedial measures are required based on the current subproject scope and implementation arrangements;
- an assessment of changes to the key assumptions and risks that affect attainment of the development objectives; and
- other subproject developments, including monitoring and reporting on environmental and social requirements that might adversely affect the project's viability or accomplishment of immediate objectives.

### **D. Implementation Progress**

Provide the following:

- assessment of subproject implementation arrangements such as establishment, staffing, and funding of the PMU;
- information relating to other aspects of the EA's internal operations that may impact on the implementation arrangements or subproject progress;
- progress or achievements in implementation since the last progress report;
- assessment of the progress of each subproject component, such as,
  - recruitment of consultants and their performance;
  - procurement of goods and works (from preparation of detailed designs and bidding documents to contract awards); and
  - the performance of suppliers, manufacturers, and contractors for goods and works contracts;
- assessment of progress in implementing the overall project to date in comparison with the original implementation schedule—quantifiable and monitorable target, (include simple charts such as bar or milestone to illustrate progress, a chart showing actual versus planned expenditure, S-curve graph showing the relationship between physical and financial performance, and actual progress in comparison with the original schedules and budgets, the reference framework or guidelines in calculating the project progress); and
- an assessment of the validity of key assumptions and risks in achieving the quantifiable implementation targets.

#### **E. Compliance with Covenants**

Provide the following:

- the borrower's compliance with policy loan covenants such as sector reform initiatives and EA/IA reforms, and the reasons for any noncompliance or delay in compliance;
- the borrower's and EA/IA's compliance with financial loan covenants including the EA/IA's financial management, and the provision of audited project accounts or audited agency financial statements; and
- the borrower's and EA/IA's compliance with project-specific loan covenants associated with implementation, environment, and social dimensions.

#### **F. Major Project Issues and Problems**

Summarize the major problems and issues affecting or likely to affect implementation progress, compliance with covenants, and achievement of immediate development objectives. Recommend actions to overcome these problems and issues (e.g., changes in scope, changes in implementation arrangements, and reallocation of loan proceeds).

## **SUBPROJECT AGREEMENT**

SUBPROJECT AGREEMENT dated \_\_\_\_\_ between the PLANNING AND DEVELOPMENT DIVISION (hereinafter called PDD) and \_\_\_\_\_ (hereinafter called the Implementing Agency).

### **WHEREAS**

(A) by a Loan Agreement of [date] herewith between Islamic Republic of Pakistan (hereinafter called the Borrower) and the Asian Development Bank (hereinafter called ADB), ADB has agreed to make to the Borrower a loan in various currencies equivalent to Seventeen Million One Hundred Sixty-Three Thousand Special Drawing Rights (SDR17,163,000) on the terms and conditions set forth in the Loan Agreement; and

(B) PDD and the Implementing Agency, in consideration of ADB entering into the Loan Agreement with the Borrower, have agreed to undertake the obligations set forth in this Subproject Agreement;

NOW THEREFORE the parties agree as follows:

## **ARTICLE I**

### **Definitions**

Section 1.01. Wherever used in this Subproject Agreement, unless the context otherwise requires, the terms defined in the Loan Agreement and in the Loan Regulations (as so defined) have the respective meanings therein set forth, except that for purposes of this Subproject Agreement, the term "subproject" means [\_\_\_\_\_].

## **ARTICLE II**

### **Particular Covenants**

Section 2.01. (a) PDD shall assist the Implementing Agency to carry out the subproject with due diligence and efficiency, and in conformity with sound engineering, financial, economic, administrative, environmental and social safeguard practices.

(b) In the carrying out of the subproject the Implementing Agency shall perform all obligations set forth in this Subproject Agreement.

Section 2.02. The Implementing Agency shall make available, promptly as needed, the funds, facilities, services, equipment and other resources which are required, for the carrying out of the subproject.

Section 2.03. (a) In the carrying out of the subproject, PDD and the Implementing Agency shall employ competent and qualified consultants and equipment suppliers.

(b) All goods and services to be financed out of the proceeds of the Loan shall be procured in accordance with the provisions of Schedule 4 and Schedule 5 to the Loan Agreement.

Section 2.04. PDD shall assist the Implementing Agency to carry out the subproject in accordance with plans, design standards, specifications, and work schedules. The Implementing Agency shall furnish, or cause to be furnished, to PDD, promptly after their preparation, such plans, design standards, specifications and work schedules, and any material modifications subsequently made therein, in such detail as PDD shall reasonably request.

Section 2.05. The Implementing Agency shall maintain, or cause to be maintained, records and accounts adequate to identify the goods and services and other items of expenditure financed out of the proceeds of the Loan, to disclose the use thereof in the subproject, to record the progress of the subproject (including the cost thereof) and to reflect, in accordance with consistently maintained sound accounting principles, its operations and financial condition.

Section 2.06. (a) PDD and the Implementing Agency shall cooperate fully to ensure that the purposes of the Loan will be accomplished.

(b) The Implementing Agency shall promptly inform PDD of any condition which interferes with, or threatens to interfere with, the progress of the subproject, the performance of its obligations under this Subproject Agreement.

(c) PDD and the Implementing Agency shall from time to time, at the request of either party, exchange views through their representatives with regard to any matters relating to the subproject, PDD, the Implementing Agency and the Loan.

Section 2.07. (a) The Implementing Agency shall furnish to PDD all such reports and information as PDD shall reasonably request concerning (i) the Loan and the expenditure of the proceeds thereof; (ii) the goods and services and other items of expenditure financed out of such proceeds; (iii) the subproject; (iv) the administration, operations and financial condition of the Implementing Agency; and (v) any other matters relating to the purposes of the Loan.

(b) Without limiting the generality of the foregoing, the Implementing Agency shall furnish to PDD quarterly progress reports on the execution of the subproject and on the operation and management of the subproject facilities. Such reports shall be



submitted in such form and in such detail and within such a period as PDD shall reasonably request, and shall indicate, among other things, progress made and problems encountered during the quarter under review, steps taken or proposed to be taken to remedy these problems, and proposed program of activities and expected progress during the subsequent implementation period, which shall include details on contract awards and disbursement projections.

(c) Promptly after physical completion of the subproject, but in any event not later than three (3) months thereafter or such later date as PDD may agree for this purpose, the Implementing Agency shall prepare and furnish to PDD a report, in such form and in such detail as PDD shall reasonably request, on the execution and initial operation of the subproject, including its cost, the performance by the Implementing Agency of its obligations under this Subproject Agreement.

Section 2.08. (a) The Implementing Agency shall (i) maintain separate accounts for the subproject; (ii) have such accounts and related financial statements (balance sheet, statement of income and expenses, and related statements) audited annually, in accordance with appropriate auditing standards consistently applied, by independent auditors whose qualifications, experience and terms of reference are acceptable to PDD and ADB; and (iii) furnish to PDD, promptly after their preparation but in any event not later than 6 (six) months after the close of the fiscal year to which they relate, certified copies of such audited accounts and financial statements and the report of the auditors relating thereto, all in the English language.

Section 2.09. PDD and the Implementing Agency shall apply the proceeds of the Loan to the financing of expenditures on the subproject in accordance with the provisions of the Loan Agreement and this Subproject Agreement, and shall ensure that all goods and services financed out of such proceeds are used exclusively in the carrying out of the subproject.

### **ARTICLE III**

#### **Effective Date**

Section 3.01. This Subproject Agreement shall come into force and effect on [the date].

## ARTICLE IV

### Miscellaneous

Section 4.01. Any notice or request required or permitted to be given or made under this Subproject Agreement shall be in writing and shall be delivered by hand or by mail, facsimile or radiogram to the party to which it is required or permitted to be given or made at its address hereinafter specified, or at such other address as such party shall have designated by notice to the party giving such notice or making such request. The addresses so specified are:

For PDD

\_\_\_\_\_

Facsimile Number:

\_\_\_\_\_.

For the Implementing Agency

\_\_\_\_\_

Facsimile Number:

\_\_\_\_\_.

IN WITNESS WHEREOF the parties hereto, acting through their representatives thereunto duly authorized, have caused this Subproject Agreement to be signed in their respective names, as of the day and year first above written.

PLANNING AND DEVELOPMENT  
DIVISION

By \_\_\_\_\_  
Authorized Representative

[IMPLEMENTING AGENCY]

By \_\_\_\_\_  
Authorized Representative

## WORKSHEET FOR QUARTERLY AND YEARLY CONTRACT AWARDS/COMMITMENTS AND DISBURSEMENT PROJECTIONS (\$ Million)

Ref. PAI Nos. 4.13. Issued in July 1992 and 6.1. Issued in October 1990

PROJECT: <u>BAN: GAS TRANSMISSION AND DEVELOPMENT PROJECT</u>		LOAN NO. _____		SEGMENT NO. _____		OCR FUNDS (OCR, SF)		IND COUNTRY (Acronym)		PROJECTIONS MADE IN: <u>JAN. 2006</u> (Month, Year)														
Ref. Line no.	Category <sup>1</sup>	CONTRACT/COMMITMENT ITEM <sup>1</sup>	Contracts Awarded on Previous Year (s)	QUARTER 1 January, February, March			QUARTER 2 April, May, June			QUARTER 3 July, August, September			QUARTER 4 October, November, December			TOTAL PROJECTED FOR THE YEAR _____								
				Month, Year Contract Awarded Contract Value (Bank Financed)	QP QA	Month Awarded/ Committed or To be Awarded/ Committed Contract Value/ Commitment (1)	QP QA	Disbursement Amount Related to the Contract/ Commitment (2)	QP QA	Month Awarded/ Committed or To be Awarded/ Committed Contract Value/ Commitment (3)	QP QA	Disbursement Amount Related to the Contract/ Commitment (4)	QP QA	Month Awarded/ Committed or To be Awarded/ Committed Contract Value/ Commitment (5)	QP QA	Disbursement Amount Related to the Contract/ Commitment (6)	QP QA	Month Awarded/ Committed or To be Awarded/ Committed Contract Value/ Commitment (7)	QP QA	Disbursement Amount Related to the Contract/ Commitment (8)	Contract Value/ Commitment (9)=(1+3+5+7)	Disbursement Amount Related to the Contract/ Commitment (10)=(2+4+6+8)		
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In accordance with the allocation of loan proceeds as defined in the loan documents, or any other detailed breakdown if found useful.

QA = Quarterly Actual (already awarded/committed/distributed, when projections are prepared).

QP = Quarterly Projected (to be awarded/committed/distributed, when projections are prepared).

## IMPLEMENTATION SCHEDULE

	2005				2006				2007				2008				2009			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Overall Infrastructure TA Loan																				
Infrastructure TA Loan Processing																				
Management Review Meeting		▲																		
PC-I approval		▲																		
Loan Negotiation		■																		
Advance Recruitment Action																				
Establish Project Coordination Team																				
Initial Implementing Agency Subproject Implementation Arrangement																				
Completion of All Request for Proposal Documents																				
Completion of All Consultant Selection																				
Overall Consulting Service Period																				
PCR Preparation																				

PC-1 = Planning Commission Document I; TA = technical assistance.

<sup>a</sup> A separate detailed implementation schedule will be developed for each subproject, and approved by the EA and ADB.

## COPY OF AUDIT LETTER



Asian Development Bank

South Asia Department

30 September 2005

Mr. Muhammad Shehzad Arbab  
 Joint Secretary (ADB)  
 Economics Affairs Division  
 Ministry of Finance  
 Government of Pakistan  
 Islamabad, Pakistan  
 Fax No. (92-51) 920-5971/921-0734

Dear Mr. Arbab,

**Subject: Loan 2178-PAK: Technical Assistance Loan for Infrastructure  
 Development  
 - Financial Reporting and Auditing Requirements**

This letter is to ensure your timely compliance with the loan covenants and the quality of financial information as required by ADB. ADB's *Handbook for Borrowers on the Financial Governance and Management of Investment Projects financed by the Asian Development Bank* (the Booklet) is enclosed to guide you.

The Asian Development Bank (ADB), by its Charter, is required to ensure that the proceeds of any loan made, guaranteed, or participated in by ADB are used only for the purposes for which the loan was approved. ADB requires accurate and timely financial information from its borrowers to be assured that the expenditures incurred on a project were in fact for the purposes stated in the loan agreements; and to satisfy the ADB with respect to the economy and efficiency of the project.

For this particular loan, the requirements are stipulated in Article IV, Sections 4.01, 4.02, 4.03 and 4.04 of the Loan Agreement dated 12 September 2005 between the ADB and the Government of the Islamic Republic of Pakistan. For ease of reference, copies of the Loan Agreement are enclosed for onward transmission by your Office to your Executing Agencies and the auditor(s) concerned, together with a copy of this Letter.

- ADB requires the Executing Agency to maintain separate project accounts and records exclusively for the Project, to ensure that the loan funds were used only for the objective set out in the aforesaid Loan Agreement. The project accounts comprise of full audited financial statements including its detailed specification of investments as well as cost expenditures financed by the ADB.

The first set of project accounts to be submitted to the Bank should cover the fiscal year ending 30 June 2006. As stipulated in the Loan Agreement, they are to be submitted up to six months after the end of the fiscal year. For this loan, the deadline is by 31 December 2006. A sample report format, together with explanatory notes, is attached as Annex A.

- The accounts and records for the Project must be consistently maintained in accordance with sound accounting principles. Please stipulate that your External Auditor is to express an opinion on whether the financial report has been prepared using international or local generally accepted accounting standards and whether they have been applied consistently.

ADB prefers that project accounts to use international accounting standards prescribed by the International Accounting Standards Committee. Please advise your external auditor to also comment on the impact of any deviations, by the executing agency from international accounting standards.

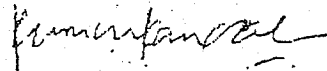
- Please ensure that your external auditor specifies in the Auditor's Report the appropriate auditing standards they used, and direct them to expand the scope of the paragraph in the Auditor's Report by disclosing the key audit procedures followed. Your external auditor is also to state whether the same audit procedures were followed for all supplementary financial statements submitted.

ADB wishes that auditors conform to the international auditing standards issued by the International Federation of Accountants. In cases where other auditing standards are used, please request your external auditor to indicate, in the Auditor's Report the extent of any differences and their impact on the audit.

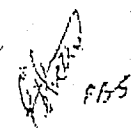
- The external auditor's opinion is also required on whether
  - the proceeds of the ADB's loan have been utilized only for the project in accordance with the Loan Agreement;
  - the financial information contains data specifically agreed upon between the Economic Affairs Division, Ministry of Finance and the ADB to be included in the financial statements;
  - the financial information complies with relevant regulations and statutory requirements; and
  - compliance has been met with all the financial covenants contained in the Loan or Project Agreements.
- The Auditor's Report is to clearly state the reasons for any opinions that are qualified, adverse, or disclaimers.
- Actions or deficiencies disclosed by the external auditor in its report are to be resolved by the Economic Affairs Division, Ministry of Finance within a reasonable time. The external auditor is to comment in the subsequent Auditor's Report on the adequacy of the corrective measures taken by the Ministry of Finance in the subsequent Auditor's Report.

Compliance with these ADB requirements will be monitored by future review missions and during normal project supervision and followed up regularly with all concerned, including the external auditor.

Yours sincerely,



Thevakumar Kandiah  
Director, Energy Division  
South Asia Department



Attachments:

1. Sample Report Format (Annex A)
2. Booklet (6 copies)
3. Loan Agreement

- cc:
1. Secretary  
Planning and Development Division  
Government of Pakistan  
Fax. No. +92-51-920-2704
  2. Member Infrastructure  
Planning and Development Division  
Government of Pakistan  
Fax. No. +92-51-920-2704
  3. Mr. Hammad Shamimi  
Deputy Secretary (ADB)  
Economic Affairs Division  
Ministry of Finance  
Government of Pakistan  
Fax No. +92-51-920-5971
  4. Mr. Khalid Waheed Khan  
Deputy Chief (Power)  
Energy Wing, Planning and Development Division  
Fax No. +92-51-922 0724
  5. Country Director  
Pakistan Resident Mission  
Fax No. +92-51-282 3324



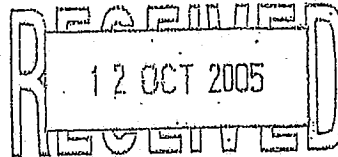
## Asian Development Bank

Controller's Department  
Loan Administration Division

7 October 2005  
CTLA-2/05-031

Mr. Nawid Ahsan  
Secretary  
Ministry of Finance  
Economic Affairs Division  
Rm. 308 Block "C" Secretariat Building  
Islamabad, Pakistan

ASIAN DEVELOPMENT BANK



SOUTH ASIA ENERGY DIVISION

Dear Sir:

RE: Loan No. 2178-PAK(SF): Technical Assistance Loan for Infrastructure Development.

1. We draw your kind attention to the Loan Agreement and other related documents dated 12 September 2005 of the above loan. The Loan Account will be credited with SEVENTEEN MILLION ONE HUNDRED SIXTY THREE THOUSAND Special Drawing Rights (SDR 17,163,000) when the Loan Agreement becomes effective.

#### Withdrawal of Loan Proceeds

2. Expenditures are normally eligible for financing from the date the Loan Agreement becomes effective. We enclose one copy of our Loan Disbursement Handbook (Handbook) dated January 2001, and hope it will assist you in making withdrawals from the Loan Account. For disbursements using the Statement of Expenditures (SOE) procedure and/or the Imprest Fund procedure which normally require ADB's approval, please refer to Chapters 9 and 10 of the Handbook. Sample withdrawal application forms are in the Appendices of the Handbook<sup>1</sup>. Incomplete withdrawal applications, which do not substantially meet the criteria requirements for disbursement, will be returned to you.

#### Statement of Expenditures (SOE)

3. Under Paragraph 7 of Schedule 3 of the Loan Agreement, you may apply the SOE procedure to reimburse eligible expenditures, for any individual payment not exceeding the equivalent of \$50,000. Details of the SOE procedure and formats to be used are in Attachment 1. Under the SOE procedure, you should retain all supporting documents and produce them for examination by ADB's representative whenever needed. Furthermore, SOE records are periodically audited, as part of the project audit, by an independent auditor or auditor acceptable to ADB and the audit report is to be given to ADB by the date indicated in the loan agreement after the end of each fiscal year.

<sup>1</sup> Please ensure that each withdrawal application is numbered sequentially with a five-character numeric identification, such as 00001. Assign an alpha identification for each EA (province) if there is more than one EA and submission of withdrawal applications is done separately by the EA (province).



#### Authorized Signatory(ies)

4. The Loan Disbursement Handbook describes what you must do before disbursement commences. The person(s) nominated by you to sign the withdrawal applications on your behalf should be authorized under the Loan Agreement provisions. An authorization letter, together with the relevant specimen signature(s), is to be sent to ADB before submission of the first withdrawal application. If there is a change in the authorized person(s) later, send us a new authorization letter, accompanied by the specimen signature(s) to ensure uninterrupted processing of loan disbursements.

#### Minimum Amount per Withdrawal Application

5. To promote efficiency in processing loan disbursements, a minimum value per withdrawal application is set at \$100,000 equivalent. As far as possible, the Executing Agency is requested to consolidate claims and submit a withdrawal application as soon as this amount is reached.

#### Loan Service Payment

6. Arrangements are to be made for paying principal, as well as interest, and other charges on due dates specified in the Loan Agreement.

#### Required Action

7. We suggest that the procedures contained in the enclosed publications be studied thoroughly by the officials responsible for administering the loan. Please tell us if we can clarify any of the attachments. To avoid delays in disbursement after the loan becomes effective, you should submit the withdrawal authorization letter together with the specimen signature(s).

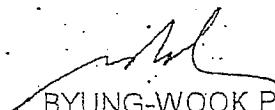
#### Advice of Withdrawals


8. Advice of withdrawals and other loan disbursement information is available at the Controller's Department's website address, <http://lfis.adb.org>. For password access, please contact the Webmaster at [lfis@adb.org](mailto:lfis@adb.org). Please also provide us the updated address, telephone number and e-mail addresses of the Executing/Implementing Agency(ies) concerned.

9. Please circulate this letter to the concerned project staff, including project accountants.

10. We look forward to your continued cooperation and a mutually beneficial relationship in the future.

Very truly yours,

  
BYUNG-WOOK PARK  
Assistant Controller  
Loan Administration Division



cc: Secretary  
Ministry of Planning and Development  
Planning and Development Division  
H. No. 1, A&B, Street 2, F8/3  
Islamabad, Pakistan

Director, SAEN (without enclosures)  
Country Director, PRM (without enclosures)


Attachment:

Statement of Expenditures (SOE) Procedure

Enclosures:

1. Loan Agreement
2. Loan Disbursement Handbook – Revised January 2001

BWP/RIR:vmg:ggr



Attachment 1

Loan No. 2178-PAK(SF): Technical Assistance Loan for Infrastructure Development

STATEMENT OF EXPENDITURES (SOE) PROCEDURE**DEFINITION**

1. Pursuant to Para. 7 of Schedule 3 of the Loan Agreement, you may use the SOE procedure whereby an application for reimbursement is supported by Statement of Expenditures, in lieu of the normal full documentation. Under the SOE procedure you are required to submit to ADB together with the Withdrawal Application (Form ADB-RMP), a statement of expenditures (ADB-SOE-SS), duly certified by persons authorized to sign withdrawal applications. The SOE form would be submitted in place of the usually required supporting documents such as invoices, contractors' bills, bills of lading and or other related documents.

**SOE LIMIT**

2. SOE procedure will be used for eligible expenditures not exceeding US\$50,000 per individual payment.

**SUPPORTING DOCUMENTS**

3. The SOE, a special reimbursement procedure of ADB has been approved for your use on the condition that all relevant supporting documents will be retained by you and will be made available for examination by the ADB's representatives during field missions. In addition you are required to maintain proper accounting records of SOE expenditures to facilitate verification of these expenditures against supporting documents.

**INELIGIBLE EXPENDITURES**

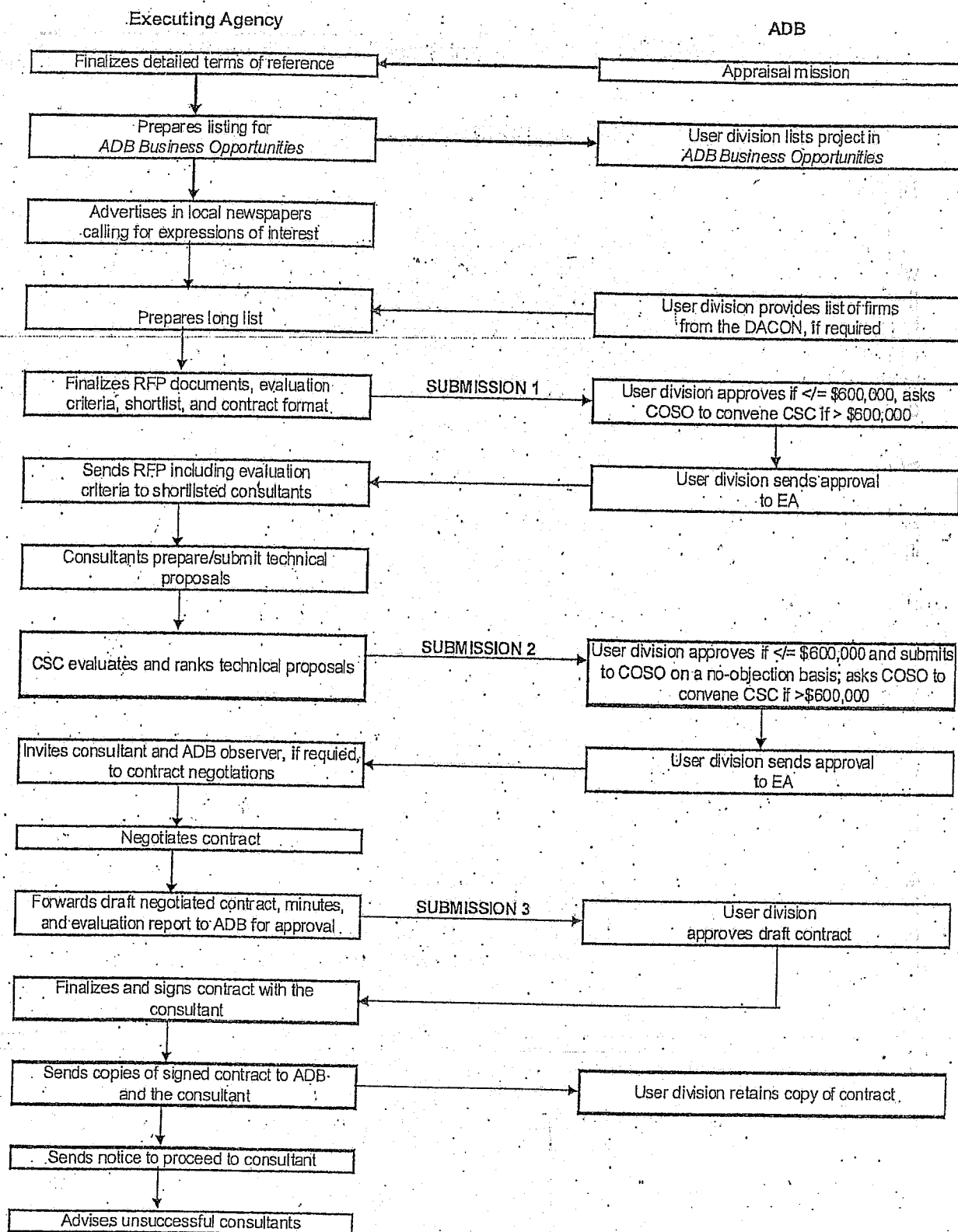
4. Where ADB subsequently finds any payment made under the SOE procedure to be insufficiently supported or ineligible for ADB financing, ADB may offset the amount of the unjustified or ineligible payment against subsequent withdrawals for reimbursement or request the Ministry of Planning and Development to refund the same amount to the loan account.

**AUDIT**

5. The SOE records must be audited regularly by independent and qualified auditors acceptable to ADB. The audit is carried out as part of the regular annual audit of the Executing Agency's account. A separate opinion should be included in the annual audit report.

## PROCEDURES TO RECRUIT CONSULTING FIRM (UNDER QCBS)

### Recruiting Consulting Firms for Loan Projects Using Quality-Based Selection



## **Project Completion Report**

### **Suggested Topics for Project Completion Reports to be Prepared by Borrowers**

#### **I. PROJECT DESCRIPTION**

- A. Objectives
- B. Components
- C. Implementation methods
- D. Description and justification of changes in components (or subproject appraisal criteria) or implementation methods

#### **II. PROJECT IMPLEMENTATION**

- A. Compare original and actual implementation schedules. Indicate delays, length and causes of delays, and remedial action taken.
- B. Compare cost estimates made during appraisal and actual costs (foreign and local). Local currency costs incurred, appropriate exchange rates for their conversion into US dollars, and the foreign exchange costs financed by cofinanciers must be compiled correctly with reference to audited project accounts. Indicate factors that contributed to any significant overruns or underruns.
- C. State problems or difficulties in recruiting consultants, with reference to ADB procedures. Assess the consultant's work and the working relationship between the executing agency (EA) and the consultant. Use of a logical framework is strongly recommended.
- D. State problems or difficulties encountered in procuring goods and services (including civil works) with reference to ADB procedures. Assess the supplier's or contractor's performance under the contract.
- E. Give the extent of compliance of the borrower and EA with loan covenants, with reasons for noncompliance or delays in compliance and the remedial actions taken.
- F. State reasons for any delays in loan utilization. Evaluate the appropriateness of the disbursement methods used. Justify the reallocation of loan proceeds.
- G. State problems or difficulties with subproject appraisal. Evaluate the EA's performance and capacity to appraise subprojects.

#### **III. INITIAL OPERATIONS**

- A. Describe initial operations of the project and transitional problems encountered from project completion to initial operations.

- B. Describe measures taken to ensure continued smooth operation of the project relative to management, staffing, funding, and maintenance of project facilities.
- C. Analyze the prospects of the project benefits being realized.

#### IV. EVALUATION OF INFRASTRUCTURE MANAGEMENT UNIT

- A. Assess IMU's performance in supervising project implementation. Include comments on the adequacy of the consultants' terms of reference and appropriateness of specifications in tender documents. Evaluate the effectiveness and timeliness of assistance extended by IMU to solve implementation problems
- B. Comment on problems encountered with IMU's procedures. Note the measures taken to resolve these problems and suggest changes in procedures and requirements

#### V. EVALUATION OF THE ASIAN DEVELOPMENT BANK'S PERFORMANCE

- A. Assess ADB's performance in supervising project implementation. Include comments on the adequacy of the consultants' terms of reference and appropriateness of specifications in tender documents. Evaluate the effectiveness and timeliness of assistance extended by ADB to solve implementation problems.
- B. Comment on problems encountered with ADB's procedures. Note the measures taken to resolve these problems and suggest changes in procedures and requirements.

## OUTLINE SMALL-SCALE TECHNICAL ASSISTANCE FOR SUPPORT OF INFRASTRUCTURE INVESTMENTS

### A. Introduction

1. **Background.** The Government of Pakistan (the Government) has undertaken significant activities to support and promote infrastructure investment. In March 2005, the Planning Commission (PC) released its Medium Term Development Framework (MTDF) for public review with approval expected in June 2005. The MTDF provides development objectives and a strategic framework for Pakistan from 2005 to 2010, and it addresses infrastructure needs for those sectors to be addressed by the ADB Technical Assistance Loan for Infrastructure Development (the Project); i.e. power, transport; and water resources and irrigation. The MTDF will provide the foundation for the Project through its focus and elaboration on (i) infrastructure needs for the relevant sectors; (ii) legal and regulatory issues; (iii) public private partnerships; and (iv) macroeconomic considerations.

2. Although the Government has made substantial progress in defining needs and developing a plan for sector investments in power, transportation, and water resources, the enabling environment for infrastructure investments for the private sector, multilateral and bilateral development agencies needs strengthening. Some of the challenges facing infrastructure investment by nonpublic agencies include investor protection, sector and investor legal and regulatory fairness and consistency, property rights, transparency of sector policy frameworks, strategic direction and sector development, overly bureaucratic regulations and procedures, monetary stability and exchange regulations, and efficient contract enforcement. To help address these investment constraints faced by private sector and external development assistant, the Project includes a component, enabling environment for infrastructure investments, for \$1 million to help eliminate infrastructure investment constraints and ameliorate the overall investment climate for energy, transport, and water resources infrastructure. However, assistance is needed to most effectively develop and implement a program to improve the enabling environment for infrastructure investments.

### B. Scope

3. **Objective.** The objective of the small-scale technical assistance (the TA) to support the Project is to assist identification and implementation of interventions to strengthen the enabling environment for infrastructure investment by nonpublic entities. The TA will have three components: (i) investigation and diagnostic work for constraints to infrastructure investment; (ii) development of subproject using the \$1 million in funds from enabling environment component to address constraints identified; and (iii) assistance in implementation of subprojects and dissemination of their results.

4. **Diagnosis.** The identification and diagnosis of constraints to investment will involve review of literature and current government policies and procedures. This would draw upon previous work studies by ADB and other foreign and domestic institutions. Diagnostic work would also include formal and informal discussions with investment stakeholders to solicit their views. The goal of this TA component is to identify gaps in addressing infrastructure investment constraints and develop a prioritized list of constraints to be addressed. The types of interventions to be identified would include such activities as policy and legal reforms, improved access to information, sector-specific studies, and capacity development activities.

5. **Development of Interventions.** The specific interventions to be developed under the TA will focus on finding ways to resolve the constraints identified during the diagnostic phase. The interventions will be prioritized, but most likely several of the interventions will be executed on a parallel basis. The TA will develop TOR and implementation arrangements for the prioritized list of interventions. The \$1 million in funds allocated to the enabling environment for infrastructure investments component will be used to support the interventions. Wherever possible, cofinancing opportunities will be sought with development partners and other interested stakeholders to leverage funds. Interventions will be developed and implemented until the \$1 million in funds are exhausted.

6. **Implementation of Interventions.** The TA will also provide management oversight to implement the developed interventions. This will include calls for expressions of interest; recruitment of consultants; project management; quality control over outputs; and monitoring and evaluation. An important aspect of this activity will be the wide dissemination of results and support to ensure that intervention outputs results in a meaningful change to the enabling environment for infrastructure investments. This will include direct dialog with relevant federal and provincial government ministries and agencies, workshops, and distribution of position papers and publications.

### **C. Expertise, Implementation Arrangements, Cost Estimates, and Financing Plan**

7. Two domestic consultants will be recruited for 16 months each over a period of 2 years for a total of 32 person-months. The consultants will be engaged in accordance with ADB's *Guidelines on the Use of Consultants*. Consultants will have expertise in (i) infrastructure investments; (ii) institutional reform; (iii) project management; and (iv) with ADB and government procedures for recruitment and contracting of consultants.

8. In terms of implementation arrangements, the Infrastructure Management Unit (IMU) of the PC, which will be responsible for overall management of the Project, will also be responsible for the implementation of the TA. Staff from the IMU will be assigned to and support the TA consultants, and other PC staff will be seconded on an ad hoc basis as needed to assist the TA consultants.

9. The total cost of the TA is estimated at \$190,000 equivalent, comprising \$5,000 in foreign exchange and \$185,000 equivalent in local currency. ADB will finance \$150,000 equivalent on a grant basis from ADB's TA funding program to cover the entire foreign exchange and \$145,000 equivalent of the local currency cost. The Government will finance the remaining local currency cost amounting to \$40,000 for (i) office accommodation and utilities; (ii) counterpart staff support; and (iii) workshop facilitation as needed



**LOAN NO. 2178-PAK (SF): INFRASTRUCTURE DEVELOPMENT PROJECT****Major Covenants**

Project Specific Covenants	Reference	Due Date	Responsible Agencies	Status/Actions to be taken
<b>Sector</b>				
1. The IMU headed by an executive director, of at least Joint Secretary level and supported by experts, with substantial experience in infrastructure sectors, shall be established within PDD prior to the Effective Date. The IMU director shall report to the Secretary, PDD. The IMU shall be responsible for the day-to-day operational management of project implementation, and monitoring the progress of individual subprojects for all Components. More specifically, the IMU shall on behalf of the Project Executing Agency: (i) develop each Component's program; (ii) coordinate with the Borrower's ministries and agencies; (iii) liaise with ADB on all Project administration matters; (iv) consolidate progress reports submitted by the Implementing Agency; (v) consolidate subproject completion reports; (vi) prepare the Project completion report; and (vii) assist the Implementing Agencies in carrying out their respective responsibilities.	LA, Sch. 6, para. 2	Immediately	-IMU -EAD	Completed.
2. Each Implementing Agency shall be responsible for the detailed preparatory activities and implementation of each subproject, and shall report on the progress of each subproject to the Project Executing Agency. The responsibilities of the Implementing Agency shall be as follows, but not limited to: (i) undertake consultants selection and recruitment, and procurement activities; (ii) prepare and maintain financial records, accounts, and statements; (iii) prepare subproject completion report; (iv) prepare and submit PC-Is and PC-IIs, as	LA, Sch. 6, para. 3	With priority	-IMU -IAs	

appropriate; (v) monitor and evaluate individual subprojects; (vi) coordinate the work of the consultants; (vii) ensure the quality of the detailed work program for each subproject; and (viii) prepare and submit subproject proposals in the format agreed by the Borrower and ADB. Each Implementing Agency may be responsible for one or more subprojects.				
3. Each Implementing Agency shall appoint a subproject director, acceptable to ADB, to administer the respective subproject. The Borrower shall ensure that each subproject director shall have capacity to oversee social, resettlement, and environmental issues as well as engineering aspects included in the subproject. The Borrower shall ensure that each subproject director shall have necessary resources and facilities for implementing their respective obligations under the Loan Agreement.	LA, Sch. 6, para. 4	With priority	-IMU -IAs	
4. The Borrower shall cause the Project Executing Agency and the Implementing Agency concerned to enter into a Subproject Agreement in substantially provided format.	LA, Sch. 6, para. 5	With priority	-IMU -IAs	
5. The Borrower shall ensure that adequate resources and facilities are made available in a timely manner and in the amount required to enable the Project Executing Agency and each Implementing Agency to discharge their responsibilities under the Project.	LA, Sch. 6, para. 6	With priority	-IMU	
6. For <b>Component C</b> , TSSC shall be established to oversee the activities of the Borrower's agencies concerned. TSSC shall discuss and review the program related to implementation of Component C, including approvals of subprojects. TSSC shall ensure effective implementation and utilization of available funds, by creating an opportunity to reallocate funds between the 3 transport sub-sectors, and between projects/programs. TSSC shall meet as required, at least semiannually.	LA, Sch. 6, para. 7	Immediately	-IMU -MOC	

7. <b>For Component D</b> , the Implementing Agency for TAP shall assist in preparation of the detailed terms of reference and costing for the activities covered under the subprojects allocated to the TAP. A TAP Steering Committee shall be formed to (i) oversee development and implementation of the TAP; (ii) provide policy guidance; and (iii) monitor and evaluate impact of the TAP. The TAP Steering Committee shall meet at least semiannually.	LA, Sch. 6, para. 8	Immediately	-IMU -MOWP	
<b>II. FINANCIAL</b>				
1. The Borrower shall (i) maintain, or cause to be maintained, separate accounts for the Project; (ii) have such accounts and related financial statements audited annually, in accordance with appropriate auditing standards consistently applied, by independent auditors whose qualifications, experience and terms of reference are acceptable to ADB; (iii) furnish to ADB, as soon as available but in any event not later than six (6) months after the end of each related fiscal year, certified copies of such audited accounts and financial statements and the report of the auditors relating thereto (including the auditors' opinion on the use of the Loan proceeds and compliance with the financial covenants of the Loan Agreement as well as on the use of the procedures for statement of expenditures), all in the English language; and (iv) furnish to ADB such other information concerning such accounts and financial statements and the audit thereof as ADB shall from time to time reasonably request.	LA, Art. IV, Sec. 4.02 (a)	During project implementation	-IMU -IAs	<b>Will monitor compliance during project implementation.</b>
2. The Borrower shall enable ADB, upon ADB's request, to discuss the Borrower's financial statements for the Project and its financial affairs related to the Project from time to time with the Borrower's auditors, and shall authorize and require any representative of such auditors to participate in any such discussions requested by ADB, provided that any discussion shall be conducted only in the	LA, Art. IV, Sec. 4.02 (b)	During project implementation	-IMU/PDD -IAs	<b>Will monitor compliance during project implementation.</b>

presence of an authorized officer of the Borrower unless the Borrower shall otherwise agree.				
<b>III. RESETTLEMENT/INDIGENOUS PEOPLES</b>				
1. The Borrower and the Implementing Agencies shall ensure that for subprojects and Follow-on Projects entailing land acquisition and resettlement, resettlement plans in accordance with (i) the Borrower's applicable laws and policies, and (ii) ADB's <i>Involuntary Resettlement Policy</i> (1995) and involuntary resettlement operational procedures, are prepared. Adequate measures to avoid or minimize land acquisition and resettlement shall be incorporated into Follow-on Project and subproject designs.	LA, Sch. 6, para. 15	During project implementation	-IMU -IAs	<b>Will monitor compliance during project implementation.</b>
2. The Borrower and the Implementing Agencies shall ensure that measures in accordance with (i) the Borrower's applicable laws on indigenous peoples and (ii) ADB's <i>Policy Indigenous Peoples</i>	LA, Sch. 6, para. 16	During project implementation	-IMU -IAs	<b>Will monitor compliance during project implementation.</b>
<b>IV. ENVIRONMENTAL</b>				
1. The Borrower and the Implementing Agencies shall ensure that adequate environmental measures, in accordance with (i) the Borrower's applicable environmental laws and regulations, and (ii) ADB's <i>Environmental Policy</i> (2002) environmental operational procedures, are incorporated into all subproject and Follow-on Project designs, and that these measures are incorporated during subproject implementation.	LA, Sch. 6, para. 14	During project implementation	-IMU -IAs	<b>Will monitor compliance during project implementation.</b>
<b>V. OTHERS</b>				
1. The Project Executing Agency and each Implementing Agency shall develop a project performance evaluation monitoring system for the Project and each subproject, including (i) setting performance targets; (ii) monitoring performance against the performance targets; (iii) benefits	LA, Sch 6, para. 10		-IMU -IAs	

monitoring; and (iv) performance evaluation, acceptable to ADB.				
2. The Borrower shall ensure that quarterly progress reports of the Implementing Agencies shall be consolidated by the IMU and shall indicate, among other things, (i) progress made against established targets, (ii) problems encountered during the period and remedial actions taken or proposed to resolve the problems, and (iii) proposed activities to be undertaken and progress expected during the succeeding implementation period, including detailed contract awards and disbursement projections. Each Implementing Agency shall prepare a subproject completion report for each subproject within three (3) months of complete disbursement under the subproject. The IMU shall submit the Project completion report within three (3) months of complete disbursement of the Loan.	LA, Sch 6, para. 11	First submission of the quarterly progress reports (as of <b><u>30 June 2006</u></b> ) is on or before <b><u>31 July 2006</u></b> (one month after each quarter).	-IMU -IAs	<b>Not yet due.</b>
3. ADB may review implementation of the Project, performance of the Implementing Agencies, and the activities under each subproject annually or as needed. In addition, a midterm review of the Project shall be carried out on or about two years after the Effective Date to review the overall progress of the implementation and achievements of the Project.	LA, Sch 6, para. 12		ADB	<b>Not yet due.</b>

## ENABLING ENVIRONMENT FOR INFRASTRUCTURE INVESTMENTS COMPONENT

### A. Description of the Project Component

#### a. Objective and Scope

1. The Enabling Environment component will identify constraints and bottlenecks for infrastructure financing in Pakistan, particularly for attracting private sector participation in infrastructure developments. In addition, this component will address a limited number of bottlenecks through specific subprojects to be developed under the small-scale technical assistance.<sup>6</sup>

2. The scope of this component is as follows:

- (a) Provide resources to identify current constraints preventing investments in infrastructure projects;
- (b) Develop subprojects inclusive defining activities to remove identified constraints that negatively affect the investment climate and the sustainability of investment options in infrastructure sectors;
- (c) Executing the subprojects addressing the identified constraints; and
- (d) Institutional support for the IMU.

#### b. Components

- (i) SSTA amounting to \$150,000.

The objective of the small-scale technical assistance (the TA) is to identify, develop, and implement interventions to strengthen the environment for infrastructure investments. The TA will have three components: (i) investigation and diagnostic work identifying constraints to infrastructure investment; (ii) develop subprojects using the \$1 million in funds from the Enabling Environment component to address constraints identified; and (iii) assistance in implementation of subprojects and dissemination of their results.

- (ii) IMU institutional capacity building amounting to \$250,000.

The Government and ADB have identified a need to improve and supplement the skills of the IMU for its planning and coordinating the infrastructure components and implementing subproject preparatory and monitoring activities, inclusive of proposal writing, selection and contracting of consultants, and monitoring implementation activities at the implementing agency level.

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<sup>6</sup> This SSTA is a piggybacked TA to TA Loan 2178-PAK (SF).

- (iii) Enabling Environment subprojects amounting to \$1,000,000.

This is the funding source for the subprojects to be approved, and implemented from the constraints identified under (i) above. The selection of subprojects will be done by IMU with concurrence from ADB.

**c. Implementation Arrangements**

The IMU will be the implementing agency for the Enabling Environment Component, and accordingly will hire the consultants under the SSTA and for the IMU subproject. In addition, IMU will be responsible for implementation of each approved subproject under this component.

**B. Cost Estimate and Financing Plan**

**Cost Estimate and Financing Plan – Power Sector**  
(\$ million)

Item	Foreign Exchange	Local Currency	Total Cost
<b>A. Asian Development Bank Financing</b>			
1. Consultants Services	0.80	0.45	1.25
<b>Subtotal (A)</b>	<b>0.80</b>	<b>0.45</b>	<b>1.25</b>
<b>B. Government Financing</b>			
1. Administration, Taxes, and Duties	0.80	0.45	0.45
<b>Subtotal (B)</b>	<b>0.00</b>	<b>0.45</b>	<b>0.45</b>
<b>Total</b>	<b>0.80</b>	<b>0.45</b>	<b>1.25</b>

Source: Asian Development Bank estimates.

## POWER SECTOR COMPONENT

### A. Description of the Project Component

#### a. Objective and Scope

1. The objective of the Government's infrastructure initiative in the power sector policy is to deliver more reliable and affordable electricity to the industrial, commercial, and household customers on a nationwide basis. Infrastructure has become equal to economic growth, and well-guided economic growth should benefit the macroeconomic position of Pakistan as well as alleviate poverty. There are several key elements in the power sector to meet this objective, and specifically government-supported initiatives are (i) encourage an increased utilization of hydropower, coal, and natural gas reserves for power generation, which are fuel sources yielding a lower cost of production than what is being experienced today; (ii) reduce technical and nontechnical losses of the power sector utilities; (iii) gradually increase the tempo of power sector reforms and restructuring, inclusive of privatizations, and (iv) continue support of the National Electric Power Regulatory Authority (NEPRA) the independent regulator of the power sector through issuance of mainly licenses and tariff determinations.

2. Under the Government's power sector strategy, actions are being pursued in all areas of the sector. It is planning more generation facilities, and augmentation and expansion of the transmission and distribution networks to meet the estimated economic growth and reduce the loss level. It is pursuing renewable energy to broaden fuel sources, and using privatization and PPP to increase investment funding.

3. In order for the Government to meet the policy, a number of issues facing the power sector need to be addressed such as (i) financial and operating performance of the sector, (ii) lack of generation facilities, (iii) old and outdated dispatch center, and (iv) transmission and distribution system augmentations and expansions.

4. The power sector allocation is \$6.75 million which has been allocated among identified subprojects. The subprojects can be divided into two categories—project preparatory and institutional capacity building. The power sector subprojects are listed below.

<b>Power Sector Subprojects</b>		
<b>Description</b>	<b>Amount (\$)</b>	<b>IA</b>
a. Transmission Project: Subprojects preparation	600,000	NTDC
b. Distribution Project: Subprojects preparation	600,000	MOWP
c. Rehabilitation/refurbishing IPP Feasibility Study	800,000	PPIB
d. Sindh small gas field IPP	750,000	PPIB
e. Hydel feasibility and bidding documents (2 projects)	1,300,000	PPIB
f. NTDC continuation of institutional capacity building	700,000	NTDC
g. Discos: planning, design, monitoring capacity building	2,000,000	PC
<b>Total Allocation</b>	<b>6,750,000</b>	<b>PC</b>

IPP = independent power producer, NTDC = National Transmission and Despatch Company.  
Sources: Asian Development Bank estimates.

5. The total allocation is the ADB portion of the total cost and financing of the power sector segment. The counterpart financing from the Government is reflected in the individual



cost estimates and financing plan table within each subproject description given in the description of each subproject. The counterpart financing covers areas such as office accommodations for consultants, facilities for workshops and seminars, remuneration of counterpart staff, and transportation arrangements for field visits. Other cost items as specific per subproject could also be included.

### **b. Implementation Arrangements**

6. As each subproject has been identified, inclusive of its IA, the focus will be on implementation. Each IA is responsible for developing the detailed TORs and for presenting them to the IMU and ADB for approval. Where appropriate, the IMU will seek input and concurrence from MOWP before approval and calling for expressions of interest. The IAs will be responsible for short-listing consultants, evaluating proposals, and preparing the documents for approval of the selection by IMU and ADB.

### **c. Cost Estimate and Financing Plan**

7. The total cost of the power sector component has been estimated at \$9.00 million, with the foreign exchange costs and local currency costs estimated at \$4.92 million and \$4.08 million, respectively. ADB undertakes to finance \$6.75 million of the power sector costs, which will cover the foreign exchange costs and \$1.83 million of the local currency costs. The Government undertakes to finance domestic currency costs amounting to \$2.25 million equivalent.

#### **Cost Estimate and Financing Plan – Power Sector** (\$ million)

<b>Item</b>	<b>Foreign Exchange</b>	<b>Local Currency</b>	<b>Total Cost</b>
<b>A. Asian Development Bank Financing</b>			
1. Consultants Services	4.92	1.83	6.75
<b>Subtotal (A)</b>	<b>4.92</b>	<b>1.83</b>	<b>6.75</b>
<b>B. Government Financing</b>			
1. Administration, Taxes, and Duties	0.00	2.25	2.25
<b>S</b>	<b>0.00</b>	<b>2.25</b>	<b>2.25</b>
<b>Subtotal (B)</b>			
<b>Total</b>	<b>4.92</b>	<b>4.08</b>	<b>9.00</b>

Source: Asian Development Bank estimates.

### **B. Subproject Description and Scope**

8. The subsequent section contains a brief description of each subproject in the power sector and the related outline terms of reference. The subprojects have all been discussed in detail by MOWP, EA, the respective IAs, and ADB, and there is agreement on the parameters of each subproject. The next task for each subproject is to develop the detailed TORs, and commence the consultant selection process by ensuring proper advertisement of the opportunities available, followed by the establishment of the long list of interested when the expression of interest deadline has expired.

## OUTLINE TERMS OF REFERENCE FOR CONSULTING SERVICES

### A. Power Transmission System Subproject

#### A. Subproject Description

To achieve the economic growth and poverty reduction, it is essential to ensure a reliable power supply to an increasing number of industrial, commercial, and domestic consumers. This project will prepare subprojects for financing by the Asian Development Bank under its proposed Power Transmission Enhancements project. The subcomponent will cover several transmission system development projects of NTDC including 500kV and 220kV transmission lines and substations, which will increase system efficiency and the energy delivered to consumers. The consulting services will enable NTDC to prepare these power transmission projects.

#### B. Scope of the Technical Assistance

The consultants' outline terms of reference will include, but not necessarily limited to, the following tasks.

##### a. Feasibility Study<sup>7</sup>

- (i) Review NTDC's power systems and their investment plans, and identify priority subprojects for ADB funding with a focus on transmission system (500kV and 220kV). In identifying priority subprojects, review the justification of the subprojects, including technical specification, and propose the revised technical specification, if necessary.
- (ii) Review the NTDC's transmission system study result and carry out the additional study (including power flow, transient stability, static stability and voltage stability) to examine the appropriateness of the subprojects.
- (iii) Review and update cost estimates, separating foreign exchange and local currency, including physical and price contingencies and interest during construction. Prepare a list of materials, equipment, and works necessary to implement the subprojects.
- (iv) Outline project implementation and procurement arrangements including contract packaging, and a project implementation schedule.
- (v) Perform economic and financial impacts of each subproject to determine its economic and financial rate of return in accordance with *ADB's Guideline for the Economic Analysis of Projects* and *Guidelines for the Financial Governance and Management of Investment Projects Financed by the Asian Development Bank*. Identify all risks to project revenue and costs and conduct relevant sensitivity analysis.

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<sup>7</sup> Each final feasibility study report should have a disclaimer indicating that ADB shall not be held liable for the said feasibility study report as well as for application of safeguard policies in case follow-on projects are financed by other institutions.

- (vi) Prepare financing plan for the subprojects considering prospective cofinancing, and appropriate counterpart funds for local currency expenditures.
- (vii) Identify the specific sources and projection of revenue from the investment projects, to indicate the financial viability of the investment subprojects, also taking into account the reduction of system losses and any improvements in operational efficiency.
- (viii) Assess the environmental impacts of each subproject and undertake an initial environmental examination (IEE) and present the findings in an IEE report and its summary. When preparing the reports, refer to ADB's *Environment Policy*, ADB's *Environmental Guidelines for Selected Infrastructure Projects*, ADB's *Environmental Assessment Guidelines*, and any applicable procedures or guidelines for environmental assessment required by the Government.
- (ix) If the IEE recommends undertaking a full environmental impact assessment (EIA), conduct the EIA and prepare the report and its summary, including an environmental management plan to implement mitigation measures.
- (x) Ensure that the costs for implementing recommended mitigation measures, environmental management and monitoring plans, and any capacity strengthening measures, are included in the proposed investment projects' development costs.
- (xi) In accordance with ADB's *Handbook on Poverty and Social Analysis* and *Handbook for Integrating Poverty Impact in Economic Analysis of Projects*, analyze the social, poverty, and development impact of subprojects. Prepare a poverty impact assessment and a summary poverty and social analysis according to the ADB format. Identify the impact on indigenous peoples, and prepare an appropriate indigenous peoples plan, as necessary, in accordance with ADB's *Policy on Indigenous Peoples*.
- (xii) In accordance with ADB's *Policy on Involuntary Resettlement* and *Handbook on Resettlement* and the requirements of the Government, identify and prepare socioeconomic profiles (20% sample survey) of the project-affected communities. Carry out field surveys as necessary. Ensure that data is disaggregated by gender and vulnerable groups are identified. Include initial involuntary resettlement and indigenous people's checklists in the inception report.
- (xiii) Undertake a full census and inventory of assets that may be lost (in terms of loss of homes, agricultural and other lands, or assess to current income-generating activities, including impacts caused by permanent or temporary acquisition) by affected people, and a baseline socioeconomic survey of the affected population.
- (xiv) Prepare an entitlement matrix listing all likely effects, permanent and temporary, and a study to determine the replacement costs of all

categories of losses. Prepare an indicative, itemized budget for land acquisition and resettlement costs with specific sourcing and approval process.

- (xv) If the investment projects are likely to involve significant<sup>8</sup> resettlement, prepare a resettlement plan with full participation of stakeholders and the executing and implementing agencies. Prepare (a) a short resettlement plan if the resettlement aspects of the investment subprojects are classified as not significant; (b) a summary resettlement plan; and (c) an indigenous people's development plan, if required.

#### **b. Pre-Construction**

- (i) Review the result of initial route surveys for transmission line subprojects and site survey for substation subprojects, to determine (a) the most cost effective line route and substation site, wherever possible, seeking to avoid involuntary resettlement; (b) soil characteristics; (c) accessibility; and (d) infrastructure details etc.
- (ii) Based on the result of the route survey, prepare transmission line profile and tower spottings.
- (iii) Prepare the engineering designs of transmission lines including towers, conductors, insulators, ground wires etc. in accordance with required technical specification and relevant technical standard.
- (iv) Prepare the engineering designs of substations in accordance with required technical specification and relevant technical standard.
- (v) Prepare Bill of quantities for all materials required based on the detailed design and calculate detailed cost estimates for each material with breaking down into foreign exchange and local currency.
- (vi) Prepare contract packages in accordance with ADB's *Guidelines for Procurement*.
- (vii) Prepare detailed project implementation schedules showing anticipated progress of works and expenditures for each contract package. The schedules will take into account seasonal climatic conditions.
- (viii) Prepare engineering drawings.
- (ix) Finalize a resettlement plan for the project-affected people, acceptable to the Government and ADB in line with the Government's relevant policy and ADB's *Handbook on Resettlement*.
- (x) Finalize the IEE or EIA

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<sup>8</sup> Resettlement is "significant" where 200 or more people experience major impacts. Major impacts are defined as when the affected people are physically displaced from housing and/or more than 10% of their productive assets (income generating) are lost.

- (xi) Assist the EA's procurement process and consultant selection process. Procurement will be carried out in accordance with ADB's *Guidelines for Procurement*. Consultant selection will be in accordance with ADB's *Guidelines on the Use of Consultants*.
- (xii) Prepare bidding documents required for the subprojects following ADB's *Guidelines for Procurement* and relevant *Standard Bidding Documents*.
- (xiii) Assist the EA in inviting bids, clarification on bidding documents, issuing addenda, managing site inspections and pre-bid meeting, evaluation of bids, recommending award of contracts, and preparing formal contract documentation.
- (xiv) Prepare terms of reference for construction supervision including social and environmental impact monitoring. Prepare Request for Proposal (RFP) documents in accordance with ADB's *Guidelines on the Use of Consultants*.
- (xv) Assist the EA in selecting the project supervision consultant including inviting proposals, replying to queries, evaluation of proposals, contract negotiation.

### C. Cost Estimate and Financing Plan

a.	Item	Foreign Exchange	Local Currency	Total Cost
A. Asian Development Bank Financing				
1.	Consultants			
a.	Remuneration and Per Diem			
i.	International Consultants	366,000	0	366,000
ii.	Domestic Consultants	0	115,000	115,000
b.	International and Local Travel	36,000	3,850	39,850
c.	Reports and Communications	10,000	0	10,000
2.	Equipment	5,000	0	5,000
3.	Miscellaneous Costs	20,000	0	20,000
4.	Contingencies	44,150	0	44,150
	<b>Subtotal (A)</b>	481,150	118,850	600,000
B. Government Financing				
1.	Office Accommodation and Transport			
2.	Remuneration and Per Diem of Counterpart Staff			
3.	Others			
	<b>Subtotal (B)</b>	0	200,000	200,000
	<b>Total</b>	481,150	318,850	800,000

## OUTLINE TERMS OF REFERENCE FOR CONSULTING SERVICES

### B. Power Distribution System Subproject

#### A. Subproject Description

To achieve the economic growth and poverty reduction, it is essential to ensure a reliable power supply to an increasing number of industrial, commercial, and domestic consumers. Development of distribution system to increase system efficiency and supply capability is crucial for this purpose. This project will prepare subprojects for financing by the Asian Development Bank under its proposed Power Distribution Enhancements project. Distribution system subcomponents will include several distribution system improvement projects (132kV and below) of the eight distribution companies established through the restructuring and unbundling of WAPDA. The consulting services will enable distribution companies to prepare distribution system subprojects.

#### B. Scope of the Technical Assistance

The consultants' outline terms of reference will include, but not necessarily limited to, the following tasks.

##### a. Feasibility Study<sup>9</sup>

- (i) Review distribution systems (132kV and below) of eight Distribution Companies (Discos) and their mid-term investment plans, and identify priority subprojects for ADB funding. In identifying priority subprojects, review the justification of the subprojects, including technical specification, and propose the revised technical specification, if necessary.
- (ii) Review and update cost estimates, separating foreign exchange and local currency, including physical and price contingencies and interest during construction. Prepare a list of materials, equipment, and works necessary to implement the subprojects.
- (iii) Outline project implementation and procurement arrangements including contract packaging, and a project implementation schedule.
- (iv) Perform economic and financial impacts of each subproject to determine its economic and financial rate of return in accordance with *ADB's Guideline for the Economic Analysis of Projects* and *Guidelines for the Financial Governance and Management of Investment Projects Financed by the Asian Development Bank*. Identify all risks to project revenue and costs and conduct relevant sensitivity analysis.
- (v) Prepare financing plan for the subprojects considering prospective cofinancing, and appropriate counterpart funds for local currency expenditures.

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<sup>9</sup> Each final feasibility study report should have a disclaimer indicating that ADB shall not be held liable for the said feasibility study report as well as for application of safeguard policies in case follow-on projects are financed by other institutions.

- (vi) Identify the specific sources and projection of revenue from the investment projects, to indicate the financial viability of the investment subprojects, also taking into account the reduction of system losses and any improvements in operational efficiency.
- (vii) Assess the environmental impacts of each subproject and undertake an initial environmental examination (IEE) and present the findings in an IEE report and its summary. When preparing the reports, refer to ADB's *Environment Policy*, ADB's *Environmental Guidelines for Selected Infrastructure Projects*, ADB's *Environmental Assessment Guidelines*, and any applicable procedures or guidelines for environmental assessment required by the Government.
- (viii) If the IEE recommends undertaking a full environmental impact assessment (EIA), conduct the EIA and prepare the report and its summary, including an environmental management plan to implement mitigation measures.
- (ix) Ensure that the costs for implementing recommended mitigation measures, environmental management and monitoring plans, and any capacity strengthening measures, are included in the proposed investment projects' development costs.
- (x) In accordance with ADB's *Handbook on Poverty and Social Analysis* and *Handbook for Integrating Poverty Impact in Economic Analysis of Projects*, analyze the social, poverty, and development impact of subprojects. Prepare a poverty impact assessment and a summary poverty and social analysis according to the ADB format. Identify the impact on indigenous peoples, and prepare an appropriate indigenous peoples plan, as necessary, in accordance with ADB's *Policy on Indigenous Peoples*.
- (xi) In accordance with ADB's *Policy on Involuntary Resettlement* and *Handbook on Resettlement* and the requirements of the Government, identify and prepare socioeconomic profiles (20% sample survey) of the project-affected communities. Carry out field surveys as necessary. Ensure that data is disaggregated by gender and vulnerable groups are identified. Include initial involuntary resettlement and indigenous people's checklists in the inception report.
- (xii) Undertake a full census and inventory of assets that may be lost (in terms of loss of homes, agricultural and other lands, or access to current income-generating activities, including impacts caused by permanent or temporary acquisition) by affected people, and a baseline socioeconomic survey of the affected population.
- (xiii) Prepare an entitlement matrix listing all likely effects, permanent and temporary, and a study to determine the replacement costs of all categories of losses. Prepare an indicative, itemized budget for land acquisition and resettlement costs with specific sourcing and approval process.

- (xiv) If the investment projects are likely to involve significant<sup>10</sup> resettlement, prepare a resettlement plan with full participation of stakeholders and the executing and implementing agencies. Prepare (a) a short resettlement plan if the resettlement aspects of the investment subprojects are classified as not significant; (b) a summary resettlement plan; and (c) an indigenous people's development plan, if required.

**b. Pre-Construction**

- (i) Carry out route surveys for line subprojects and site survey for substation subprojects, to determine (a) the most cost effective line route and substation site, wherever possible, seeking to avoid involuntary resettlement; (b) soil characteristics; (c) accessibility; and (d) infrastructure details etc.
- (ii) Based on the result of the route survey, prepare transmission/distribution line profile and tower spottings.
- (iii) Prepare the detailed engineering designs of transmission lines including towers, conductors, insulators, ground wires etc. in accordance with required technical specification and relevant technical standards.
- (iv) Prepare the detailed engineering designs of substations in accordance with required technical specification and relevant technical standards.
- (v) Prepare detailed engineering designs of distribution system subprojects in accordance with required technical specification and relevant technical standards.
- (vi) Prepare Bill of quantities for all materials required based on the detailed design and calculate detailed cost estimates for each material with breaking down into foreign exchange and local currency.
- (vii) Prepare contract packages in accordance with ADB's *Guidelines for Procurement*.
- (viii) Prepare detailed project implementation schedules showing anticipated progress of works and expenditures for each contract package. The schedules will take into account seasonal climatic conditions.
- (ix) Prepare engineering drawings.
- (x) Finalize a resettlement plan for the project-affected people, acceptable to the Government and ADB in line with the Government's relevant policy and ADB's *Handbook on Resettlement*.
- (xi) Finalize the IEE or EIA

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<sup>10</sup> Resettlement is "significant" where 200 or more people experience major impacts. Major impacts are defined as when the affected people are physically displaced from housing and/or more than 10% of their productive assets (income generating) are lost.



- (xii) Assist the EA's procurement process and consultant selection process. Procurement will be carried out in accordance with ADB's *Guidelines for Procurement*. Consultant selection will be in accordance with ADB's *Guidelines on the Use of Consultants*.
- (xiii) Prepare bidding documents required for the subprojects following ADB's *Guidelines for Procurement* and relevant *Standard Bidding Documents*.
- (xiv) Assist the EA in inviting bids, clarification on bidding documents, issuing addenda, managing site inspections and pre-bid meeting, evaluation of bids, recommending award of contracts, and preparing formal contract documentation.
- (xv) Prepare terms of reference for construction supervision including social and environmental impact monitoring. Prepare Request for Proposal (RFP) documents in accordance with ADB's *Guidelines on the Use of Consultants*.
- (xvi) Assist the EA in selecting the project supervision consultant including inviting proposals, replying to queries, evaluation of proposals, contract negotiation.

### C. Cost Estimate and Financing Plan

b.	Item	Foreign Exchange	Local Currency	Total Cost
A. Asian Development Bank Financing				
1. Consultants				
a. Remuneration and Per Diem				
i. International Consultants		370,000	0	370,000
ii. Domestic Consultants		0	105,000	105,000
b. International and Local Travel		42,000	5,250	47,250
c. Reports and Communications		10,000	0	10,000
2. Equipment		5,000	0	5,000
3. Miscellaneous Costs		10,000	0	10,000
4. Contingencies		52,750	0	52,750
<b>Subtotal (A)</b>		489,750	110,250	600,000
B. Government Financing				
1. Office Accommodation and Transport				
2. Remuneration and Per Diem of Counterpart Staff				
3. Others				
<b>Subtotal (B)</b>		0	200,000	200,000
<b>Total</b>		489,750	310,250	800,000

## **OUTLINE TERMS OF REFERENCE FOR CONSULTING SERVICES**

### **C. Rehabilitation/Refurbishment of IPP Subproject**

#### **A. Subproject Description**

To achieve the economic growth and poverty reduction, it is essential to ensure a reliable power supply to an increasing number of industrial, commercial, and domestic consumers. Rehabilitation/refurbishment of aged thermal power plants (coal/gas/oil), whose generation capability has been decreased from its rated capacity, will contribute to enhancement of generation capacity within Pakistan. The consulting services include (i) pre-study to assist PPIB to select one suitable existing power plant for this purpose; and (ii) feasibility study on rehabilitation/refurbishment of the selected existing power plant. Selection of the generation power plant, on which feasibility study will be conducted, shall be selected in accordance with selection criteria prepared by PPIB. PPIB shall seek ADB's concurrence on the selected generation plant prior to commencement of feasibility study.

#### **B. Scope of the Technical Assistance**

2. The consultants' outline terms of reference will include, but not necessarily limited to, the following tasks.

##### **a. Pre-Study**

- (i) Prepare the list of existing thermal power generation plants of Generation Companies, whose fuel are coal/gas/oil. The list should include the following information to be used for prioritization of generation plant to be rehabilitated/refurbished, such as the year of commission, rated capacity, actual capable capacity, fuel, manufacturer, infrastructure around the plant, area of the plant, surrounding environment etc.
- (ii) Prioritize the generation thermal power plants to be rehabilitated/refurbished in accordance with selection criteria, which will be provided by PPIB.

##### **b. Feasibility Study<sup>11</sup>**

- (i) Estimate potential of power generation capacity of the proposed project.
- (ii) Carry out power system study (including power flow, transient stability, static stability, system voltage etc) and prepare the power evacuation plan based on the system study results in accordance with NTDS's transmission system planning criteria.
- (iii) Prepare technical specification of the proposed gas fired power plant, transmission system for power evacuation, and fuel supply/storage facility.
- (iv) Prepare investment cost estimates, separating foreign exchange and local currency, including physical and price contingencies and interest during

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<sup>11</sup> Each final feasibility study report should have a disclaimer indicating that ADB shall not be held liable for the said feasibility study report as well as for application of safeguard policies in case follow-on projects are financed by other institutions.

construction. Prepare a list of materials, equipment, and works necessary to implement the project.

- (v) Prepare the estimated operation cost of the plant.
- (vi) Outline project implementation and procurement arrangements including contract packaging, and a project implementation schedule.
- (vii) Perform economic and financial impacts of each subproject to determine its economic and financial rate of return in accordance with *ADB's Guideline for the Economic Analysis of Projects* and *Guidelines for the Financial Governance and Management of Investment Projects Financed by the Asian Development Bank*. Identify all risks to project revenue and costs and conduct relevant sensitivity analysis.
- (viii) Prepare financing plan for the subprojects considering prospective cofinancing, and appropriate counterpart funds for local currency expenditures.
- (ix) Identify the specific sources and projection of revenue from the project, to indicate the financial viability of the project.
- (x) Assess the environmental impacts of the project and undertake an initial environmental examination (IEE) and present the findings in an IEE report and its summary. When preparing the reports, refer to ADB's *Environment Policy*, ADB's *Environmental Guidelines for Selected Infrastructure Projects*, ADB's *Environmental Assessment Guidelines*, and any applicable procedures or guidelines for environmental assessment required by the Government.
- (xi) If the IEE recommends undertaking a full environmental impact assessment (EIA), conduct the EIA and prepare the report and its summary, including an environmental management plan to implement mitigation measures.
- (xii) Ensure that the costs for implementing recommended mitigation measures, environmental management and monitoring plans, and any capacity strengthening measures, are included in the proposed investment projects' development costs.
- (xiii) In accordance with ADB's *Handbook on Poverty and Social Analysis* and *Handbook for Integrating Poverty Impact in Economic Analysis of Projects*, analyze the social, poverty, and development impact of subprojects. Prepare a poverty impact assessment and a summary poverty and social analysis according to the ADB format. Identify the impact on indigenous peoples, and prepare an appropriate indigenous peoples plan, as necessary, in accordance with ADB's *Policy on Indigenous Peoples*.
- (xiv) In accordance with ADB's *Policy on Involuntary Resettlement* and *Handbook on Resettlement* and the requirements of the Government, identify and prepare socioeconomic profiles (20% sample survey) of the project-affected communities. Carry out field surveys as necessary. Ensure that data is disaggregated by gender and vulnerable groups are identified. Include initial

involuntary resettlement and indigenous people's checklists in the inception report.

- (xv) Undertake a full census and inventory of assets that may be lost (in terms of loss of homes, agricultural and other lands, or assess to current income-generating activities, including impacts caused by permanent or temporary acquisition) by affected people, and a baseline socioeconomic survey of the affected population.
- (xvi) Prepare an entitlement matrix listing all likely effects, permanent and temporary, and a study to determine the replacement costs of all categories of losses. Prepare an indicative, itemized budget for land acquisition and resettlement costs with specific sourcing and approval process.
- (xvii) If the project is likely to involve significant<sup>12</sup> resettlement, prepare a resettlement plan with full participation of stakeholders and the executing and implementing agencies. Prepare (a) a short resettlement plan if the resettlement aspects of the investment subprojects are classified as not significant; (b) a summary resettlement plan; and (c) an indigenous people's development plan, if required.

### C. Cost Estimate and Financing Plan

c.	Item	Foreign Exchange	Local Currency	Total Cost
A. Asian Development Bank Financing				
1.	Consultants			
a.	Remuneration and Per Diem			
i.	International Consultants	504,000	0	504,000
ii.	Domestic Consultants	0	130,000	130,000
b.	International and Local Travel	42,000	4,550	46,550
c.	Reports and Communications	10,000	0	10,000
2.	Equipment	10,000	0	10,000
3.	Miscellaneous Costs	20,000	0	20,000
4.	Contingencies	79,450	0	79,450
	<b>Subtotal (A)</b>	<b>665,450</b>	<b>134,550</b>	<b>800,000</b>
B. Government Financing				
1.	Office Accommodation and Transport			
2.	Remuneration and Per Diem of Counterpart Staff			
3.	Others			

<sup>12</sup> Resettlement is "significant" where 200 or more people experience major impacts. Major impacts are defined as when the affected people are physically displaced from housing and/or more than 10% of their productive assets (income generating) are lost.

<b>Subtotal (B)</b>	0	267,000	267,000
<b>Total</b>	665,450	401,550	1,067,000

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## OUTLINE TERMS OF REFERENCE FOR CONSULTING SERVICES

### D. Development of Gas Fired Power Plant in Sindh Province

#### A. Subproject Description

To achieve the economic growth and poverty reduction, it is essential to ensure a reliable power supply to an increasing number of industrial, commercial, and domestic consumers. Development of a new natural gas fired generation power plant will contribute to meet the increasing electricity demand in the country. There are several small low/medium BTU gas field in Sindh Province and each gas field are assumed to have limited gas reserve of up to 5-6 years. Such fields are, on an individual basis, of no economic value due to the costs associated with extraction of gas. However, the proposed generation project, estimated to be somewhere from 150 to 200MW, intends to utilize the currently uneconomic fields in a series manner. This approach would ensure a life of the power generation station of about 20 to 25 years, and hence make the uneconomic fields becoming an economic asset to the country. Under the consulting services, feasibility study will be carried out for the envisioned project.

#### B. Scope of the Technical Assistance

2. The consultants' outline terms of reference will include, but not necessarily limited to, the following tasks.

- (i) Carry out survey on availability, amount of reserve, and quality of gas resource of a number of gas fields in Sindh Province. Gas fields to be studied will be determined by PPIB.
- (ii) Estimate potential of power generation utilizing the gas resources.
- (iii) Carry out power system study (including power flow, transient stability, static stability, system voltage etc) and prepare the power evacuation plan based on the system study results in accordance with NTDS's transmission system planning criteria.
- (iv) Prepare technical specification of the proposed gas fired power plant, transmission system and gas pipelines.
- (v) Prepare cost estimates, separating foreign exchange and local currency, including physical and price contingencies and interest during construction. Prepare a list of materials, equipment, and works necessary to implement the subprojects.

- (vi) Outline project implementation and procurement arrangements including contract packaging, and a project implementation schedule.
- (vii) Perform economic and financial impacts of each subproject to determine its economic and financial rate of return in accordance with *ADB's Guideline for the Economic Analysis of Projects* and *Guidelines for the Financial Governance and Management of Investment Projects Financed by the Asian Development Bank*. Identify all risks to project revenue and costs and conduct relevant sensitivity analysis.
- (viii) Prepare financing plan for the subprojects considering prospective cofinancing, and appropriate counterpart funds for local currency expenditures.
- (ix) Identify the specific sources and projection of revenue from the project, to indicate the financial viability of the project.
- (x) Assess the environmental impacts of the project and undertake an initial environmental examination (IEE) and present the findings in an IEE report and its summary. When preparing the reports, refer to ADB's *Environment Policy*, ADB's *Environmental Guidelines for Selected Infrastructure Projects*, ADB's *Environmental Assessment Guidelines*, and any applicable procedures or guidelines for environmental assessment required by the Government.
- (xi) If the IEE recommends undertaking a full environmental impact assessment (EIA), conduct the EIA and prepare the report and its summary, including an environmental management plan to implement mitigation measures.
- (xii) Ensure that the costs for implementing recommended mitigation measures, environmental management and monitoring plans, and any capacity strengthening measures, are included in the proposed investment projects' development costs.
- (xiii) In accordance with ADB's *Handbook on Poverty and Social Analysis* and *Handbook for Integrating Poverty Impact in Economic Analysis of Projects*, analyze the social, poverty, and development impact of subprojects. Prepare a poverty impact assessment and a summary poverty and social analysis according to the ADB format. Identify the impact on indigenous peoples, and prepare an appropriate indigenous peoples plan, as necessary, in accordance with ADB's *Policy on Indigenous Peoples*.
- (xiv) In accordance with ADB's *Policy on Involuntary Resettlement* and *Handbook on Resettlement* and the requirements of the Government, identify and prepare socioeconomic profiles (20% sample survey) of the project-affected communities. Carry out field surveys as necessary. Ensure that data is disaggregated by gender and vulnerable groups are identified. Include initial involuntary resettlement and indigenous people's checklists in the inception report.
- (xv) Undertake a full census and inventory of assets that may be lost (in terms of loss of homes, agricultural and other lands, or assess to current income-

generating activities, including impacts caused by permanent or temporary acquisition) by affected people, and a baseline socioeconomic survey of the affected population.

- (xvi) Prepare an entitlement matrix listing all likely effects, permanent and temporary, and a study to determine the replacement costs of all categories of losses. Prepare an indicative, itemized budget for land acquisition and resettlement costs with specific sourcing and approval process.
- (xvii) If the investment projects are likely to involve significant<sup>13</sup> resettlement, prepare a resettlement plan with full participation of stakeholders and the executing and implementing agencies. Prepare (a) a short resettlement plan if the resettlement aspects of the investment subprojects are classified as not significant; (b) a summary resettlement plan; and (c) an indigenous peoples development plan, if required.

### C. Cost Estimate and Financing Plan

d.	Item	Foreign Exchange	Local Currency	Total Cost
A. Asian Development Bank Financing				
1.	Consultants			
a.	Remuneration and Per Diem			
i.	International Consultants	480,000	0	480,000
ii.	Domestic Consultants	0	115,000	115,000
b.	International and Local Travel	42,000	4,550	46,550
c.	Reports and Communications	10,000	0	10,000
2.	Equipment	10,000	0	10,000
3.	Miscellaneous Costs	20,000	0	20,000
4.	Contingencies	68,450	0	68,450
	<b>Subtotal (A)</b>	<b>630,450</b>	<b>119,550</b>	<b>750,000</b>
B. Government Financing				
1.	Office Accommodation and Transport			
2.	Remuneration and Per Diem of Counterpart Staff			
3.	Others			
	<b>Subtotal (B)</b>	<b>0</b>	<b>250,000</b>	<b>250,000</b>
	<b>Total</b>	<b>630,450</b>	<b>369,550</b>	<b>1,000,000</b>

<sup>13</sup> Resettlement is "significant" where 200 or more people experience major impacts. Major impacts are defined as when the affected people are physically displaced from housing and/or more than 10% of their productive assets (income generating) are lost.

## **OUTLINE TERMS OF REFERENCE FOR CONSULTING SERVICES**

### **E. Hydro Generation Subcomponent of the Proposed TA Loan**

#### **A. Subproject Description**

To achieve the economic growth and poverty reduction, it is essential to ensure a reliable power supply to an increasing number of industrial, commercial, and domestic consumers. Under the proposed component of the TA loan, two feasibility studies will be carried out for the development of two new Hydro Power Plants (Run-of-River). The hydro plants would be in the range of 50 to 100MWs, and this size is preferred as it should be attracting the domestic industrial concerns to evaluate and eventually bid for the license to develop one or more of power generation stations. Feasibility study for each plants will be carried out separately.

#### **B. Scope of the Technical Assistance**

The consultants' outline terms of reference will include, but not necessarily limited to, the following tasks.

- (i) Carry out feasibility studies for several hydro power projects identified by PPIB.
- (ii) Carry out power system study (including power flow, transient stability, static stability, system voltage etc) and prepare the power evacuation plan based on the system study results in accordance with NTDS's transmission system planning criteria.
- (iii) Prepare technical specification of the proposed projects.
- (iv) Prepare cost estimates, separating foreign exchange and local currency, including physical and price contingencies and interest during construction. Prepare a list of materials, equipment, and works necessary to implement the subprojects.
- (v) Outline project implementation and procurement arrangements including contract packaging, and a project implementation schedule.
- (vi) Perform economic and financial impacts of each subproject to determine its economic and financial rate of return in accordance with *ADB's Guideline for the Economic Analysis of Projects* and *Guidelines for the Financial Governance and Management of Investment Projects Financed by the Asian Development Bank*. Identify all risks to project revenue and costs and conduct relevant sensitivity analysis.
- (vii) Prepare financing plan for the subprojects considering prospective cofinancing, and appropriate counterpart funds for local currency expenditures.
- (viii) Identify the specific sources and projection of revenue from the project, to indicate the financial viability of the project.



- (ix) Assess the environmental impacts of the project and undertake an initial environmental examination (IEE) and present the findings in an IEE report and its summary. When preparing the reports, refer to ADB's *Environment Policy*, ADB's *Environmental Guidelines for Selected Infrastructure Projects*, ADB's *Environmental Assessment Guidelines*, and any applicable procedures or guidelines for environmental assessment required by the Government.
- (x) If the IEE recommends undertaking a full environmental impact assessment (EIA), conduct the EIA and prepare the report and its summary, including an environmental management plan to implement mitigation measures.
- (xi) Ensure that the costs for implementing recommended mitigation measures, environmental management and monitoring plans, and any capacity strengthening measures, are included in the proposed investment projects' development costs.
- (xii) In accordance with ADB's *Handbook on Poverty and Social Analysis* and *Handbook for Integrating Poverty Impact in Economic Analysis of Projects*, analyze the social, poverty, and development impact of subprojects. Prepare a poverty impact assessment and a summary poverty and social analysis according to the ADB format. Identify the impact on indigenous peoples, and prepare an appropriate indigenous peoples plan, as necessary, in accordance with ADB's *Policy on Indigenous Peoples*.
- (xiii) In accordance with ADB's *Policy on Involuntary Resettlement* and *Handbook on Resettlement* and the requirements of the Government, identify and prepare socioeconomic profiles (20% sample survey) of the project-affected communities. Carry out field surveys as necessary. Ensure that data is disaggregated by gender and vulnerable groups are identified. Include initial involuntary resettlement and indigenous people's checklists in the inception report.
- (xiv) Undertake a full census and inventory of assets that may be lost (in terms of loss of homes, agricultural and other lands, or assess to current income-generating activities, including impacts caused by permanent or temporary acquisition) by affected people, and a baseline socioeconomic survey of the affected population.
- (xv) Prepare an entitlement matrix listing all likely effects, permanent and temporary, and a study to determine the replacement costs of all categories of losses. Prepare an indicative, itemized budget for land acquisition and resettlement costs with specific sourcing and approval process.
- (xvi) If the investment projects are likely to involve significant<sup>14</sup> resettlement, prepare a resettlement plan with full participation of stakeholders and the executing and implementing agencies. Prepare (a) a short resettlement plan if

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<sup>14</sup> Resettlement is "significant" where 200 or more people experience major impacts. Major impacts are defined as when the affected people are physically displaced from housing and/or more than 10% of their productive assets (income generating) are lost.

the resettlement aspects of the investment subprojects are classified as not significant; (b) a summary resettlement plan; and (c) an indigenous people's development plan, if required.

### C. Cost Estimate and Financing Plan

Item	Foreign Exchange	Local Currency	Total Cost
A. Asian Development Bank Financing			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants	864,000	0	864,000
ii. Domestic Consultants	0	190,000	190,000
b. International and Local Travel	51,000	5,600	56,600
c. Reports and Communications	20,000	0	20,000
2. Equipment	20,000	0	20,000
3. Miscellaneous Costs	20,000	0	20,000
4. Contingencies	129,400	0	129,400
<b>Subtotal (A)</b>	1,104,400	195,600	1,300,000
B. Government Financing			
1. Office Accommodation and Transport			
2. Remuneration and Per Diem of Counterpart Staff			
3. Others			
<b>Subtotal (B)</b>	0	434,000	434,000
<b>Total</b>	1,104,400	629,600	1,734,000

Notes: Above cost estimates are for two subprojects.

## **OUTLINE TERMS OF REFERENCE FOR CONSULTING SERVICES**

### **F. Institutional Capacity Building of NTDC**

#### **A. Subproject Description**

Under the proposed component of the TA loan, assistance will be provided to undertake institutional capacity building of NTDC with the objective of preparing NTDC to professionally manage the power transmission, dispatch, and trading activities as per its license. Assistance in this area is also facilitated under TA 4130-PAK, but more in-depth and continued assistance will be provided under the proposed consulting services.

#### **B. Scope of The Technical Assistance**

The consultants' outline terms of reference will include, but not necessarily limited to, the following tasks.

##### **Power Sector Trading Activities (Team Leader)**

- (i) Summarize the current and projected energy sector trading activities of NTDC, and assess the readiness of NTDC to commence trading activities as per its license.
- (ii) Develop and implement the single buyer trading arrangements, in terms of the operating procedures, organizational structure, and market settlement procedures as per best market practice and in accordance with NTDC's license, and be operational by 1 July 2004.
- (iii) Identify major policy, regulatory, institutional, management, operational and financial impediments that need to be removed to undertake the power trading activities. Recommend initiatives to remove these barriers, including action plans to promote sustainable energy development.
- (iv) Develop and implement the competitive trading arrangements, in terms of the operating procedures, organizational structure, and market settlement procedures as per best market practice and in accordance with NTDC's license. A simulation program of the competitive trading system should be operational at the end of the TA.
- (v) Identify and evaluate power sector trading software, and recommend to NTDC the best suitable software. This should be done in conjunction with the current upgrading of the load dispatch center operations.

##### **Financial and Accounting Review and Improvements**

- (i) Assess, enhance, and implement the accounting system for the power sector trading activities.

- (ii) Review, further enhance, and implement the financial management system (FMS) to accurately determine the tariff requirements of NTDC.
- (iii) Review and assist NTDC develop the filing procedures for the transfer pricing determination and the subsequent tariff determination, inclusive of all requirements from each business segment of NTDC.
- (iv) Review and assist NTDC develop/enhance filing procedures, inclusive of supporting documentation, for the automatic adjustments concerning identified pass-through costs.
- (v) Review and develop an accounting system for NTDC that will cater to the segregation of business activities as required per the license.

### **Legal Enhancements**

- (xvi) Review the existing contractual relationships of NTDC versus the power generators, bulk customers, and distribution companies. Ensure consistency and incorporation of all obligation manifested legally in the tariff calculations. This refers to PPAs, bulk supply contracts, and energy supply agreements.
- (xvii) Prepare and implement legal contracts for utilization of addition generation companies/stations, bulk suppliers, and distribution companies.
- (xviii) Prepare and implement the legal transfer arrangements from the current integrated system to the power market structure described in NTDC's license. This would entail the relationship between NTDC and WAPDA, power generators, distribution companies, and bulk purchasers.

### **System and Planning Function Enhancement**

- (i) Review, further enhance, and implement operating procedures for system operations, for both the transmission and dispatch functions. This includes reviews of various draft operational codes, and the codes related implementation.
- (ii) Undertake a transmission system efficiency improvement study, and recommend specific efficiency increasing measures for implementation inclusive of implementation timetable and cost estimates. This would include a study concerning application of static var compensators in the transmission network.
- (iii) Review the dispatch system and recommend operational quality enhancing measures to improve dispatch efficiencies, inclusive of timetable for implementation and cost estimates.
- (iv) Review the system design capabilities, and develop a long term plan for the required design requirements of NTDC, with due considerations to the options for outsourcing and in-house system design requirements.

**Information Technology Enhancements**

- (i) Assess current status of IT systems within NTDC, covering both hardware and software, and the related human capacity/skills level arriving at recommendations for consideration of NTDC's Board of Directors. The recommendations should be specific in terms of implementation timetable and costs, as well as contain a priority list of the recommendations.
- (ii) Assist with the implementation of IT system enhancements as approved by NTDC during the technical assistance period.
- (iii) Review required IT software and hardware configurations at the power generator and distribution company levels, in order to ensure a direct linkage with NTDC's operational system with the long-term objective of ensuring a fully integrated system. Make necessary recommendations for system configurations.

**Integrated Training Module**

- (i) Assess the training requirements of all NTDC activities, and develop an integrated training program inclusive of individual modules related to NTDC's business segments, with particular emphasis on the new business segments, such as power trading.
- (ii) Implement the integrated training program for the power training activities for the directly responsible NTDC management and staff. Also undertake specially designed training sessions for the various stakeholders of the power trading activities (generators, distribution companies, MOWP, MOF, media, and consumer groups focusing on utility operations).
- (iii) Implement a workshop for NTDC's Board of Directors and Senior Management covering the specific details of power sector trading, and specifically the legal and accounting/settlement aspects of power trading.
- (iv) Identify external training opportunities that would enhance NTDC's capabilities in meeting the 1 July 2009 deadline for introduction of an open market trading system for the power sector in Pakistan.

**C. Cost Estimate and Financing Plan**

<b>Item</b>	<b>Foreign Exchange</b>	<b>Local Currency</b>	<b>Total Cost</b>
<b>A. Asian Development Bank Financing</b>			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants	360,000	0	360,000
ii. Domestic Consultants	0	205,000	205,000
b. International and Local Travel	27,000	8,050	35,050
c. Reports and Communications	6,000	0	6,000
2. Equipment	20,000	0	20,000
3. Miscellaneous Costs	2,000	0	2,000
4. Contingencies	71,950	0	71,950
<b>Subtotal (A)</b>	<b>486,950</b>	<b>213,050</b>	<b>700,000</b>
<b>B. Government Financing</b>			
1. Office Accommodation and Transport			
2. Remuneration and Per Diem of Counterpart Staff			
3. Others			
<b>Subtotal (B)</b>	<b>0</b>	<b>234,000</b>	<b>234,000</b>
<b>Total</b>	<b>486,950</b>	<b>447,050</b>	<b>934,000</b>

**OUTLINE TERMS OF REFERENCE FOR CONSULTING SERVICES**  
**G. Institutional Capacity Building of Distribution Companies**

**A. Subproject Description**

Under the proposed component of the TA loan, assistance will be provided to strengthen the institutional capacity of eight distribution companies in (i) distribution system planning; (ii) designing distribution development projects; and (iii) monitoring implementation of distribution development projects.

**B. Scope of the Technical Assistance**

The consultants' outline terms of reference will include, but not necessarily limited to, the following tasks.

- (i) Conduct discussion with WAPDA and Discos to examine the Discos' institutional capacity in planning, designing and monitoring of distribution system development projects.
- (ii) Determine the number and qualification of technical and financial personnel required in the Discos and identify the necessary training.
- (iii) Propose efficient organization and business procedure in the area of planning, designing and implementation of projects.
- (iv) Provide Discos capacity building through on-the-job-training, training courses, workshops, and seminars covering, but not limited to, the following areas: a) Distribution system (132kV and below) planning based on power system studies including power flow, system stability, voltage profile etc.; b) economic and financial analysis of distribution projects to determine their economic and financial viability; c) engineering design of transmission line, substation, distribution lines etc. in accordance with relevant international reputable technical standard; d) project implementation arrangement including implementation scheduling, contract packaging, procurement based on competitive bidding etc.; and e) monitoring of project implementation

**C. Cost Estimate and Financing Plan**

e.	Item	Foreign Exchange	Local Currency	Total Cost
A. Asian Development Bank Financing				
	1. Consultants			
	a. Remuneration and Per Diem			
	i. International Consultants	672,000	0	672,000
	ii. Domestic Consultants	0	960,000	960,000
	b. International and Local Travel	36,000	22,400	58,400
	c. Reports and Communications	20,000	0	20,000
	2. Equipment	70,000	0	70,000

3. Miscellaneous Costs	20,000	0	20,000
4. Contingencies	199,600	0	199,600
<b>Subtotal (A)</b>	<b>1,017,600</b>	<b>982,400</b>	<b>2,000,000</b>
<b>B. Government Financing</b>			
1. Office Accommodation and Transport			
2. Remuneration and Per Diem of Counterpart Staff			
3. Others			
<b>Subtotal (B)</b>	<b>0</b>	<b>667,000</b>	<b>667,000</b>
<b>Total</b>	<b>1,013,100</b>	<b>1,653,900</b>	<b>2,667,000</b>

## OUTLINE TERMS OF REFERENCE FOR CONSULTING SERVICES

### H. Institutional Capacity Building of Planning Commission

#### A. Subproject Description

During the implementation stage of the proposed Infrastructure TA loan, the Planning Commission will be the Executing Agency and coordinate as well as monitor all activities in each sector, i.e. energy, transport and water. Under the proposed component of the TA loan, assistance will be provided to strengthen the institutional capacity of Infrastructure Wing of the Planning Commission to undertake the EA functions of the proposed TA loan implementation by the relatively large number of implementing agencies.

#### B Scope of the Technical Assistance

The consultants' outline terms of reference will include, but not necessarily limited to, the following tasks.

- (i) Assist the Planning Commission to monitor the TA implementation by EAs/IAs. Also assist the Planning Committee to coordinate the TA implementation among several EAs/IAs.
- (ii) Conduct discussion with Planning Commission to examine the Planning Commission's institutional capacity in monitoring/coordinating implementation of projects by the related ministries/agencies.
- (iii) Determine the number and qualification of technical and financial personnel required in the Planning Commission and identify the necessary training.
- (iv) Propose efficient organization and procedure for monitoring/coordinating implementation of projects by related ministries/entities.
- (v) Provide the Planning Commission's institutional incapacity building through on-the-job-training, training courses, workshops, and seminars covering, but not limited to, the following areas: a) monitoring of the implementation of the projects by the executing agencies and the implementing agencies; and b) coordination among the executing agencies.



**C. Cost Estimate and Financing Plan**

<b>Item</b>	<b>Foreign Exchange</b>	<b>Local Currency</b>	<b>Total Cost</b>
A. Asian Development Bank Financing			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants	96,000	0	96,000
ii. Domestic Consultants	0	90,000	90,000
b. International and Local Travel	12,000	2,100	14,100
c. Reports and Communications	10,000	0	10,000
2. Equipment	5,000	0	5,000
3. Miscellaneous Costs	10,000	0	10,000
4. Contingencies	24,900	0	24,900
<b>Subtotal (A)</b>	<b>157,900</b>	<b>92,100</b>	<b>250,000</b>
B. Government Financing			
1. Office Accommodation and Transport			
2. Remuneration and Per Diem of Counterpart Staff			
3. Others			
<b>Subtotal (B)</b>	<b>0</b>	<b>83,400</b>	<b>83,400</b>
<b>Total</b>	<b>157,900</b>	<b>175,500</b>	<b>333,400</b>

[illegible]

## Transport Sector Component

### A. Description, Cost Estimates and Financing Plan

#### 1. Objective and Scope

The Government attaches high priority to the development of infrastructure as the prime engine for economic growth and poverty reduction. Strategic investment in infrastructure is necessary for Pakistan to take advantage of the geopolitical situation in the region and benefit from regional opportunities for cooperation in trade and commerce. The Government will have to address four major challenges: (i) lack of an integrated national transport policy to guide the development of subsector policies, (ii) poor governance, (iii) weak public institutions, and (iv) the need for targeted investment based on sound economic criteria.

**Roads.** ADB's support in the sector is evolving from a project-by-project approach into a programmatic approach, where assistance to all categories of roads is in parallel with policy dialogue and the preparation of a road map for sector reform. A policy framework comprising road user charges, road fund, axle load control, road safety, environmental and social aspects, and private sector participation in road construction and operation is needed to sustain the overall road network. Institutional improvements and capacity building are required so that the road agencies can plan, develop, and manage road assets.

**Railways.** In early 2004, the Government asked ADB to consider including support for railways in its Country Strategy and Program (CSP) for Pakistan. ADB is currently conducting a preliminary assessment of the railways sector and identified areas of technical assistance through the TA loan, with a view to developing a framework or "roadmap" for future improvement of the railway sector. However, ADB would wish to see certain advance actions and commitments being met prior to approval of any possible ADB support for infrastructure rehabilitation. Examples might include (i) establishing a reform implementation task force; (ii) approving the draft legislation for corporatization, and then enacting the legislation and operationalizing the corporation, (iii) preparing an overarching reform program for railways, and obtaining a high-level government commitment for it; and (iv) recruiting and carrying out the proposed consulting services to develop and implement a new activity-based accounting system. If the assessment is positive, ADB might include support for railways in the CSP and prepare a detailed timetable for formulation of support.

**Ports.** ADB has recently initiated policy and technical discussions with the Government on possible ADB support for the port sector. The first priority is a comprehensive port sector prioritization plan that will prioritize investment for Karachi Port and Port Qasim considering the economic viability and national interests. This is because plans for channel dredging suggest that both ports are trying to change their role from feeder ports to attracting main line operators. It is not immediately obvious that both ports would simultaneously be successful in attracting main line operators. Thus, that investment in channel deepening at both ports is economically viable. Once analysis of the demand and potential of both ports is carried out, it would become clearer which investments in the port sector would be economically viable and serve the national interest.

## 2. Cost Estimate and Financing Plan

The total cost of the transport sector component has been estimated at \$14.68 million, with the foreign exchange costs and local currency costs estimated at \$8.14 million and \$6.54 million, respectively. ADB undertakes to finance \$11.00 million of the transport sector costs, which will cover the foreign exchange costs and \$2.86 million of the local currency costs. The Government undertakes to finance domestic currency costs amounting to \$3.68 million equivalent.

**Table 2: Cost Estimate and Financing Plan – Transport Sector  
(\$ million)**

	Item	Foreign Exchange	Local Currency	Total Cost
A.	Asian Development Bank Financing			
	Consultants Services	8.14	2.86	11.00
	Subtotal (A)	8.14	2.86	11.00
B.	Government Financing			
	Administration, Taxes, and Duties	0.00	3.68	3.68
	Subtotal (B)	0.00	3.68	3.68
	Total	8.14	6.54	14.68

### B. List of Subprojects

The subprojects for the transport sector component was prepared together with the Planning Commission and the relevant line Ministries (MOC, MOR, MOPS and MLG), in close coordination with the relevant subsector agencies, primarily NHA and PR. The transport sector sub-projects covers the following areas (i) road project preparatory facilities, (ii) railway project preparatory facilities, (iii) model concession and project preparatory facility for a PPP pilot project in NHs, (iv) capacity building for NHA, (v) policy development and capacity building for MOR and PR, and (vi) policy development and capacity building for MOPS.

**Table 2 Transport Sector Subprojects**

	Description	Amount (\$)	IA
a.	Road Project Preparatory Facility (national highway projects)	5,400,000	NHA
b.	Road Project Preparatory Facility (district road project)	2,000,000	MLG
c.	Railway Project Preparatory Facility	800,000	MOR
d.	PPP Initiative for NHs Development	1,200,000	NHA
e.	Capacity Building for NHA	600,000	NHA
f.	Policy Development/Capacity Building for MOR/PR	500,000	MOR
g.	Policy Development/Capacity Building for MOPS	500,000	MOPS
	Total allocation	11,000,000	PC

NH = National Highways, NHA = National Highways Authority, MOR = Ministry of Railways, MOPS = Ministry of Ports and Shipping, PR = Pakistan Railways.

### C. Terms of Reference of the Consultants (TORs)

Contract packages are summarized below with each TOR is attached.

**Table 2: Transport Sector Contract Packages**

<b>Item</b>	<b>Cost</b>	<b>Outputs</b>
<b>A. Roads</b>		
PPP Initiative for National Highway Development	<b>Package 1</b> PPP Project Preparation \$0.4 million	(i) conduct due diligence of design and engineering work, economic and financial analyses and conduct all assessments necessary to ensure that ADB's compliance requirements are fulfilled; (ii) develop a model concession agreement and concession documents; (iii) prepare bidding documents; and (iv) assist the Government on concession's contract negotiations.
	<b>Package 2</b> PPP Capacity Building \$0.8 million	(i) capacity building for NHA, the Planning Commission/IMU, and other stakeholders; and (ii) financial management assessment of each subproject IA.
NHA Capacity building in project planning, development, and management	<b>Package 3</b> \$0.6 million	Reengineer business processes in NHA through (i) strengthening Road Planning and Programming, (ii) strengthening preconstruction processes in the Highway Design, Bridges and Construction and Maintenance Divisions, and (iii) strengthening construction management in the Construction and Maintenance Division.
NH Road Project Preparation	<b>Package 4</b> First Batch \$1.8 million	(i) Prepare feasibility studies; (ii) prepare detailed design; and (iii) assist procurement, which includes (a) bid document preparation and evaluation, (b) bid processing, (c) contract negotiations for selecting civil works contractors, supervision consultants, and equipment vendors; and (iv) financial management assessment of each subproject IA.
	<b>Package 5</b> \$1.8 million	Second Batch
	<b>Package 6</b> \$1.8 million	Third Batch
Provincial and District Roads Project Preparation	<b>Package 7</b> \$2.0 million	(i) Prepare feasibility studies; (ii) prepare detailed design; and (iii) assist procurement, which includes (a) bid document preparation and evaluation, (b) bid processing, (c) contract negotiations for selecting civil works contractors, supervision consultants, and equipment vendors; and (iv) financial management assessment of each subproject IA.
<b>B. Railways</b>		
Policy development and capacity building	<b>Package 8</b> \$0.5 million	Corporatization of PR units for efficient operation.
Railway Project Preparatory Facility	<b>Package 9</b> \$0.8 million	(i) Prepare feasibility studies; (ii) prepare detailed design; and (iii) assist procurement, which includes (a) bid document preparation and evaluation; (b) bid processing; (c) contract negotiations for selecting civil works contractors, supervision consultants, and equipment vendors, and (iv) financial management assessment of each subproject IA.
<b>3. Ports</b>		
Policy development and capacity building	<b>Package 10</b> \$0.5 million	Strengthen capacity in port management

IA = implementing agency, NH = national highway, NHA = National Highways Authority, MOF = Ministry of Finance, PPP = public-private partnership, TBD = to be determined.

**TERMS OF REFERENCE  
PACKAGE 1**

**PUBLIC PRIVATE PARTNERSHIP (PPP) INITIATIVE FOR NATIONAL HIGHWAY  
DEVELOPMENT**

**PPP PROJECT PREPARATION**

**A. Objectives**

Objectives of the consulting services are to:

- (i) Prepare the PPP Program for NHA, and prioritize NHA PPP projects
- (ii) Prepare a financially viable PPP scheme for selected PPP projects, in close coordination with the NHA's feasibility study team including consultant teams, ensuring the project is economically, financially, commercially, environmentally and socially viable;
- (iii) Assist NHA in procurement, including preparing and evaluating bid documents; and preparing and concluding concession negotiations.

**B. Required Expertise**

The consultants include the following:

- (i) BOT specialist (12 international person months)
- (ii) Financial expert in road PPP (2 international person months); and
- (iii) Legal expert (3 domestic person months)

**C. Terms of Reference**

The BOT specialist, as Team Leader, will conduct the following tasks with the financial expert and the legal expert, in close coordination with the NHA consultant team including consultant teams.

**1. Preparation and prioritization of the NHA PPP program**

Prepare the PPP Program for NHA and prioritize NHA PPP projects. Tasks will include the following:

- (i) Identify a list of PPP projects for the NHA PPP program
- (ii) Prepare implementation plan with funding plan for 2007-2011, in consideration of capacity of domestic private financial sector and domestic contractors to participate in PPPs and propose actions to enhance such capacity.
- (iii) Prioritize the projects under the program
- (iv) Facilitate the implementation of SSTA4508 recommendations
- (v) Prepare the procurement schedule of PPP projects, procedures and appropriate evaluation criteria, and bid documents for PPP projects with combined target value of PRs60 billion

**2. Preparation of a PPP scheme**

Prepare a financially and commercially viable and implementable PPP scheme for selected projects. Tasks will include the following:

- (i) To make the Project attractive to the private sector, propose the physical packages (for instance, the combination of “brown field” and “green field” investments; whether the construction of major bridges, some approach roads, etc is to be included in the PPP package).
- (ii) Conduct risk assessment by: (i) reviewing the current allocation of risks under the model concession agreements; (ii) proposing changes in the risk allocation that will make the concessions more attractive to the private sector without significantly increasing the liabilities of NHA.
- (iii) Develop tolling strategy, tolling technology selection and optimisation modeling, in line with the tolling policy of NHA. This will cover the following: (a) Develop the tolling options to ensure that the use and placement of barrier and exit tolling stations are to achieve a reasonable level of capture of traffic using the road; (b) Examine the impacts of the tolling at each station to determine the likely impact on diversion; and (c) Revise the estimate of toll revenues during the period of the concession, and propose optimized and realistic toll rate.
- (iv) Propose financial structuring and financing options for the Project to be financially viable, covering debt-equity ratios and prospects for raising debt/equity from the foreign and local markets considering availability of funds, inflation, debt servicing, and foreign exchange risk, and possible viability enhancement such as government annuities, grant contributions, revenue sharing, government incentives and guarantees, toll structures, any other options to make the PPP projects financially viable and attractive to the private sector.
- (v) Propose appropriate viability enhancement mechanisms and investment schemes such as equity financing, parallel loan financing, partial credit guarantees and political risk guarantees for consideration by the ADB and other agencies. Outline how these contributions can assist in meeting public and private financing requirements for creating viable PPPs.
- (vi) Develop a conceptual framework in designing bidding package in consideration of a variety of specific factors including: (a) the requirements for periodic maintenance based on performance parameters, and (b) the terms for early termination.
- (vii) Prepare Project Information Memorandum, Project Financial Plan, Project Risk Allocation Structures and Possible Government and ADB support strategies.

### **3. Procurement assistance**

Consultants shall assist NHA in all aspects of procurement. A key task is the tailor-made structuring of the draft concession agreement prepared under the SSTA, including the period of concession and the way to provide subsidies to contractors, and the development of bidding documents.

- (i) Review and make necessary modifications to the draft concession documents with an aim to provide a more effective concession that is more effective and less likely to require capital subsidy.
- (ii) Finalize the bid documents, including bid evaluation criteria.
- (iii) Facilitate the pre-bid meeting, making clarification to bid documents and prepare minutes.
- (iv) Assist NHA in evaluating bid documents (including prequalification, technical and

- financial evaluation and the overall ranking).
- (v) Develop a strategy for the negotiation with the selected contractor.
- (vi) Assist NHA in concluding contract negotiations.

## **D. Reporting Requirements**

### **1. General Requirement**

The consultant will prepare and submit the following reports to NHA and ADB:

- (i) First report, within 1 month of commencement of assignment, proposing an optimal financial structure;
- (ii) Progress reports, after the completion of every main milestone of the project and/or contract delivery, as to be agreed in the consulting services contract;
- (iii) Draft final report, tentatively after 11 months of commencement of assignment, proposing the PPP Program for the next 5 years; and
- (iv) Final report, incorporating comments provided by the Government and ADB.

In addition to the above reports, the consultant will submit short monthly reports to the NHA and ADB, summarizing TA activities, issues, and constraints for the duration of the TA.

### **2. Specific Requirement**

With regards to the general requirement of Para 7 (i) and (ii), report submission at main milestones of the project includes, but not limited to, the following:

- (i) Optimal Financial Structure, within 1 month of commencement of assignment;
- (ii) Evaluation Criteria, within 1 month after finalization of the optimal financial structure;
- (iii) Request for Proposal, including the draft Concession Agreement and Sample Submission Forms, within 2 months of commencement of assignment;
- (iv) Minutes of Clarification at the pre-bid conference, within 1 week after the conference; and
- (v) Bid Evaluation Report, within 1 month of bid submission deadline.

## **E. Workshop and Seminar**

The BOT Specialist will facilitate and hold one workshop and one seminar for introducing project-specific lessons learned for government officials and the private sector.

## **F. NHA Staff Training**

The BOT Specialist will facilitate training of NHA staff who are involved in PPP projects to expose them to actual PPP projects under processing in the region, e.g., a one-week study tour to work on project documents of actual PPP projects.

## **G. Government Inputs**



NHA will provide counterpart staff and support staff for this consultancy service. It will provide temporary office space, all available maps, reports and other data needed by consultants, as well as staff to work with the consultants.

## H. Cost

The total cost is estimated at \$400,000 equivalent, excluding the Government's in-kind contributions such as office accommodation, counterpart staff, communications, transport, and other administration.

### Cost Estimate and Financing Plan

Item	Foreign Exchange	Local Currency	Total Cost
A. Asian Development Bank Financing			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants	280,000	0	280,000
ii. Domestic Consultants	0	15,000	15,000
b. International and Local Travel	20,000	2,000	22,000
c. Reports and Communications	3,000	0	3,000
2. Training	20,000	0	20,000
3. Seminar/Workshop	0	10,000	10,000
3. Miscellaneous Costs	15,000	0	15,000
4. Contingencies	32,000	3000	35,000
<b>Subtotal (A)</b>	<b>370,000</b>	<b>30,000</b>	<b>400,000</b>
B. Government Financing			
1. Office Accommodation and Transport	0	44,000	44,000
2. Remuneration and Per Diem of Counterpart Staff	0	75,000	75,000
3. Others	0	15,000	15,000
<b>Subtotal (B)</b>	<b>0</b>	<b>134,000</b>	<b>134,000</b>
<b>Total</b>	<b>370,000</b>	<b>175,500</b>	<b>534,000</b>

## **OUTLINE TERMS OF REFERENCE PACKAGE 2**

### **PUBLIC PRIVATE PARTNERSHIP (PPP) INITIATIVE FOR NATIONAL HIGHWAY DEVELOPMENT**

#### **PPP CAPACITY BUILDING**

##### **A. Terms of Reference**

The consultants will undertake the following tasks:

- (i) Conduct discussions with NHA, Planning Commission, MOF and other stakeholders to enhance and promote the PPP concession model and support NHA in preparing presentations/discussion papers and workshops and in attending meetings with stakeholders;
- (ii) Determine the number and qualification of technical, operations and management personnel needed in the field of PPP within NHA for the next 10 years and identify training needs;
- (iii) Propose a detailed capacity building plan for the for the domestic private sector - including consultants, contractors and financial sector - on road sector PPPs, and provide a detailed financing plan for these activities.
- (iv) Provide NHA, Planning Commission, MOF and other public stakeholder, extensive capacity building on PPPs through training courses, workshops and seminars covering, but not limited, to the following areas: a) PPP international experiences and good practices; b) PPP models and design; c) PPPs project finance; d) national policy and regulatory framework on PPPs; e) economic, financial and budgetary implications of PPPs; f) analysis of weaknesses of the domestic private sector on PPP projects; g) analysis of previous PPP road projects in Pakistan; (h) analysis of risks and strategies for risk mitigation in PPPs; i) strategies for participation of contractors, infrastructure operators and financial companies in PPPs; (j) PPP contracts.

##### **B. Staff Training**

Training Specialist will facilitate training of government officials involving in PPP projects to expose them to actual PPP projects under processing in the region, e.g., a 1-week study tour to work on project documents of actual PPP projects.

##### **C. Cost**

The total cost is estimated at \$800,000 equivalent, excluding the Government's in-kind contributions such as office accommodation, counterpart staff, communications, transport, and other administration.

## **OUTLINE TERMS OF REFERENCE PACKAGE 3**

### **Consulting Services for Capacity Building for NHA in Project Planning, Development and Management**

#### **A. Objective**

1. The objective of the assistance is to enhance efficiency of the road sector by strengthening the performance and capacity of the NHA to plan, construct, maintain and manage the national road asset base. The provision of the capacity building will be built upon an appropriate review of on-going technical assistance on Business Processes Re-engineering (BPR), and the Proposed Reorganization of the NHA.

#### **B. Terms of Reference**

The Consultant shall assist NHA in administering the BPR study and implementation. The assistance will include (i) revenue of proposed management system with respect to assist NHA Management, (ii) road planning and programming, (iii) highway and bridges project management, and (iv) HRD component of BPR.

#### **C. Reporting**

The consultants will prepare and submit the following reports to NHA and the Asian Development Bank (ADB):

- Inception report, within 4 weeks of commencement of assignment;
- Short monthly progress reports, summarizing TA activities, issues, and constraints for the duration of the TA.
- An interim reports at the middle-term of the assignment;
- Draft final report, 1 month before the end of the assignment; and
- Final report.

Both the Government and ADB will comment on the draft final report. The final report will be submitted within 2 weeks after the tripartite meeting to discuss the draft final report.

#### **D. Consultants and Schedule**

The international consultants will have expertise in: (i) road transport policy and institutional development (Mission Leader), and (ii) Highway Planning and Programming with experience on HDM-4. The domestic consultants will have expertise in: (i) Highway Planning and Programming, (ii) Highway Design, and (iii) Highway Construction and Maintenance Management. However the reform consultant may propose alternative arrangements that the reform consultant believes will provide the services of equivalent or better quality.

#### **E. Cost**

The total cost is estimated at \$600,000 equivalent, excluding the Government's in-kind contributions such as office accommodation, counterpart staff, communications, transport, and other administration.

## OUTLINE TERMS OF REFERENCE PACKAGE 4-7

### ROAD PROJECT PREPARATION FACILITY

#### A. Objective

The objective of the proposed project preparatory facility is to support the Government in developing road network efficiently. Focusing on road project activities during pre-construction and project implementation phases, the Project will (i) facilitate pre-construction activities of road projects and (ii) ensure readiness of the follow-on project implementation. The Project will also contribute to enhancing NHA's capacity of implementing road projects. The Project covers National Highways (NHs) and motorways nationwide including public procured and privately financed roads.

#### B. Scope of the Technical Assistance

The project preparation facility will enable the preparation of: (i) project feasibility studies, (ii) project detailed designs, and (iii) project bidding documents.

For each package, the assistance will be implemented in two phases: (i) the first, for feasibility studies, and (ii) the second, for preconstruction activities.

##### 1. Feasibility study

The consultants will carry out the following tasks:

- (i) Update existing feasibility studies<sup>15</sup>, and prepare new ones, as appropriate, for the selected roads.
- (ii) As a part of the feasibility studies for selected roads, estimate the project costs based on appropriate quantities, unit rates, and costs. Estimate the foreign exchange (direct and indirect) and local currency costs. Show tax as a separate item. Estimate physical contingencies. Estimate price contingencies based on ADB's international and domestic inflation rates and a constant real exchange rate. Estimate the costs of routine and periodic maintenance for selected roads.
- (iii) As part of the feasibility studies for selected roads, carry out economic evaluation in accordance with ADB's Guidelines for Economic Analysis of Projects and confirm the economic viability of selected roads based on HDM-4 economic analysis and also quantifying benefits from timesavings and reduction in accidents. Specifically, the consultants will do the following:
- (iv) Carry out an economic evaluation (20-year benefit stream period) of the alternative improvement options for each road section and project road by calculating the economic internal rate of return based on benefits and costs, including those for civil works, rights-of-way, detailed engineering, and

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<sup>15</sup> Feasibility refers to complete appraisal of all technical; economic; financial; social including resettlement, gender, and poverty; and environment aspects and other related issues of the candidate roads in accordance with all relevant Asian Development Bank guidelines and best international practices. Each final feasibility study report should have a disclaimer indicating that ADB shall not be held liable for the said feasibility study report as well as for application of safeguard policies in case follow-on projects are financed by other institutions.

construction supervision. The choice between mutually exclusive improvement options will be based on the net present worth method at a discount rate of 12%.

- (v) Identify the beneficiaries of the proposed road improvements, classify them according to income class, and assess the poverty reduction aspects of the road improvements and how many poor people would be affected in relation to the total population in the project influence areas during construction and during the benefit stream period, and estimate the impact of the road improvements, if any, on employment of women.
- (vi) Undertake sensitivity tests for the recommended improvements by appropriately varying benefits, project costs, maintenance costs (and their implications for roughness in the with and without situations related to EIRR), and the implementation period.
- (vii) As part of the feasibility studies for selected roads, carry out financial analysis. Compute forward recurrent costs and debt service obligations as compared with existing budget available.

## **2. Pre-construction**

The consultants will carry out the following tasks:

- (i) Update and carry out, as appropriate, detailed design and engineering for the selected roads including the following:
- (ii) Update or carry out, as appropriate, topographic surveys to reflect present conditions. This will involve restoring and/or reestablishing (for realignment) survey benchmarks, updating topographic maps, and identifying built-up areas along the road. Review and carry out the geometric design based on the updated surveys, and make appropriate modifications and improvements.
- (iii) Undertake detailed traffic counts, origin-destination surveys, turning movement counts, and road roughness and axle load surveys to verify and/or update the original traffic and axle load studies and traffic growth rates. The traffic surveys will include non-motorized vehicles of all types. Analyze the new traffic and axle load data for confirming or amending the traffic forecasts and axle load projections.
- (iv) Review the suitability of the proposed alignments, sections, and road intersections taking into account safety considerations. In particular, develop appropriate means of minimizing conflicts between fast moving motorized traffic and slow-moving motorized and non-motorized traffic.
- (v) Review the drainage and hydrological designs proposed for the selected roads and prepare, as required, new designs that will provide appropriate drainage, vehicle standing, bus loading, pedestrian refuge, traffic control, and other facilities as may be required.
- (vi) Make an inventory and update the condition of all bridge/culvert structures. Review the appropriateness of the original structural designs including rehabilitation options based on the current conditions and prepare new designs where required for the selected roads. In particular, assess, through nondestructive methods, whether bridges that were originally to have been

rehabilitated have since deteriorated to such an extent that replacement is now a more appropriate option.

- (vii) Review and, if required, carry out hydrological design in accordance with the prevailing site conditions. This will include evaluation of stream regimes and local floods, and assessment of the protection and training works and drainage structures provided in the original design.
- (viii) Based on a testing program that includes field/laboratory testing, deflection testing of pavements and required condition surveys, evaluate the appropriateness of the original pavement design for the prevailing conditions and updated axle loads. Also, identify areas affected by salinity and water logging and their effects on embankment design.
- (ix) Carry out social analysis including assessment of gender and indigenous people and prepare appropriate action plans, as required, in accordance with ADB's Guidelines for Incorporation of Social Dimensions into Bank Operations, Handbook for Incorporation of Social Dimensions in Projects, Policy on Indigenous Peoples, Policy on Gender, and other requirements.
- (x) Formulate a Resettlement Plan in accordance with government policy and laws, and ADB's Involuntary Resettlement Policy.
- (xi) Carry out poverty impact assessments for selected roads in accordance with ADB's guidelines and procedural requirements. Prepare a distribution analysis of quantified economic benefits and estimation of poverty impact ratios for selected roads.
- (xii) Carry out environmental impact assessment (EIA) and/or initial environmental examination (IEE) and summary EIA and/or IEE for selected roads in accordance with ADB guidelines and other requirements.
- (xiii) Propose suitable contract packaging for selected roads and identify the need for advance action.
- (xiv) Prepare complete civil works prequalification (including evaluation guidelines) and bidding documents for selected roads following ADB's Guidelines on Procurement and Sample Bidding Documents for Civil Works.
- (xv) Prepare terms of reference for construction supervision including inputs for design review and additional design work during construction, resettlement, social impact monitoring, etc.
- (xvi) Review project implementation arrangements and recommend measures for strengthening of project management.
- (xvii) Prepare schedules for all components of the project and a corresponding disbursement schedule

### **C. Cost**

The total cost of each package is estimated at \$1,800,000 equivalent, excluding the Government's in-kind contributions such as office accommodation, counterpart staff, communications, transport, and other administration.

## OUTLINE TERMS OF REFERENCE PACKAGE 8

### CORPORATIZATION OF MANUFACTURING UNITS INTO A NEW SEPARATE ENTITY

#### A. Introduction

Pakistan Railway (PR) is undertaking a major reform exercise. As the first step of the reform exercise, PR is being reorganized along lines of business (LOB). The World Bank assists the overall reorganization exercise. As part of this overall reorganization, consultants under this package are required to assist in transforming Manufacturing Units (MU) into a separate corporate entity, which requires preparing an asset register for MU; and identifying the assets as well as the liabilities to be transferred to the different entity.

#### B. Scope of Works

**Component 1 - Preparation of Asset Register and liabilities subcomponent (1 international accounting consultant – 4 person-months, 1 international railway valuation – 2 person-months, 1 international information technology (IT) consultant – 2 person-months, 2 domestic accounting consultants – 10 person-months)**

The Scope of Works for this component includes the following:

- (i) Preparation of workplan and timetable - This task should prepare a detailed workplan for creating an asset register for MU. The work plan and timetable should be completed within 1 month of commencement of services. It should address:
  - The format of the asset register
  - The approach for collecting details of the existing assets and procedures for estimating unknown data
  - Procedures for maintaining the asset register
  - Computerization and linkages with the more general accounting project
- (ii) Asset revaluation - After the assets have been identified, their value should be updated. This task should summarize the alternative approaches that are in general use and recommend the procedures that should be adopted in the case of PR. This process will require the active involvement of the PR financial management. The approval of the Auditor-General will also be required for the subsequent incorporation of the updated asset values in the Balance Sheet. This revaluation should be completed within 4 months of commencement of services.
- (iii) Creation of asset registers and identification of assets - This task will define the registers and collect the data for each asset class. This should be completed within 4 months of commencement of services
- (iv) Revalue assets - This task will revalue the assets identified above using the principles established. This task should be completed within 5 months of commencement of services.

- (v) Transfer of assets and liabilities – identify assets and liabilities to be transferred to the different corporate entity. This task should be completed within 6 months of commencement of services.
- (vi) Support and Training – The consultant will train staff for PR and the new entity to maintain the asset register. This task should be completed within 7 months of commencement of services.

**Component 2 – Corporatization Advisory Services Component (1 international corporatization consultant – 3 person-months, 1 international stakeholder consultant – 3 person-months, 1 domestic accounting consulting – 4 person-months, 1 domestic stakeholder consultation expert – 4 person months)**

The tasks shall include the following:

- (i) Carry out a stakeholder consultation process to disseminate accurate information and attempt to build consensus among all stakeholders on the transformation within 4 months of commencement of services;
- (ii) Prepare the relevant information material as may be reasonably required to effectively carry out the stakeholder consultation process within 4 months of commencement of services;
- (iii) Prepare accounting statements including income statements, balance sheets; funds flow statements; and profit and loss statements for the corporate entity according to IAS including identification and valuation of the current assets in terms of cash, receivables and inventories; the fixed assets in terms of book value, accumulated depreciation and net book value; any other assets held; the current liabilities in terms of short-term debts, payables and others; the long-term debts within 4 months of commencement of services;
- (iv) Carry out preparatory actions including preparing drafting the appropriate legal instruments to effect the transfer of assets and liabilities of MU to the corporate entity that will be set up and option papers for staff to be assigned from MU to the corporate entity within 4 months of commencement of services;
- (v) Advice on options for dealing with financial aspects of transfer of assets and liabilities especially on pension liabilities issues within 4 months of commencement of services.

The deliverables will include

- (i) Inception Report: Within 1 month of Commencement Date;
- (ii) Preparation of material needed for stakeholder consultation - 1 month of Commencement Date;
- (iii) Preliminary report on results of stakeholder consultations – within 4 months of Commencement Date;
- (iv) Presentations and Workshops: to be determined in consultation with PR;
- (v) Final Report: Within 1 month of receipt of comments from PR on the Draft Report.

**Component 3 – Legal Support (1 international legal consultant – 1 person-months, and 1 domestic legal consultant – 3 person-months)**



This component provides legal support to the previous components in the execution of their respective tasks. They include, among other things, includes the following tasks:

- (i) drafting of service memorandums of understandings agreement between PR and the new corporate entity within 6 months of commencement of services;
- (ii) other legal matters as may be necessary to accomplish the operationalizing of the new corporate entity within 6 months of commencement of services.
- (iii) drafting all legal and/or administrative paperwork necessary to give legal effect the transfer of assets and liabilities from PR to the corporate entity within 6 months of commencement of services;
- (iv) drafting the legal instruments for the options to be given to staff upon corporatization of MU within 6 months of commencement of services;

### **C. Executing Agency Support**

The Client will provide the following support and services to the Consultant:

- All available data and information relating to the project;
- Suitable furnished office accommodation with heat, light, electricity and international telephone connections (the consultants will be responsible for the cost of international costs) and free access to photocopying and fax machines;
- Introduction to other authorities and concerned agencies in Pakistan.

### **D. Reporting Requirements**

25. The Consultant shall submit 5 copies to ADB and 10 copies to PR of all the reports produced such as Inception Report, Draft Report, Interim Report, Draft Final Report, Final Report. The Consultant shall also submit to ADB and PR the same number of all technical working papers that is produced as part of this assignment. The Consultant will also prepare and submit a Project Completion Report within 3 months of the completion.

### **E. Consultants**

The consultant inputs will be 15 international person-months and 21 domestic person-months for all components.

**F. Cost Estimate and Financing Plan**

<b>Item</b>	<b>Foreign Exchange</b>	<b>Local Currency</b>	<b>Total Cost</b>
A. Asian Development Bank Financing			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants	300,000	0	300,000
ii. Domestic Consultants	0	84,000	84,000
b. International and Local Travel	35,000	2,000	37,000
c. Reports and Communications	0	3,000	3,000
3. Seminar/Workshop	0	10,000	10,000
3. Miscellaneous Costs	30,000	0	30,000
4. Contingencies	30,000	6,000	36,000
<b>Subtotal (A)</b>	<b>395,000</b>	<b>105,000</b>	<b>500,000</b>
B. Government Financing			
1. Office Accommodation and Transport	0	55,000	55,000
2. Remuneration and Per Diem of Counterpart Staff	0	95,000	95,000
3. Others	0	17,000	17,000
<b>Subtotal (B)</b>	<b>0</b>	<b>167,000</b>	<b>167,000</b>
<b>Total</b>	<b>395,000</b>	<b>272,000</b>	<b>667,000</b>

## OUTLINE TERMS OF REFERENCE PACKAGE 9

### RAILWAY PROJECT PREPARATORY FACILITY

#### A. Objective

The objective of the proposed project preparatory facility is to support the Government in developing the rail network efficiently. Focusing on railway project activities during pre-construction and project implementation phases, the Project will (i) facilitate pre-construction activities of railway projects and (ii) ensure readiness of the follow-on project implementation. The Project will also contribute to enhancing Ministry of Railways (MOR) and Pakistan Railways (PR) capacity of implementing railway projects.

#### B. Scope of the Technical Assistance

The project preparation facility will enable the preparation of: (i) project feasibility studies, (ii) project detailed designs, and (iii) project bidding documents. The assistance will be implemented in two phases: (i) the first, for feasibility studies, and (ii) the second, for preconstruction activities.

The consultants will carry out, as required, the following tasks:

- (i) Update existing feasibility studies<sup>16</sup>, and finalize them, as appropriate, for the selected railway projects.
- (ii) As a part of the feasibility studies for selected railway projects, estimate the project costs based on appropriate quantities, unit rates, and costs. Estimate the foreign exchange (direct and indirect) and local currency costs. Show tax as a separate item. Estimate physical contingencies. Estimate price contingencies based on ADB's international and domestic inflation rates and a constant real exchange rate.
- (iii) As part of the feasibility studies for selected railway projects, carry out economic evaluation in accordance with ADB's Guidelines for Economic Analysis of Projects and confirm the economic viability of selected railway projects.
- (iv) Update and carry out, as appropriate, detailed design and engineering for the selected railway projects.
- (v) Carry out social analysis including assessment of gender and indigenous people and prepare appropriate action plans, as required, in accordance with ADB's Guidelines for Incorporation of Social Dimensions into Bank Operations, Handbook for Incorporation of Social Dimensions in Projects, Policy on Indigenous Peoples, Policy on Gender, and other requirements.
- (vi) Formulate a resettlement plan in accordance with Government policy and laws, and ADB's Involuntary Resettlement Policy.

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<sup>16</sup> Feasibility refers to complete appraisal of all technical; economic; financial; social including resettlement, gender, and poverty; and environment aspects and other related issues of the candidate railway projects in accordance with all relevant Asian Development Bank guidelines and best international practices.

- (vii) Carry out poverty impact assessments for selected railway projects in accordance with ADB's guidelines and procedural requirements. Prepare a distribution analysis of quantified economic benefits and estimation of poverty impact ratios for selected railway projects.
- (viii) Carry out environmental impact assessment (EIA) and/or initial environmental examination (IEE) and summary EIA and/or IEE for selected railway projects in accordance with ADB guidelines and other requirements.
- (ix) Propose suitable contract packaging for selected railway projects and identify the need for advance action.
- (x) Prepare complete civil works prequalification (including evaluation guidelines) and bidding documents for selected railway projects following ADB's Guidelines on Procurement and Sample Bidding Documents for Civil Works.
- (xi) (xi) Prepare terms of reference for construction supervision including inputs for design review and additional design work during construction, resettlement, social impact monitoring, etc.
- (xii) Review project implementation arrangements and recommend measures for strengthening of project management.
- (xiii) Prepare schedules for all components of the project and a corresponding disbursement schedule.

### **C. Cost**

The total cost is estimated at \$800,000 equivalent, excluding the Government's in-kind contributions such as office accommodation, counterpart staff, communications, transport, and other administration.

## **OUTLINE TERMS OF REFERENCE PACKAGE 10**

### **CAPACITY BUILDING OF PORT MANAGEMENT**

#### **A. Objective**

The consulting services will (i) strengthen the capacity of the Port Management Unit to improve efficiency of port operation and management for all 3 ports, and (ii) prepare port maps.

#### **B. Scope of Works**

##### **1. Strengthen the capacity of port management**

The consultant will provide its services in 2 stages.

##### **Stage 1**

Prepare a comprehensive report outlining the deficiencies in the existing practices at all ports, including personnel, training (including requirements for overseas training), and recruitment needs as well as the requirements for port regulations, safe and efficient cargo handling practices, environmental controls, tariff structure, and equipment maintenance procedures.

##### **Stage 2**

Implement the recommendation made under Stage 1 study, after agreement between the Government, MOPS and ADB, regarding:

- Advice on the overall monitoring and control of port operations;
- Effective supervision of cargo handling operations;
- Improvements in operating procedures to maximize port productivity, including the establishment of port performance criteria;
- Improvements in accounting systems for cost effective monitoring and planning of all port activities;
- Effective maintenance and repair of port infrastructure, including cargo handling equipment, preventive maintenance systems design, spare parts and procurement procedures, system setting-up of data recording;
- Implementation of operational policy, procedures, and training for environmental protection and hazardous cargo handling;
- Establishment of productivity targets and monitoring achievements; and
- A training program for port staff.

##### **2. Prepare port maps**

The consultant will conduct the full survey to prepare port maps.

#### **C. Consultants**

For the capacity building in port management, the consultant service will consist of about 8 person months for an experienced port operations specialist, 3 for an equipment maintenance supervisor and 2 for a financial analyst with experience in computer application.

For the port mapping, the consultant service will consist of 5 international person-months for an experienced surveyor in port, and 10 (3x5) domestic person-months.

#### D. Reporting

For the capacity building in port management:

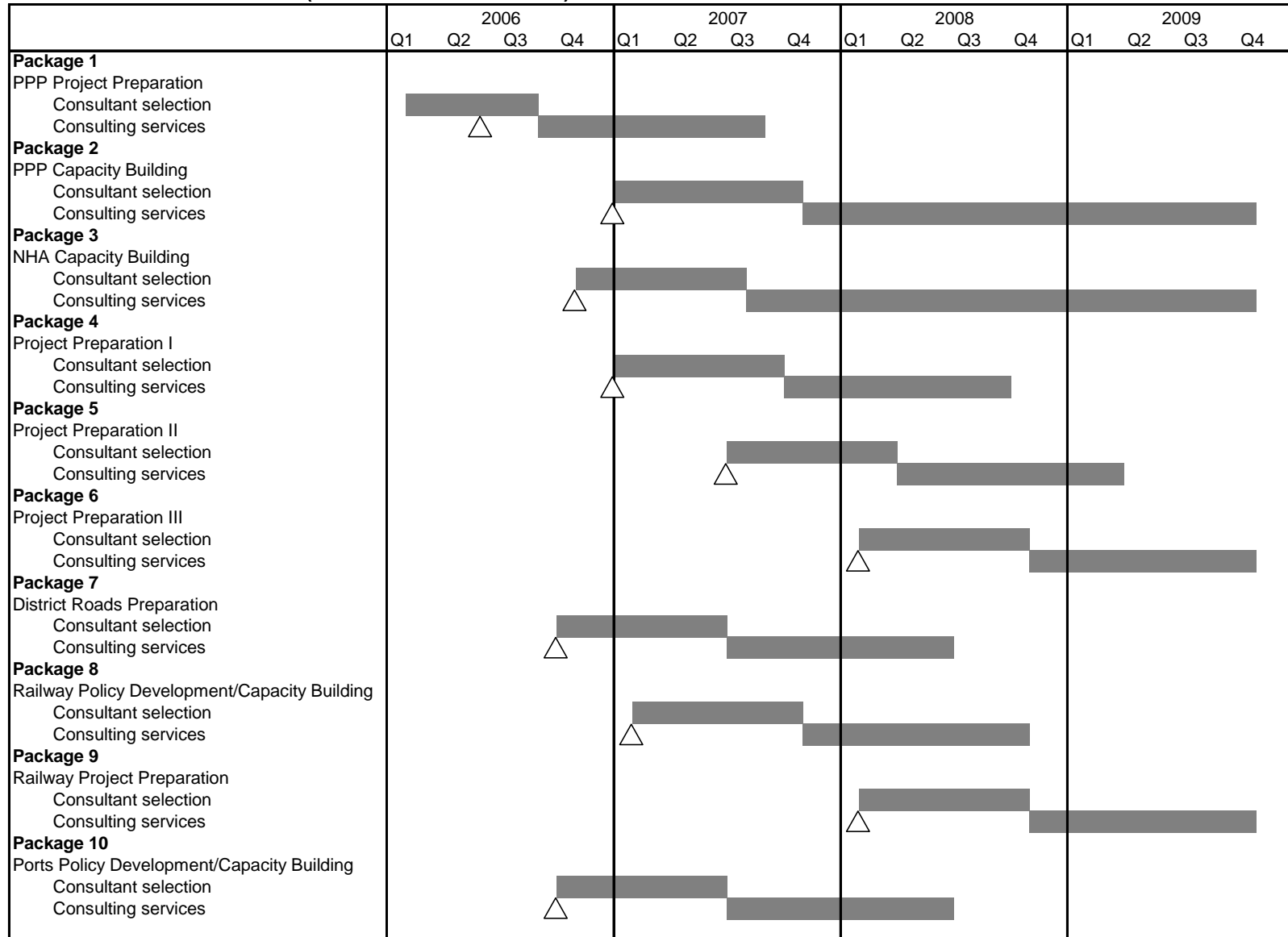
- Comprehensive report under stage 1 within 1 month after commencement of the service
- Monthly progress reports outlining achievements in capacity building
- Draft final report within 7 month commencement of the service
- Final report within 1 month after receiving comments from MOPS and ADB

For the port mapping:

- Port maps within 5 months after commencement of the service

#### E. Cost Estimate and Financing Plan

Item	Foreign Exchange	Local Currency	Total Cost
A. Asian Development Bank Financing			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants	360,000	0	360,000
ii. Domestic Consultants	0	45,000	45,000
b. International and Local Travel	20,000	2,000	22,000
c. Reports and Communications	0	3,000	3,000
3. Seminar/Workshop	0	10,000	10,000
3. Survey and Miscellaneous Costs	30,000	0	30,000
4. Contingencies	25,000	5,000	30,000
<b>Subtotal (A)</b>	<b>435,000</b>	<b>65,000</b>	<b>500,000</b>
B. Government Financing			
1. Office Accommodation and Transport	0	55,000	55,000
2. Remuneration and Per Diem of Counterpart Staff	0	95,000	95,000
3. Others	0	17,000	17,000
<b>Subtotal (B)</b>	<b>0</b>	<b>167,000</b>	<b>167,000</b>
<b>Total</b>	<b>435,000</b>	<b>232,000</b>	<b>667,000</b>

**IMPLEMENTATION SCHEDULE (TRANSPORT COMPONENT)**

△ PC2 Approval

## WATER SECTOR COMPONENT

### A. Description, Cost Estimates and Financing Plan

#### a. Objective and Scope

1. The Technical Assistance Loan (TA loan) will support implementation of a technical assistance program (TAP) that was initially recommended under the water sector strategy (WSS) and is now being designed in detail at the request of the Government under Asian Development Bank (ADB) by *Technical Assistance to the Islamic Republic of Pakistan for the Water Sector Irrigation Development*. Manila (TA 4435-PAK approved for \$300,000 in November 2004 – the TA).

2. The TAP is anticipated to cover (i) developing water resource analytical and planning capacity of sector institutions, (ii) improving management and technology for decision support systems such as hydrological and hydrogeological monitoring systems, and metrological monitoring capacity, and (iii) strengthening and reforming the institutional and legal arrangements. The TA is being prepared from March through August 2006 and will detail the activities that need to be undertaken through the TAP. The TA will produce detailed terms of reference for the TAP that will be supported by the TA loan.

3. The primary task of the TA Loan is to build capacity for water resources planning, development, and management within the concerned federal (and provincial agencies), so that over the medium term, they can most effectively start preparing, implementing, and implementing large water infrastructure. The TAP will strengthen the institutional framework and build new capacity for strategic planning and policy analysis to bolster overall management of water resources.

4. The TAP will build professional capacity and skills at the federal and provincial levels, and across all stakeholder agencies, focusing in particular on the implementation of the draft National Water Policy and providing assistance to implement it as well as strengthening new institutional arrangement and a technical secretariat to support it, by assisting the Government with the following activities *inter alia*:

- i. recruiting staff and providing training for improved institutional arrangements to support the draft National Water Policy;
- ii. providing national, regional, and international training opportunities;
- iii. providing short- and long-term national and international consultants as required;
- iv. providing funds for the unit to outsource special studies and related activities enabling it to tap into centers of excellence and expertise in the public and private sectors in Pakistan; and
- v. providing funds to establish and equip a technical secretariat and its associated data and decision support systems, and to make it fully functional.



## **b. Implementation Arrangements**

5. The Ministry of Water and Power (MOWP) will be the primary implementing agency (IA) for the TAP. The IA will be responsible for its subproject's detailed activities and implementation, and will report the progress to the Infrastructure Management Unit (IMU). The reporting requirements are to be developed by the IMU in coordination with the IA and ADB.

6. The IA will nominate a subproject director, acceptable to ADB, to administer the subproject. The subproject director will be responsible for overseeing social, resettlement, and environmental issues as well as engineering, financial, and economic aspects required to execute the subproject. Each subproject director will have the resources and facilities to implement their respective subprojects.

7. A TAP steering committee will oversee development and implementation of the TAP, provide policy guidance, and monitor and evaluate the TAP's impact. The TAP steering committee will meet at least semiannually and have representation from MOWP, the Planning and Development Division (PDD), Ministry of Finance, and the Indus River System Authority, and Provincial Irrigation Departments among others.

8. Component activities will require approval by the Executing Agency and ADB.

9. The provincial agencies that avail themselves of TA Loan funds will be the IAs and responsible for developing proposals for funding, the Planning Commission Document I (PC-I) or PC-II, detailed terms of reference, recruiting consultants, and monitoring and evaluating outputs with support from the IMU. All activities supported through the TA Loan funds at the provincial level, including all projects to be prepared through the feasibility studies, will have to be within the capacity of the provincial governments to implement and manage. Provincial agencies will be formally solicited for subproject proposals by the IMU. Once submitted, the IMU will review and approve the subproject proposals that will then go forward with the procedures defined in Appendix 3 for nondefined subprojects..

## **c. Cost Estimates and Financing Plan**

10. The total cost of the water sector component has been estimated at \$8.00 million, with the foreign exchange costs and local currency costs estimated at \$4.24 million and \$3.76 million, respectively. The proposed ADB loan will finance \$6.0 million, which will cover the foreign exchange costs and \$1.76 million of the local currency costs. The Government undertakes to finance domestic currency costs amounting to \$2.00 million equivalent, covering office accommodations for the consultants, facilities for workshops and seminars, remuneration of counterpart staff, transportation arrangements for field visits, and other costs that may arise in subproject preparation.

11. Of the \$6 million allocated to the component, \$4 million will support the TAP while the remaining \$2 million will be used by provincial agencies to prepare proposals for quick-gestation and relatively small-scale subprojects that can be implemented and managed entirely at the provincial level, with an indicative amount of \$500,000 allocated to each province. Detailed cost estimates are shown in Table 1.

**Table 1. Cost Estimate and Financing Plan – Water Sector**  
(\$ million)

<b>Item</b>	<b>Foreign Exchange</b>	<b>Local Currency</b>	<b>Total Cost</b>
<b>A. Asian Development Bank Financing</b>			
1. Consultants Services	3.14	1.56	4.70
2. Equipment	0.20	0.10	0.30
3. Training	0.40	0.10	0.50
4. Contingencies	0.50		0.50
<b>Subtotal (A)</b>	<b>4.24</b>	<b>1.76</b>	<b>6.00</b>
<b>B. Government Financing</b>			
1. Administration, Taxes, and Duties	0.00	2.00	2.00
<b>Subtotal (B)</b>	<b>0.00</b>	<b>2.00</b>	<b>2.00</b>
<b>Total</b>	<b>4.24</b>	<b>3.76</b>	<b>8.00</b>

Source: Asian Development Bank estimates.

## **B. List of Subprojects**

12. For programs and subprojects submitted for funding by provincial agencies, priority will be given to activities that support institutional reform and improved water resources management, as reflected in the WSS and the ADB water sector roadmap, such as groundwater management, regulation, and implementation plans, along with capacity development. Activities at the provincial level that can be linked to the TAP will also be given undertaken if demand exists. Subprojects resulting from feasibility studies supported by the TA loan would have to be within the capacity of provincial agencies to implement and manage themselves.

13. The following indicative list of projects was provided by the provinces when the TA loan was prepared:

- i Balochistan
  - a. spate irrigation development studies;
  - b. feasibility studies for small dams; and
  - c. development of a groundwater management institutional framework and implementation strategy;
- ii. Punjab
  - a. feasibility studies for small dams including an agricultural development component and
  - b. possible transbasin diversions or improved interlinking of the existing canal system;

iii. Sindh

- a. development of a strategy and long-term plan to prioritize investments as well as identify capacity needs and requirements for institutional reforms in the water sector;
- b. capacity development for farmer organizations to manage irrigation systems; and
- c. technical studies for management of groundwater;

iv. North-West Frontier Province

- a. development of a regulatory framework and implementation strategy for groundwater management; and
- b. feasibility studies for spate irrigation and small dams.