



Project Administration Memorandum

Project Number: 37041

Loan Number: 2261

Kingdom of Cambodia: Second Power Transmission and Distribution 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. This PAM shall be read along with the Report and Recommendations of the President and Grant Agreement. This PAM incorporates agreements reached between SEID and Electricité du Cambodge as of 30 April 2008. In case of discrepancy, the Loan Agreement shall prevail.

Asian Development Bank

CURRENCY EQUIVALENTS

(as of 23 April 2008)

Currency Unit	–	riel/s (KR)
KR1.00	=	US\$.0002
\$1.00	=	KR 3,960.000

ABBREVIATIONS

ADB	–	Asian Development Bank
AP	–	affected person
ASEAN	–	Association of Southeast Asian Nations
DSCR	–	debt service coverage ratio
EA	–	executing agency
EAC	–	Electricity Authority of Cambodia
EDC	–	Electricité du Cambodge
EIRR	–	economic internal rate of return
FIRR	–	financial internal rate of return
FY	–	fiscal year
GMS	–	Greater Mekong Subregion
IEE	–	initial environmental examination
IMO	–	Independent monitoring organization
IPP	–	independent power producer
IRC	–	Inter-Ministerial Resettlement Committee
JBIC	–	Japan Bank for International Cooperation
MEF	–	Ministry of Economy and Finance
MIME	–	Ministry of Industry, Mines, and Energy
PIC	–	project implementation consultant
REE	–	rural electricity enterprise
RF	–	resettlement framework
ROW	–	right-of-way
RP	–	resettlement plan
TA	–	technical assistance
VAT	–	value-added tax

WEIGHTS AND MEASURES

GWh	–	gigawatt-hour (1 million kWh)
km	–	kilometer
kV	–	kilovolt (1,000 volts)
kWh	–	kilowatt-hour (the energy of 1 kilowatt of capacity operating for 1 hour)
MW	–	megawatt (1 million watts)

NOTES

- (i) The fiscal year (FY) of the Government and its agencies ends on 31 December. FY before a calendar year denotes the year in which the fiscal year ends, e.g., FY2000 ends on 31 December 2000.
- (ii) In this report, "\$" refers to US dollars.

CONTENTS

Page

MAP	
LOAN PROCESSING HISTORY	ii
DESIGN AND MONITORING FRAMEWORK	iii
I. PROJECT DESCRIPTION	1
A. Project Area and Location	1
B. Impact and Outcome	1
C. Outputs	1
D. Special Features	3
II. COST ESTIMATES AND FINANCING PLAN	3
A. Detailed Cost Estimate	3
B. Financing Plan	3
III. IMPLEMENTATION ARRANGEMENTS	6
IV. IMPLEMENTATION SCHEDULE	6
V. CONSULTANT RECRUITMENT	7
VI. PROCUREMENT	7
VII. DISBURSEMENT PROCEDURES	7
VIII. PROJECT MONITORING AND EVALUATION	7
IX. REPORTING REQUIREMENTS	8
X. AUDITING REQUIREMENTS	8
XI. MAJOR LOAN COVENANTS	8
XII. PROJECT REVIEW	8
XIII. KEY PERSONS INVOLVED IN THE PROJECT	9
XIV. ANTICORRUPTION	11

APPENDIXES

1. Design Monitoring Framework	12
2. Detailed Cost Estimates	14
3. Project Organizational Chart	16
4. Implementation Schedule	17
5. TOR for Consultants	18
6. Procurement Plan	26
7. Disbursements	33
8. Imprest Accounts	38
9. Reports	40
10. Financial Reports and Auditing Requirements	53
11. Loan Covenants	56
12. List of ADB Reference Materials	63



LOAN PROCESSING HISTORY

	Date(s)
a. Fact-finding Mission	22 November – 1 December 2005
b. Management Review Meeting	24 April 2006
c. Appraisal Mission	25 – 28 April 2006
d. Staff Review Committee Meeting	2 June 2006
e. Loan Negotiations	11 – 13 July 2006
f. Board Approval	4 October 2006
g. Loan Effectiveness	29 January 2008
h. JBIC Loan Effectiveness	21 June 2007
i. JBIC Loan Closing Date	21 June 2013
j. Physical Completion Date	30 June 2010
k. Loan Closing Date	31 December 2010

I. PROJECT DESCRIPTION

A. Project Area and Location

1. Sihanoukville, Cambodia's only deep-sea port, is a fast-growing city with major ongoing developments to (i) expand the port facilities, (ii) upgrade the airport, and (iii) set up an export processing zone, thus making Sihanoukville an import gateway to the southern economic corridor. No power transmission grid connects Sihanoukville to the national grid. The city gets its power from a small, isolated power system based on diesel generators. This mode of power generation is expensive, inefficient, as it does not achieve economies of scale, and cannot meet the demand. The Project will complement previous investments in the transmission and distribution facilities. It will (i) extend the 230 kilovolt (kV) double circuit transmission line from Kampot to Sihanoukville, (ii) build associated substations and bulk supply distribution facilities, and (iii) carry out institutional development and capacity building for Electricité du Cambodge (EDC). The design and monitoring framework of the project is in Appendix 1. The activities and milestones are based on the current schedule.

B. Impact and Outcome

2. The Project will (i) directly expand the 230 kV power transmission grid from Kampot to Sihanoukville to provide sustainable and reliable electricity supply at affordable prices to consumers in Sihanoukville and adjacent areas along the transmission corridor, and (ii) improve EDC's operational efficiency and performance through institutional development and capacity building.

3. The first outcome will be achieved by facilitating the importation of electricity from Viet Nam through the project transmission lines, thus providing sustainable and reliable electricity supply at a lower cost than any alternative, and improving EDC's financial position. At appraisal, the EDC tariff in Sihanoukville ranges from \$0.13 to \$0.20 per kWh. In rural towns, REEs supply electricity at tariffs as high as \$0.38–\$0.63/kWh. Through the Project, electricity from Viet Nam will have a delivered electricity price in Sihanoukville of around \$0.08/kWh, including losses, operation and maintenance, and all taxes. This will greatly ease the burden of consumers by enabling them to use the savings for other purposes (education, health, or business), and promote sustainable economic development. Rural villages and communities close to the transmission line that are currently not served will also be supplied with electricity.

4. The Project will also assist the Government in four key areas: (i) reducing electricity cost and formulating sound tariff policies, (ii) enhancing EDC's financial performance, (iii) reducing distribution losses, and (iv) improving the efficiency of EDC's operations.

C. Outputs

5. The Project has two major components. Part A will focus on the infrastructure components, while part B will entail institutional strengthening and capacity building. The Project's infrastructure components were developed following technical, economic, and financial studies that took environmental and social aspects into consideration. The feasibility study¹ considered various alternatives for power supply to Sihanoukville and involved a least-cost analysis, including comparisons of power supply from diesel generation, transmission line,

¹ ADB. 2003. *Technical Assistance to the Kingdom of Cambodia for the Power Distribution and Greater Mekong Subregion Transmission Project*. Manila (TA 4078-CAM).

generators, etc. The study concluded that developing a double-circuit 230 kV transmission line and associated distribution facilities was the most cost-effective option for the supply of electricity in the target areas.

6. Part A comprises five subcomponents:

- (i) **Extension of 230 kV transmission line.** The high-voltage 230 kV double-circuit transmission lines will be extended from Kampot to Sihanoukville, for a total length of about 78 kilometers (km).
- (ii) **Construction of substations.** A new 230 kV/22 kV grid substation at Veal Rinh, a 230 kV/22 kV substation in Sihanoukville, and a 230 kV line bay at Kampot substation will be built.
- (iii) **Construction of medium- and low-voltage distribution system.** The Project will put up conventional medium-voltage 22 kV double-circuit distribution lines in Sihanoukville connecting to the 230 kV substation and the existing 22 kV network, and 22 kV feeders from Sihanoukville and Veal Rinh substations serving nearby villages. To serve the villages along the transmission line corridor, 22 kV and 400 V distribution lines will also be erected.
- (iv) **Consulting services** to assist EDC in detailed project design, implementation supervision, and other capacity-building support. Appendix 5 shows the TOR.
- (v) **Project management and monitoring activities**, including land acquisition, resettlement, environmental mitigation, monitoring, training for EDC staff in environmental management, and resettlement implementation.

7. In part B, the operating efficiency and performance of EDC will be improved. Part B will have the following four subcomponents:

- (i) **Strengthening of EDC's provincial operations.** With the extension of the power grid, EDC's operation and maintenance capacity in Sihanoukville and Kampot provinces will also need to be strengthened. The provincial branches now operate the diesel generators, maintain the distribution system, and collect the electricity charge. When outages occur, EDC sends technical staff from headquarters for system recovery. The Project will strengthen the EDC branches in Sihanoukville and Kampot by providing the necessary vehicles and equipment to detect outage points, thus speeding up system recovery and reducing its cost.
- (ii) **Training in operation and maintenance of the high-voltage transmission system.** Considering the number of staff required to operate the high-voltage transmission system to be developed in the coming decade, EDC staff will need continuous and increasingly more advanced training.
- (iii) **Improvement of EDC's data management system.** EDC's critical statistical data are now scattered in its headquarters and branch offices, hampering centralized activities such as backup, reporting, processing, and management. The Project will support EDC in establishing a consolidated data platform including reliable backup systems and improved communication systems between headquarters and branches, by procuring the necessary hardware and

software. EDC can thus efficiently maintain electronic information and improve customer billing, archiving, and services.²

- (iv) **Training of EDC staff in social, resettlement, and environmental management.** EDC is striving to strengthen its capacity by recruiting more qualified staff and providing on-the-job training. The Project will finance higher-level education for two social and environmental specialists from existing EDC staff at appropriate agencies in ASEAN countries.

D. Special Features

8. The Project has a regional cooperation focus. It forms part of the planned transmission backbone grid: the transmission lines between Cambodia and Viet Nam will be connected to the grid. Through the Project, EDC will be able to provide the southern provinces with reliable and affordable electricity from the lowest-cost source of power. The Project will increase importation of power from Viet Nam by around 50 MW by 2015 and will thus benefit both Viet Nam and Cambodia. The Project will also contribute to the economic development of the GMS Southern Economic Corridor, a flagship program of GMS economic cooperation, by providing basic economic infrastructure.

9. The provision of firm and reliable supply of electricity to Sihanoukville would allow the decommissioning of the low-efficiency and high-cost diesel generating plants (around 5 MW). Large consumers, who now run their own small, low-efficiency diesel generators (estimated at 10 MW), will connect to the EDC power grid when cheap and reliable power becomes available. Thus, EDC, the private sector, and the country as a whole will spend less foreign exchange on fuel imports and also benefit from reduced environmental pollution.

II. COST ESTIMATES AND FINANCING PLAN

A. Detailed Cost Estimate

10. The total cost of the Project, at appraisal, is estimated at \$52.36 million equivalent. The cost estimates are based on 2005 price levels for base costs. Physical contingencies were estimated at 10% of base costs, and price contingencies were calculated using ADB's current rates of inflation for local and foreign goods and services. The cost estimates are summarized in Table 1 and set out in detail in Appendix 2.

B. Financing Plan

11. ADB approved a loan of \$20 million from the Asian Development Fund to help finance the Project. The ADB loan will finance 38% of total project costs. The loan will have a 32-year term, including a grace period of 8 years, an interest rate of 1% during the grace period and 1.5% during principal amortization, and such other terms and conditions as are set forth in the Loan and Project Agreements.

² This component is an incremental step with a budget of \$500,000 and will supplement EDC's existing programs to centralize and archive customer and billing records. The proposed work involves installing and commissioning the storage and data management system and its tape backup system including hardware and software installation, training, and other customer support services.

12. The Government of Japan supports the construction of transmission lines and the expansion of substations to promote stable electric supply through the importation of electricity from neighboring countries. In this context, Japan Bank for International Cooperation (JBIC) is interested in supporting the southern economic growth corridor, which lies between Kampong Cham, Phnom Penh, and Sihanoukville. JBIC approved parallel cofinancing for a Japanese yen loan of about \$22.3 million equivalent for the transmission and distribution line packages and part of the capacity-building activities, representing 43% of total project cost. The Government will fund \$10.06 million of local project costs, representing 19% of total project costs. The financing plan based on these initial assumptions is presented in Table 2.

Table 1: Project Investment Plan
(\$ million)

Item	Total Cost
A. Base Cost ^a	
1. Part A: Infrastructure	
a. 230 kV Transmission Lines	17.20
b. Substations	17.65
c. Medium and Low-Voltage Distribution System	2.71
d. Project Implementation Consulting Services	2.30
e. Project Management and Monitoring	
i. Resettlement and Land Acquisition	0.80
ii. Environmental Management and Monitoring	0.50
iii. Project Management Activities	0.25
2. Part B: Capacity Building	
a. Strengthening of EDC's Operation in Provincial Branches	0.11
b. Improvement of EDC Data Management System	0.50
c. Training in System Operation and Maintenance	0.46
d. Training in Social, Resettlement, and Environmental Management	0.30
Subtotal (A)	42.78
B. Contingencies	
1. Physical	5.71
2. Price	3.54
Subtotal (B)	9.25
C. Interest Charges During Construction	0.33
Total	52.36

EDC = Electricité du Cambodge, kV = kilovolt.

^a Including taxes and duties, which will be entirely financed by the Government.

Source: Asian Development Bank estimates.

Table 2: Financing Plan
(\$ million)

Source	Total	% of Total
ADB Loan (Special Fund)	20.00	38.0
JBIC Loan	22.30	43.0
Government Funds	10.06	19.0
Total	52.36	100.0

ADB = Asian Development Bank, JBIC = Japan Bank for International Cooperation.

C. Allocation of Loan Proceeds

13. The allocation of loan proceeds on the basis of categories of expenses has been established in the loan agreement in Special Drawing Rights and here converted into US Dollars as shown in Table 3 below.

Table 3: Allocation and Withdrawal of Loan Proceeds

CATEGORY		ADB FINANCING	
		Amount Allocated (\$ million)	Percentage and Basis for Withdrawal from Loan
Item	Category		Account
1 Civil works - substations	13.11	100%	of total expenditure *
2 Consulting Services for Project Implementation	2.30	100%	of total expenditure *
3 Environmental Management and Monitoring ^a	0.50	100%	of total expenditure *
4 Improvement of EDC System ^b	0.50	100%	of total expenditure *
5 Social, Resettlement and Environment Training ^c	0.30	100%	of total expenditure *
6 Interest Charge	0.33	100%	of total expenditure *
7 Unallocated	2.96		
Total	20.00		

* Exclusive of taxes and duties imposed within the territory of the Borrower.

^a Includes implementation of environmental mitigation measures, monitoring and staff training as specified in Environmental Management Plan.

^b Includes installation and commissioning of the storage and data management system and tape back-up system, including hardware, software, training and customer support services.

^c Higher level education or training for two social and environmental specialists from existing EDC staff at appropriate agencies located in ASEAN countries.

14. The borrower is the Kingdom of Cambodia, and the entire proceeds of the loan was lent to EDC through a Subsidiary Loan Agreement dated 01 December 2006 with terms and conditions acceptable to ADB. The Ministry of Economy and Finance lent the ADB loan to EDC for a loan of 20-year maturity, including a 5-year grace period, at an interest rate of 4.2%,

and relent the JBIC loan on the same terms. EDC will bear the Government's foreign exchange risk on the proposed loan.

III. IMPLEMENTATION ARRANGEMENTS

15. The Executing Agency (EA) for the Project is EDC. EDC has implemented two ADB-funded projects in the power sector, and is implementing two other projects, in the process demonstrating that it has adequate capacity to implement similar projects. The Project will be implemented by a project management unit of the Project Management Office No. 1 of Corporate Planning and Projects Department. The Project organizational chart is in Appendix 3. To ensure continuous improvement of EDC's project management capacity, the project management unit will consist of EDC staff that have been part of previous ADB-financed transmission line projects. During project implementation, EDC will also be assisted by a team of international and national consultants (project implementation consultants [PIC]). EDC will assign at least three experienced and qualified engineers full-time to coordinate and work with the consultants. EDC will also appoint two recent graduates in environment and social science to its Environment and Resettlement Unit to gain experience through on-the-job training. The consultants and the seconded EDC staff will ensure that the Project is executed on time and according to international standards. The Government will ensure special care and adequate coordination during the construction of the Project within or adjacent to the Bokor National Park's buffer zone, to minimize its impact on the park.

IV. IMPLEMENTATION SCHEDULE

16. The Project will be completed within three years from the fielding of consultants. Implementation is expected to commence by third quarter 2008 with the selection of the PICs and completed by third quarter 2011. The physical works are expected to be completed by the end of 2010. After that, the contractor will train EDC staff for 6 months to operate and maintain the transmission lines. The implementation schedule at appraisal and its current status is shown in Appendix 4. The current schedule shows a projected loan closing date by the end of 2011. A request for extension of the loan will be finalized during the loan midterm review when other midterm revisions will be determined.

17. Resettlement work will begin shortly after the appointment of the PICs and independent monitoring organization³ (IMO) and after detailed design, with fieldwork for the detailed measurement survey to confirm the number of affected households and the nature and magnitude of impacts. The PIC will determine compensation rates at replacement cost for all categories of loss, and update and disclose the agreed resettlement plan (RP) for the transmission component. After the detailed design of the distribution component, resettlement planning will be undertaken and an RP will be prepared according to the agreed resettlement framework (RF). The updated RP for the transmission component and the RP for the distribution system will be agreed on between the Government and ADB, disclosed according to ADB's public communications policy,⁴ and implemented satisfactorily according to ADB's policy on involuntary resettlement.⁵

³ To be recruited by IRC.

⁴ ADB. 2005. *The Public Communications Policy of the Asian Development Bank: Disclosure and Exchange of Information*. Manila.

⁵ ADB. 1995. *Involuntary Resettlement*. Manila.

V. CONSULTANT RECRUITMENT

18. Project implementation consultants (PICs) will be required during implementation to assist EDC in project engineering, procurement, supervision of installation and construction, final testing and commissioning, quality assurance, design and implementation of environmental management and resettlement plans, and other technical inputs. About 40 person-months of international consulting services and about 45 person-months of national consulting services will be required for project supervision. The terms of reference for the PICs are given in Appendix 5.

19. PICs will be recruited through a firm by EDC, according to the *Guidelines on the Use of Consultants by Asian Development Bank and Its Borrowers (2006)*. A quality- and cost-based selection procedure will be used.

VI. PROCUREMENT

20. Goods and services financed from the proposed ADB loan will be procured according to ADB's *Procurement Guidelines (2007)*, and those financed by JBIC will be procured according to JBIC guidelines. The contracts for the 230 kV substation package will be awarded on a turnkey basis through international competitive bidding, using a single-stage, two-envelope procedure. A procurement plan, which sets forth the proposed contracts, method of procurement, and related ADB procedures, is shown in Appendix 6.

VII. DISBURSEMENT PROCEDURES

21. ADB funds under the proposed project will be disbursed mainly for the construction of substations and for PIC services. ADB's loan disbursement procedures stated in the *Loan Disbursement Handbook (2007)*, as amended from time to time, will be followed. An imprest account will be used for local expenditures. At the start, the account will hold the amount of estimated local expenditures for the first 6 months of project implementation, but no more than 10% of the loan amount (i.e., \$2.0 million). Any individual payment to be reimbursed or liquidated under the statement-of-expenditures procedure should not exceed \$100,000. Disbursement procedures are in Appendix 7.

VIII. PROJECT MONITORING AND EVALUATION

22. A number of measurable performance targets will be selected during the implementation stage, according to ADB's project performance monitoring and evaluation system. The number of electricity customers and demand in various categories will be monitored using EDC's consumer database, with a separate category for poor consumers (i.e., those consuming up to 50 kWh of electricity a month). Efficiencies in utility operations will be measured by data on distribution losses, energy sales, employee-customer ratio, and average cost of service. The degree of compliance with financial covenants will provide an indication of EDC's financial performance throughout the implementation period. The monitoring of EDC's Sihanoukville branch will include an assessment of the effectiveness of the demand management and consumer services component of the Project. Within the first year of connections, a baseline survey will be carried out by EDC, with the assistance of the PIC, to monitor connection rates of householders, electricity expenditures, and other relevant indicators. Two years after the baseline survey, an impact survey will be carried out by EDC to monitor the Project's sustainability and development impact.

IX. REPORTING REQUIREMENTS

23. Progress reports for the Project will be prepared by EDC and submitted to ADB every quarter. The reports will include a description of the physical progress, procurement and contractual status, resettlement progress, and highlights of any implementation issues including the number of consumers connected. The progress reports will also contain a summary of project components, including details on the latest project disbursements for incremental expenditures and contract amounts. A project completion report will be submitted to ADB and JBIC within 3 months after the completion of the Project. The recommended form and contents of the progress reports and the project completion report are presented in Appendices 8 and 9

X. AUDITING REQUIREMENTS

24. EDC will maintain separate accounts for the Project. Within 6 months of the close of EDC's fiscal year (31 December), EDC will submit audited annual project accounts (APA) to ADB, describing in detail the sources of funds and the expenditures made. In addition, EDC will submit audited corporate financial statements (CFS) within 6 months of the close of the fiscal year, including statements of income and expenditures, assets and liabilities with notes to the accounts, and cash flows. An auditor acceptable to ADB must audit EDC's CFS and APA, and the audit report together with the memorandum on issues identified during the audit process will also be attached to the respective reports. A sample audit report is at Appendix 10

25. According to current practice, EDC will continue to hire external auditors to audit its corporate financial statements and all separate project accounts including resettlement expenditures which is managed by MEF. International accounting standards will be followed in the preparation of the accounts, and International Auditing Standards in the performance of the audit. The auditors will be required to provide an opinion on EDC's compliance with the Project's financial covenants and indicate the details of the actual calculations for all ratios as defined in the Loan and Project Agreements.

XI. MAJOR LOAN COVENANTS

26. The status of compliance, including actions taken to comply with the covenants (see Appendix 11), should be indicated in the appropriate column and be appended in the quarterly progress reports.

XII. PROJECT REVIEW

27. ADB will review the Project regularly throughout its implementation. In addition, the Government, ADB, and JBIC will also jointly undertake a detailed midterm review of the Project after 2 years of implementation. The midterm review will (i) appraise the project scope, cost estimates, implementation arrangements, number of connections, and compliance with loan covenants; and (ii) identify any issues to be addressed to improve project impact and sustainability.

XIII. KEY PERSONS INVOLVED IN THE PROJECT

A. ADB Staff

Infrastructure Division (SEID)
Southeast Asia Regional Department
(SERD)

Mr. John Cooney
Director, SEID
Tel. No.: (63-2) 632 - 6433
Divisional Fax No.: (632) 636-2336
E-mail: jcooney@adb.org

Mr. Sohail Hasnie
Senior Energy Specialist
Tel. No.: (63-2) 632-6412
E-mail: shasnie@adb.org

Mr. Nilo Farrofo
Operations Officer
Tel. No.: (63-2) 632-6503
E-mail: nfarrofo@adb.org

Controller's Department
Loan Administration Division
(CTLA-4)

Mr. Gail Oliver Domagas
Financial Control Specialist
Tel. No.: (63-2) 632-4393
E-mail: gdomagas@adb.org

Central Operations Services Office
Consulting Operations Services
Division 2 (COS2)

Ms. Galia Ismakova
Procurement Specialist
Tel. No.: (63-2) 632-6465
E-mail: gismakova@adb.org

Address:

Asian Development Bank
P.O. Box 789
0980 Manila, Philippines
(632) 636-2336 (SEID)
<http://www.adb.org>

Facsimile:

Website Address:

B. Executing Agency

28. The key contact points are:

Project Executing Agency:

Electricité du Cambodge

H.E. Keo Rottanak
Managing Director
Mobile: +855 12 803 978
Tel.: +855 23 723 971
Fax: +855 23 426 346
Email: rottanak@online.com.kh

Mr. Chan Sodavath
Dty. Managing Director, Planning and
Techniques
Mobile: +855 11 818144
Tel.: +855 23 724 771 ext. 125
Fax: +855 23 426 938/426 018
Email: sodavath@edc.com.kh
sodavath@yahoo.com

Dr. Praing Chulasa
Executive Director
Corporate Planning and Projects
Department
Mobile: +855 12 444968
Tel.: +855 23 724 771 ext 119
Fax: +855 426 938/426 018
Email: chulasa_praing@yahoo.com
chulasa@online.com.kh

Mr. Chhim Man
Head, Project Management Office
1/Project Manager
Corporate Planning and Projects
Department
Mobile: +855 12 863591
Tel.: +855 23 724 771 ext 120
Fax: +855 426 938/426 018
Email: c.man@online.com.kh
chhimman@yahoo.com

Mr. Sor Pengkhy
Deputy Head, PMO-1
Corporate Planning and Projects
Department
Mobile: +855 12 881 683
Tel.: +855 23 724 771 ext 164
Fax: +855 426 938/426 018
Email: pengkhy@edc.com.kh

Mr. Nget Sokhan
Project Financial Controller
Accounting and Finance Department
Mobile: +855 12 725777
Tel.: +855 23 724 771 ext 145
Fax: +855 426 938/426 018
Email: nsokhan@online.com.kh

XIV. ANTICORRUPTION

29. The Government was advised of ADB's Anticorruption Policy and Policy relating to the Combating of Money Laundering and the Financing of Terrorism. Consistent with its commitment to good governance, accountability and transparency, ADB will require the Government to institute, maintain, and comply with internal procedures and controls following international best practice standards for the purpose of preventing corruption or money laundering activities or the financing of terrorism and covenant with ADB to refrain from engaging in such activities. The investment documentation between ADB and the Government will further allow ADB to investigate any violation or potential violation of these undertakings. In particular, all contracts financed by ADB in connection with the Project shall include provisions specifying the right of ADB to audit and examine the records and accounts of the EA and all contractors, suppliers, consultants, and other service providers as they relate to the Project.

30. The Project incorporates several other measures, in addition to the standard ADB requirements, to deter corruption and increase transparency. The Project will (i) build the EA's capacity to comply with ADB and government procedures as outlined in the Project Administration Manual; (ii) use EDC website (<http://www.edc.com.kh>) to disclose information about project implementation; and (iii) establish a grievance redress mechanism to ensure greater accountability. The project website will provide updated, detailed information on project implementation. For example, the website will include procurement-related information such as the list of participating bidders, name of the winning bidder, basic details on bidding procedures adopted, amount of contract awarded, and the list of goods/services procured. The grievance redress mechanism will be set up to receive and resolve complaints and act upon stakeholders' reports of irregularities on project-related matters, including grievances concerning resettlement. The EA will widely publicize the existence of this mechanism to ensure that stakeholders are aware that there is a venue to address concerns or grievances relating to fraud, corruption, abuse, and any other aspects of project implementation.

31. The ADB Office of the General Auditor 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. Please refer to the ADB's Anticorruption Policy Handbook. Anyone coming across evidence of corruption associated with the Project may contact the Anticorruption Unit by telephone, facsimile, by mail, or by email as follows:

Integrity Division (OAGI)	
Office of the Auditor General	
Asian Development Bank	
6 ADB Avenue, Mandaluyong City	
0401 Metro Manila, Philippines	
Postal Address:	P. O. Box 789
	0980 Manila, Philippines
Telephone No.:	(63-2) 632 5004
Facsimile No. :	(63-2) 636 2152
E-mail :	anticorruption@adb.org or
	integrity@adb.org

32. The PAM shall be read in conjunction with the RRP, Loan Agreement, and relevant ADB documents listed in Appendix 12.

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators ¹	Data Sources/Reporting Mechanisms	Assumptions and Risks
Impact The national power grid in the region is extended, and provides reliable, adequate, and affordable electricity. The quality of power supply in the southern region improves.	Five years after project completion <ul style="list-style-type: none"> • Electrification ratio by population increases from 17% in 2005 to 30% in 2010 • The average tariff in the Sihanoukville region is reduced from the current \$0.13–0.2/kWh to 0.08/kWh by 2010. • All towns and villages along the transmission line have access to the national power grid. 	<ul style="list-style-type: none"> • Country economic and power sector analysis reports • Socioeconomic statistics of provinces and districts • Project inception, progress, and completion reports • Consultants' survey reports 	Assumptions <ul style="list-style-type: none"> • The Government will implement other committed infrastructure projects as planned. • Electricity supply is available from Viet Nam and large generation sources. • Tariff set for electricity is affordable and financially and economically viable.
Outcome The national backbone 230 kV power grid and associated distribution facilities in the southern region are expanded and strengthened, and EDC's operation efficiency and performance are improved.	After project completion <ul style="list-style-type: none"> • There is an increase in 230 kV transmission lines, substations, and distribution facilities in project area. • EDC energy sales and consumption in the project area increase from 20 GWh to 45 GWh. • About 25,000 people are served by the power grid. • EDC's financial ratios targets are fully met, and distribution loss is kept at less than 16%. 	<ul style="list-style-type: none"> • EDC annual report, financial statements, and project accounts • Project inception and completion reports • Project performance monitoring and evaluation system 	Assumptions <ul style="list-style-type: none"> • Consumers are willing to connect to the power grid and pay the grid connection charges. • Adequate power supply is available from associated generation sources. • EDC has adequate institutional capacity. • The Government comprehensively implements the EDC financial action plan. The cumulative arrears from government agencies are fully paid by the Government, and other sector improvement measures are implemented as committed.
Outputs 1. 230 kV transmission lines from Kampot to Sihanoukville are fully operational. 2. Three new substations are fully functional.	<ul style="list-style-type: none"> • 230 kV double-circuit transmission lines are extended by 78 km. • New 230 kV substations are erected at Veal Rinh, Sihanoukville, and the Kampot substation is expanded. • Medium- and low-voltage distribution facilities are erected in vicinity areas 	<ul style="list-style-type: none"> • EDC annual report, financial statements, and project accounts • Project inception and completion reports • Project administration memorandum • Project progress reports 	Assumption <ul style="list-style-type: none"> • Counterpart funds are available on time. Risks <ul style="list-style-type: none"> • There are delays in the approval of loan documents and procurement. • Implementation of social and environmental mitigation measures is

¹ This is not a project level impact but a result of all the projects being undertaken in the sector. The figure is reflected in the Report and Recommendation of the President to the ADB Board prepared during Appraisal.

Design Summary	Performance Targets/Indicators¹	Data Sources/Reporting Mechanisms	Assumptions and Risks
	along the transmission corridor.		delayed.
<p>3. Associated medium- and low-voltage distribution system are established along the 230 kV transmission corridor.</p> <p>4. Capacity building to improve EDC's performance is fully implemented.</p>	<ul style="list-style-type: none"> • All affected households have been compensated, resettled, and rehabilitated according to approved resettlement plans (RPs). • Recommended environmental mitigation measures are well implemented. • The operation and maintenance capacity of EDC's branches at Kampot and Sihanoukville are strengthened. • Training programs for EDC staff are fully implemented. 	<ul style="list-style-type: none"> • Project review missions • Training manuals • Audited financial reports of EDC 	
Activities with Milestones <ol style="list-style-type: none"> 1. Consulting services for project implementation: commenced from July 2008. 2. Detailed design and bidding documents: completed by April 2009. 3. Resettlement implementation: completed by October 2009. 4. Civil works on 230 kV transmission line and substations: contract awarded by June 2009 and works completed by April 2011. 5. Civil works on distribution system: contract awarded by April 2010 and works completed by April 2011. 6. EDC capacity-building activities and training: completed by September 2011 7. Capacity-building training to improve awareness of social, resettlement, and environmental safeguards: completed by 2009. 8. Awareness training in STD/HIV/AIDS and trafficking among contractors and local communities before contractors are mobilized. 			Inputs <ul style="list-style-type: none"> • ADB loan of \$20 million • Government counterpart funds of \$10.06 million • JBIC loan of \$22.3 million

ADB = Asian Development Bank, EDC = Electricité du Cambodge, GWh = gigawatt-hour, JBIC = Japan Bank for International Cooperation, kV = kilovolt, STD/HIV/AIDS = sexually transmitted disease / human immunodeficiency virus / acquired immunodeficiency syndrome.

Table A2.1: Summary of Detailed Cost Estimates
(\$ million)

Item	(KR million)			(\$ million)			% Foreign	% Total
	Local	Foreign	Total	Local	Foreign	Total	Exchange	Base Costs
A. Investment Costs								
1. Equipment								
a. Steel	3,513.2	19,908.00	23,421.20	0.88	4.98	5.86	85	14
b. Conductors	4,202.9	23,578.30	27,781.20	1.05	5.90	6.95	85	16
c. Access	9,527.2	1,732.80	11,260.00	2.38	0.43	2.82	15	7
d. 220 kV Line Bays	8,320.2	19,413.80	27,734.00	2.08	4.85	6.93	70	16
e. Transformer Bays	1,324.5	2,354.70	3,679.20	0.33	0.59	0.92	64	2
f. 220/22 kV Transformers 30/50 MVA	2,852.6	5,071.40	7,924.00	0.71	1.27	1.98	64	5
g. 22 kV Switchgear	1,035.20	1,794.80	2,830.00	0.26	0.45	0.71	63	2
h. Protection Tests and Modification	2,271.00	6,114.10	8,385.10	0.57	1.52	2.10	73	5
i. 22 kV Distribution	5,438.20	1,113.80	6,552.00	1.36	0.28	1.64	17	4
j. 220 kV Bus Coupler	1,324.50	2,354.70	3,679.20	0.33	0.59	0.92	64	2
k. 22 kV Distribution (dc to S'ville)	971.10	198.90	1,170.00	0.24	0.05	0.29	17	1
l. 220 kV Transformer Bay	1,324.50	2,354.70	3,679.20	0.33	0.59	0.92	64	2
Subtotal (A1)	42,105.10	85,990.00	128,095.10	10.53	21.50	32.04	67	75
2. Civil Works								
a. Foundation, Erection and Stringing	13,376.80	3,803.20	17,180.00	3.34	0.95	4.29	22	10
b. Site Establishment	3,629.60	1,342.40	4,972.00	0.91	0.33	1.24	27	3
Subtotal (A2)	17,006.30	5,145.70	22,152.00	4.25	1.28	5.53	23	13
3. Resettlement								
Resettlement	3,187.00	0	3,187.00	0.80	0	0.80	0	2
4. Administration and Consulting Services	4,200.00	13,480.00	17,680.00	1.05	3.37	4.42	76	10
Total Baseline Costs	66,498.30	104,615.70	171,114.10	16.62	26.15	42.78	61	100
Physical Contingencies	8,325.70	14,514.00	22,839.70	2.08	3.63	5.71	64	13
Price Contingencies	8,223.10	5,922.70	14,145.80	2.06	1.48	3.53	42	8
Total Project Costs	83,047.10	125,052.30	208,099.50	20.76	31.26	52.02	60	122
Interest during Implementation	0	1,318.70	1,318.70	0	0.33	0.33	100	1
Total Costs to be Financed	83,047.10	126,371.00	209,418.20	20.76	31.59	52.36	60	122

kV = kilovolt, KR = riel.

Sources: Electricité du Cambodge and Asian Development Bank estimates based on 2005 price levels.

Table A2.2: Detailed Cost Estimates by Financier
(\$ million)

Item	EDC		ADB		JBIC		Total		For.	Local	Duties &
	Amount	%	Amount	%	Amount	%	Amount	%	Exch.	(Excl. Taxes)	Taxes
A. Infrastructure Components											
1. Line, Bay Kampot Substation	0.35	13.10	2.32	86.90	0	0	2.67	5.10	2.27	0.05	0.35
2. 220 kV Line, Kampot to Sihanoukville	3.28	14.80	0	0	18.83	85.20	22.12	42.20	14.81	4.03	3.28
3. Substation at Veal Rinh	3.30	26.00	9.39	74.00	0	0	12.68	24.20	6.91	2.90	2.87
4. Terminal Substation	1.31	25.30	3.89	74.70	0	0	5.20	9.90	2.83	1.05	1.31
5. MLV Distribution System	0.54	16.00	0	0	2.82	84.00	3.36	6.40	0.63	2.19	0.54
6. Consulting Services	0	0	2.66	100.00	0	0	2.66	5.10	2.32	0.34	0
7. Project Management and Monitoring											
a. Resettlement	0.65	100.00	0	0	0	0	0.65	1.20	0	0.65	0
b. Land Acquisition	0.35	100.00	0	0	0	0	0.34	0.70	0	0.35	0
c. Environmental Management and Monitoring	0	0	0.56	100.00	0	0	0.56	1.10	0	0.56	0
d. Other Monitoring Activities	0.28	100.00	0	0	0	0	0.28	0.50	0	0.28	0
Subtotal (A7)	1.28	69.50	0.56	30.50	0	0	1.84	3.50	0	1.84	0
Subtotal (A)	10.06	19.90	18.82	37.20	21.65	42.90	50.53	96.50	29.77	12.41	8.35
B. Capacity-Building Components											
1. Strengthening of EDC Provincial Branches	0	0	0	0	0.12	100.00	0.13	0.20	0.126	0	0
2. Improvement of EDC Information System	0	0	0.54	100.00	0	0	0.54	1.00	0.542	0	0
3. EDC Training in High-Voltage Systems	0	0	0	0	0.50	100.00	0.50	1.00	0.499	0	0
4. EDC Training in Social, Resettlement, and Environmental Management	0	0	0.36	100.00	0	0	0.32	0.60	0.325	0	0
Subtotal (B)	0	0	0.87	58.10	0.63	41.90	1.49	2.90	1.493	0	0
Total Project Costs	10.06	19.30	19.68	37.80	22.28	42.80	52.03	99.40	31.263	12.41	8.35
Interest during Implementation	0	0	0.33	99.00	0.00	1.00	0.33	0.60	0	0	0
Total Costs to be Financed	10.06	19.30	20.01	38.20	22.28	42.60	52.36	100.00	31.263	12.41	8.35

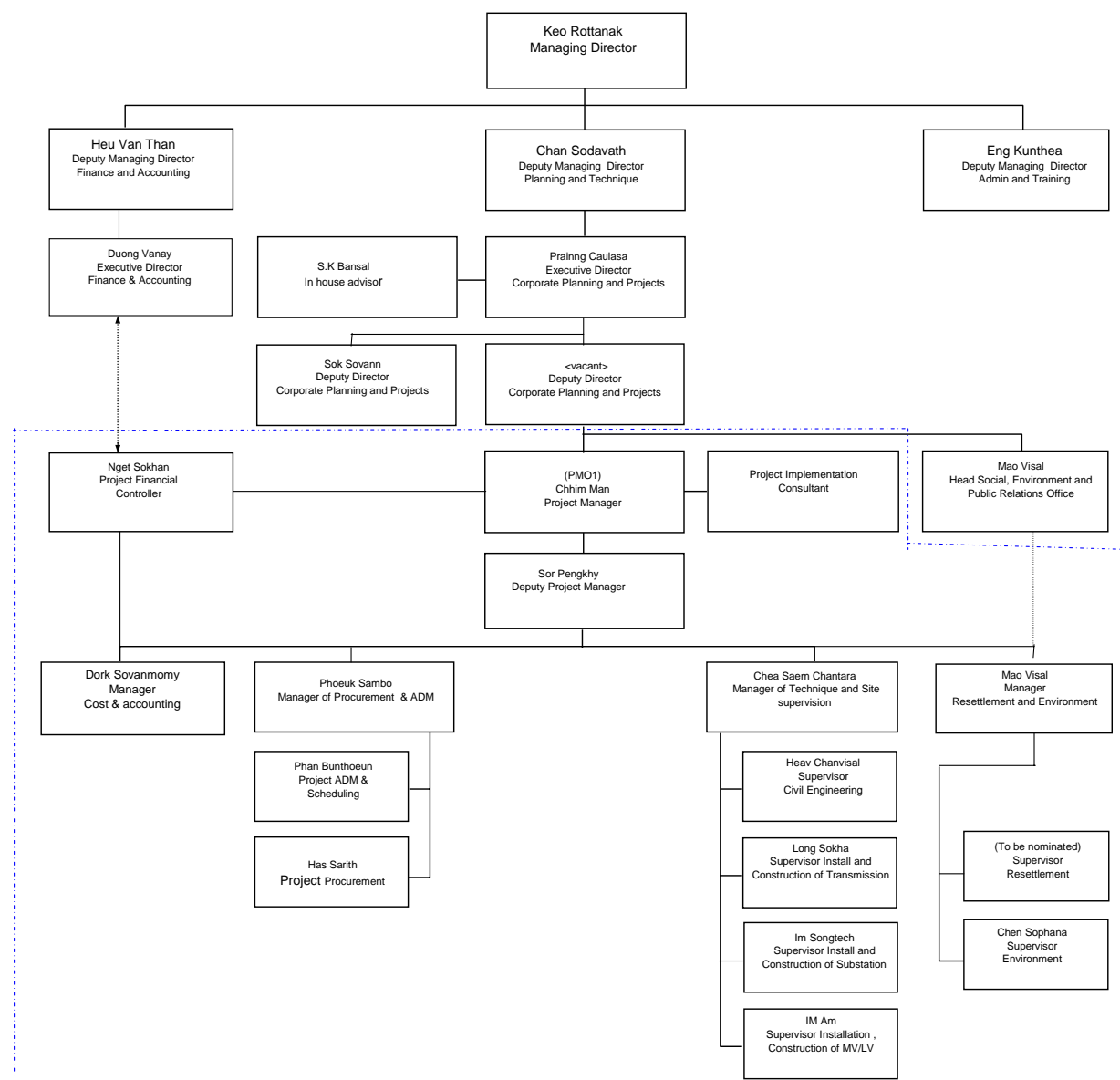
ADB = Asian Development Bank, EDC = Electricité du Cambodge, JBIC = Japan Bank for International Cooperation, kV = kilovolt.

Sources: EDC and ADB estimates based on 2005 price levels.

^b Includes detailed design and project supervision for project components financed by Korea.

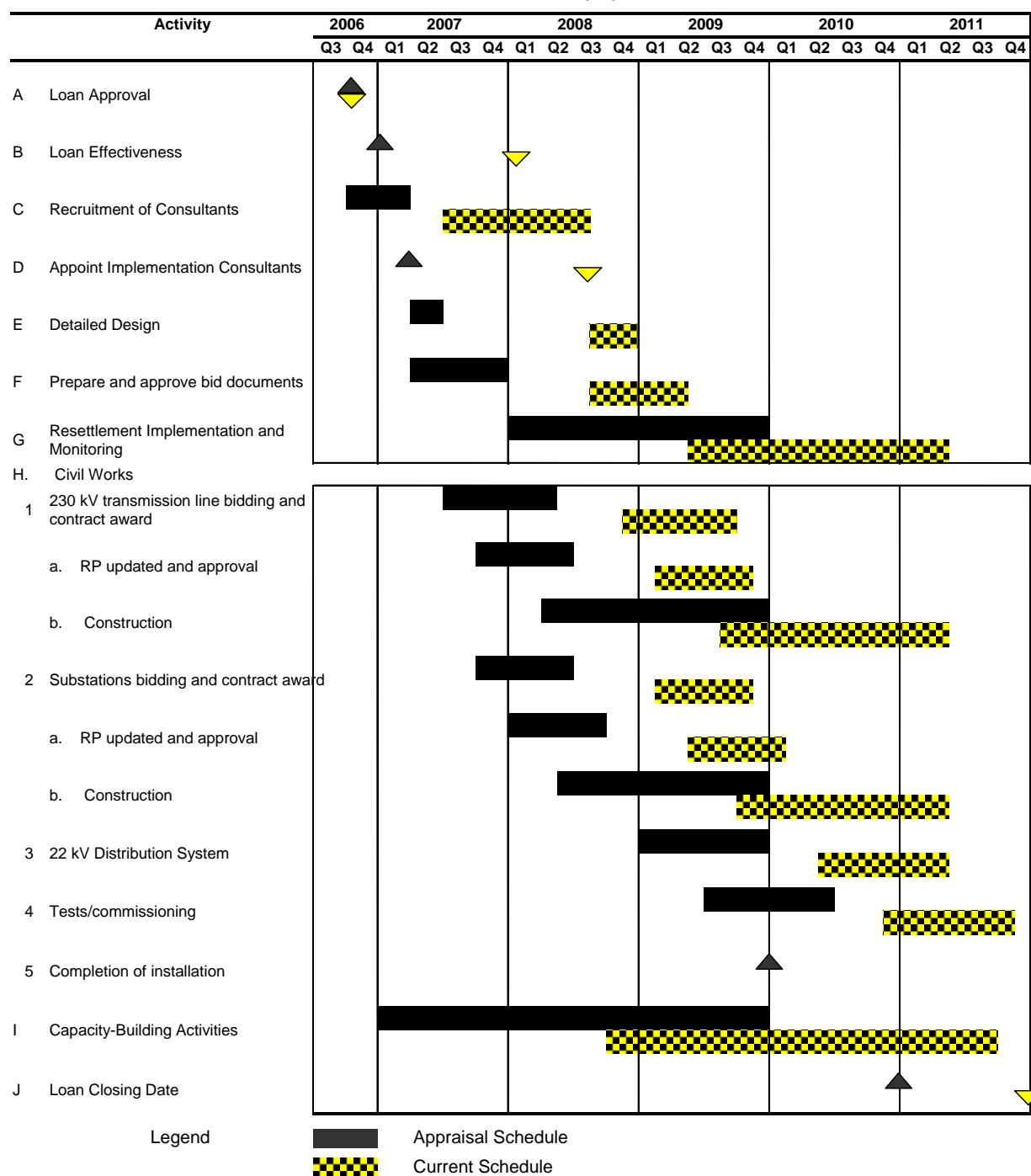
^c Based on a tax rate of 10%.

Second Power Transmission and Distribution Project ADB Loan 2261-CAM(SF) and JBIC CP-P7 , Project Management Unit (PMU)



IMPLEMENTATION SCHEDULE

Second Power Transmission and Distribution Project Loan 2261-CAM (SF)



BACKGROUND INFORMATION AND TERMS OF REFERENCE

FOR

THE CONSULTING SERVICES FOR SECOND POWER TRANSMISSION AND DISTRIBUTION PROJECT

A. Background Information

1. Cambodia is a country of about 181,035 sq. km located in the Lower Mekong Region and borders on Thailand in the west, Vietnam in the east and Lao PDR in the north. About 85% of the population is living in rural areas and mostly do not have access to electricity. Nation wide, about 17% of the population has access to electricity supply.
2. The power sector in Cambodia is both small in overall size and highly fragmented, with 24 isolated power systems centered on the various provincial cities, and the capital Phnom Penh. Lack of an integrated high voltage transmission system and interconnections to adjacent countries, coupled with the high cost of imported diesel fuel, have resulted in Cambodia having one of the highest costs of electricity production in the world. Since Cambodia has limited indigenous energy sources explored so far, it relies primarily upon expensive diesel generation. The lack of adequate and affordable electricity supply is identified as one of the main constraints to the economic growth.
3. ADB, The World Bank and several other agencies are assisting the Royal Government of Cambodia (RGC) to construct 230kV backbone transmission lines in the southern part of the country, originally from a substation on the Vietnam border and passing through Takeo to Phnom Penh and Takeo to Kampot to import power with an acceptable low tariff to meet the power demand at Phnom Penh, Takeo, Kampot and ultimately, Sihanoukville.
4. Second Power Transmission and Distribution Project (the Project) will complement previous investments on transmission and distribution facilities. The Project will include: (i) extending the 230kV transmission line from Kampot to Sihanoukville; (ii) construction of associated substations, (iii) construction of medium voltage distribution line and supplying low voltage distribution facilities; and (iv) institutional development and capacity building for EDC. The proposed transmission lines and distribution facilities to be constructed under the Project are the priority investment of the planned national backbone power grid included in EDC's Transmission Master Plan.

B. Project Objective

5. This Project is a part of the planned national backbone power grid which will connect with the transmission lines between Cambodia and Viet Nam. Through this Project, EDC will be able to provide: (i) sustainable, reliable and affordable electricity to the consumers in Sihanoukville and adjacent areas along the transmission corridor; (ii) stimulate economic growth in the southern economic

corridor; and (iii) improve EDC's operational efficiency and performance through institutional development and capacity building.

C. Project Scope

6. The Project comprises of the following two parts:

ADB Financed Components:

- i. 230/22kV Substations: This component comprises the construction of:
 - a. One new 230 kV/22 kV grid substation at Veal Rinh,
 - b. One new 230 kV/22 kV substation in Sihanoukville, and
 - c. Construction line 230 kV line bay in Kampot substation.
- ii. Consulting Services to assist EDC in detailed Project design, implementation supervision and other capacity building support.
- iii. Project management and monitoring activities, including land acquisition, resettlement, environmental mitigation, monitoring, training for EDC Staff on environmental management, and resettlement implementation.
- iv. Improvement of EDC's data management system: The Project will support EDC in establishing a consolidated data platform including reliable backup systems and improving communication systems between headquarters and branches, through procuring necessary hardware and software.
- v. Training of EDC staff on social, resettlement, and environment.

JBIC Financed Components:

- i. 230 kV transmission line: This component comprises the construction of high voltage 230 kV double-circuit transmission lines extension from Kampot to Sihanoukville with a total length of about 78 kilometers.
- ii. Medium and Low-voltage distribution system: Erecting conventional medium voltage 22 kV double-circuit distribution lines in Sihanoukville connecting to the 230 kV substation and the existing 22 kV network, and 22 kV feeders from Sihanoukville and Veal Rinh substations servicing nearby villages. Erection of 22 kV and 400 V distribution lines, serving the villages located along the transmission line corridor.
- iii. The institutional strengthening and capacity building component of the Project will improve EDC operation efficiency and performance. The following four subcomponents will be implemented by EDC:
 - a. Strengthening EDC's operations in provincial branches: The Project will strengthen EDC branches at Sihanoukville and Kampot through provision of necessary vehicles and equipment for the detection of the outage point, which will reduce the time and cost for recovery of the system.

- b. Training on high-voltage transmission system operation and maintenance.

D. Scope of Consulting Services

- 7 The Consulting Firm will carry out following tasks, with the objective of improving the design, project supervision resettlement and socio-economic assessment skills of the assigned EDC staff. Each international expert will make formal presentations to the staff of EDC and other relevant organizations (at the start and finish of their respective assignments) covering a topic relevant to their particular expertise or role in the Project. The consultant is expected to carry out all of the tasks in Cambodia with suitable head office backup. The consultant will from time to time depute necessary experts to Cambodia to implement the work in accordance with the project schedule.

The main tasks to be performed are:

- (i) A consulting firm will be engaged to act as a Project Implementation Consultant (PIC) to assist EDC in implementation of the ADB and JBIC's financed components of the Project. The consulting services will cover:
 - Review the existing feasibilities studies for the 230 kV transmission lines from Kampot to Sihanoukville and substations at Veal Rinh, Sihanoukville and expansion of Kampot substation as well as the 22 kV bulk supply distribution systems.
 - Preparation preliminary designs of works and system study taking into account the design practice used by EDC and current international standard.
 - Prepare the scope of supply and technical specification of transmission and substation equipment including spare parts.
 - Preparation of bidding documents.
 - Assistance to EDC with post qualification and tender evaluation.
 - Assistance to EDC in approval of contractors detailed designs.
 - Supervision of implementation of the resettlement plans.
 - Training of EDC's personnel.
- (ii) Consolidate the above into a design report giving project details, costs, implementation schedule, and recommendations for mitigation of adverse environmental impacts for approval by EDC, Asian Development Bank (ADB) and Japan Bank for International Cooperation (JBIC).
- (iii) Prepare bidding documents for all equipment and services required to implement the Project comprises of:
 - Turnkey Contract for 230 kV transmission line (including spare parts and training financed by JBIC using International Competitive Bidding (ICB) procurement method.

- Turnkey Contract for substations at Sihanoukville, Veal Rinh, and Kampot financed by ADB using ICB method.
- Supply of materials and equipment, and installation of medium voltage (22kV) and low voltage (400V) distribution system financed by JBIC using ICB procurement method.
- Supply of hardware and software for EDC information system financed by ADB using ICB procurement method.

The procurement of goods and services financed from the ADB loan will be procured according to ADB's Procurement Guidelines (2007). The procurement of goods and services financed from the JBIC loan will be procured in accordance with JBIC Guidelines.

- (iv) Assist EDC in inviting suitable qualified bidders and evaluating bids, and awarding contracts.
- (v) Assist EDC to commission surveys to supplement baseline data on the socioeconomic condition of the potential beneficiaries prior to implementation of the Project, and if possible within the time frame of services, conduct a similar survey one year after completion of each subproject to evaluate changes in economic conditions (particularly among the poor). Measure other factors that may contribute to economic growth, including direct impacts such as job creation as a result of the Project. Coordinate with EDC to ensure that its routine data on supply and demand (energy sold, losses, fault levels, electrification ratios, etc.) are compiled in such a way as to allow the benefits of the Project to be identified. Assist EDC with data evaluation and report the findings concurrently with the consultants' project completion report.
- (vi) Assist EDC to review and approve the contractor's detailed design drawings and technical documents.
- (vii) Assist EDC to supervise the construction of the project facilities and provide guidance to the contractors to conform to the specifications.
- (viii) Review the contractors' test procedures for compliance with manufacturer's requirements and design criteria; witness commissioning, guarantee, and acceptance tests, review test results and assist EDC in taking over the completed facilities.
- (ix) Assist EDC to review and compile "as-built" drawings and review the operation and maintenance manuals provided by the contractors for accuracy and adequacy.
- (x) Assist EDC to update and implement the Resettlement Plan, to provide capacity building to EDC in environmental management and social safeguard as well as formal and on-the-job training to other agencies

implementing resettlement at provincial, district and commune levels and to hire and supervise an agency for independent monitoring and evaluation of resettlement implementation. The consultant will guide and assist the Social Environmental and Public Relation office of EDC and resettlement committees based on the approved resettlement plan for activities that include (i) implementation of the Resettlement Plan; (ii) establishing and implementing procedures for minimizing social impacts, undertaking and completing census and detailed measurement of losses, coordinating resettlement activities, undertaking participatory needs assessments, tracking compliance with policies, and implementing grievance procedures; (iii) designing and implementing income restoration programs; (iv) design and implementing of consultation and disclosure programs and assisting in the conduct or updating of replacement costs and (v) establishing and implementing liaison and monitoring systems.

- (xi) Assist EDC to implement the gender strategy (Summary Poverty Reduction and Social Strategy, in RRP, Appendix 12) into a detailed operational plan; and train EDC, IRC, and Resettlement Working Groups from the Ministry of Women's Affairs. Capacity building training to focus on information on effective consultation process, resettlement planning activities, compensation, and livelihood activities, the main objective being to increase their knowledge about the resettlement planning and implementation process.
- (xii) The consultants, in cooperation with EDC and in consultation with the national environmental protection agency, will undertake the following:
 - Prepare an Initial Environmental Examination (IEE) in accordance with the laws and regulations of the RGC and ADB's Environment Policy (2002) and Environmental Assessment Guideline (2003). The IEE shall cover all project components financed by ADB or JBIC.
 - Develop in the IEE an environment management plan (EMP) comprising environmental mitigation and monitoring plan. The EMP should clearly identify the time frame/ schedule, locations, associated costs, reporting requirements and institutional responsibilities for implementation.
 - Undertake public consultation and document the results in IEE.
 - Based on the result of IEE, determine the need for an environmental impact assessment (EIA). If an EIA is not required, prepare a summary IEE. If an EIA is required, prepare detailed terms of reference for the EIA.
 - Design and conduct a training program on environmental assessment of power transmission and distribution projects. The training shall also include preparation and implementation of detailed environmental management plans. Participants are officers and staff of EDC and other concerned government

agencies who will be involved in the implementation of the Project EMP and environmental assessment of future projects.

- (xiii) Prepare and submit an inception report and quarterly progress reports acceptable to ADB and compile a project completion report in the format prescribed by ADB providing details of project implementation, problems encountered, solutions adopted, and detailing and explaining any variation in project costs and implementation times from the original estimates.
- (xiv) The consultant will monitor and evaluate the performance of the completed project by comparing a number of indicators prior to and after completion of the new transmission line. The impact of the Project on EDC's operations will be monitored by evaluating data on electrical losses, sales loss through system breakdown, customer-employee ratios, average cost of service and monthly consumption by consumer category. The impact of the bulk supply distribution system will also be evaluated. Within the first year of connections, the consultants will arrange for a benchmark survey to be carried out to monitor (i) connection rates among the poor and the non-poor, (ii) electricity expenditures, (iii) up-front charges, (iv) affordability of tariffs, and (v) ability of households to sustain monthly payments. Two years after the baseline survey, the consultants will arrange for an impact survey to be carried out covering to the extent possible the same households.

E. Implementation Arrangement

7. The Executing Agency (EA) for the Project will be EDC. The implementation of the Project will be carried out by a project management team. EDC will also be assisted by Project Implementation Consultants (PIC), who assist EDC in project engineering; procurement; supervision of installation and construction; final testing and commissioning; quality assurance; designing and implementing environmental management, resettlement planning and implementation; as well as other technical inputs. It is estimated that about 40 person-months of international consulting services and about 45 person-months of domestic consulting services will be required for the project supervision. The Project will be implemented over 4 years, beginning in the fourth quarter of 2007.

F. Reports

8. The consultant shall prepare and submit the following documents to ADB, JBIC and EDC related to the project:
 - Project Inception report with in one month after commencement of the contract.
 - Design reports for all the project works.
 - Monthly and quarterly progress reports through out the project period. The progress reports should include at least the following:
 - Brief summary of progress of works achieved during the reporting period.

- Project synopsis and scope of work.
- Consultant's services contract.
- Consultant's activities.
- Contractor's activities.
- Detailed progress of works during the reporting period.
- Problems for the works.
- progress and issues on the resettlement and social aspect.
- Schedule for the next month/ quarter
- Tender Analysis Reports.
- Factory Inspection and Test Reports.
- Site Inspection and Test Reports.
- Project Completion Report.
- Accurate and systematic records and accounts of the project.
- Other reports as and when required by ADB, JBIC, EDC and other authorities.

Four copies of these reports will be provided to EDC and two copies to ADB and two copies JBIC. .

G. Counterpart Facilities

9. EDC will provide and make available to the Consultants, free of charge, the following facilities, services, documents and information for carrying out the consultancy services.
 - (i) Office Space

The office accommodation will be provided by EDC at free of charge. All the equipment and furniture for office- use, procured by the Consultants under the project cost will be transferred to EDC at the end of the contract.
 - (ii) Counterpart Staff

EDC shall provide the counterpart staff to assist the consultants in executing the consultancy services smoothly and efficiently in Cambodia. Offices for the counterpart staff will be separately provided by EDC in the same premises as for the consultants. However transportation and others cost in carrying out the work by the counterpart staff will be paid by the consultant from local currency cost component of services.
 - (iii) Other facilities and services to be provided to the Consultants:
 - Provide the available data and information such as reports, documents, drawings, maps statistics, etc., in connection with the project.
 - Assist consultant in obtaining the necessary permits and authorizations required for carrying out the services under the project.

H. Experts and the requirements:

10. The minimum requirement of the experts required for the project illustrated as follow:

Description		Man-month	Minimum qualifications
International Consultants:		40.00	
a	Resident Engineer/ Transmission Engineer		<ul style="list-style-type: none"> 10 years experiences Structural or Electrical Engineer
b	Substation engineer		<ul style="list-style-type: none"> 10 years experiences Electrical Engineer
c	System study Engineer		<ul style="list-style-type: none"> 5 years experiences Electrical Engineer
d	Distribution Engineer		<ul style="list-style-type: none"> 5 years experiences Electrical Engineer
e.	Civil Engineer		<ul style="list-style-type: none"> 10 years experiences Civil or electrical Engineer
f.	SCADA/ Communication Engineer		<ul style="list-style-type: none"> 10 years experiences Telecommunication Engineer
g.	Socio-Economist		<ul style="list-style-type: none"> 5 years experiences Related fields
h	Environmental		<ul style="list-style-type: none"> 5 years experiences Related fields
Domestic Consultants:		45.00	
a.	Transmission/ Dist. Engineer		<ul style="list-style-type: none"> 5 years experiences Electrical Engineer
b.	Environmental/ RP Expert		<ul style="list-style-type: none"> 5 years experiences Related field
c.	Civil Engineer		<ul style="list-style-type: none"> 3 years experiences Civil Engineer

PROCUREMENT PLAN AND CONTRACT PACKAGES

Table A6.1: Project Information

Country	Kingdom of Cambodia
Name of Borrower	Kingdom of Cambodia
Project Name	Second Power Transmission and Distribution Project
Loan Reference	2261-CAM(SF)
Date of Effectiveness	29 January 2008
Amount (\$)	\$20 million
Of which Committed (\$)	\$20 million
Executing Agency	Electricité du Cambodge (EDC)
Approval Date of Original Procurement Plan	12 July 2006
Approval of Most Recent Procurement Plan	Tbd
Publication of Local Advertisements ^a	Tbd
Period Covered by This Plan	18 months from loan approval

EDC = Electricité du Cambodge, Tbd = to be determined.

^a General procurement notice, invitations to prequalify and to bid, calls for expressions of interest.

Source: Asian Development Bank estimates.

Table A6.2: Procurement Thresholds, Goods and Related Services, Works, and Supply and Installation

Procurement Method ^a	To Be Used (\$)
International Competitive Bidding (ICB) Works	Above \$1 million
ICB Goods	Above \$500,000
National Competitive Bidding (NCB) Works	Less than \$1 million
NCB Goods	Less than \$500,000
Shopping Works	Less than \$100,000
Shopping Goods	Less than \$100,000

ICB = international competitive bidding, NCB = national competitive bidding.

^a For international competitive bidding (ICB), ADB will conduct prior review of all procurement documents, the bid evaluation report (BER), and award of contract. For national competitive bidding (NCB), the first-draft, English-language version of the procurement documents should be submitted for ADB review and approval regardless of the estimated contract amount. ADB-approved NCB procurement documents should be used as a model for all NCB procurement financed by ADB, and will not be subjected to further review unless required under special arrangements.

Source: Asian Development Bank estimates.

Table A6.3: Procurement Thresholds, Consultant Services

Procurement Method	To be used (\$)
Quality- and Cost-Based Selection (QCBS)	Above \$200,000
Consultants' Qualifications Selection (CQS)	Below \$200,000
Least-Cost Selection (LCS)	Below \$100,000

CQS = Consultants' Qualifications Selection, LCS = least-cost selection, QCBS = quality- and cost-based selection.

Source: Asian Development Bank estimates.

**Table A6.4: List of Contract Packages in Excess of \$100,000,
Goods, Works, and Consulting Services**

Ref	Contract Description	Estimated Cost (\$ million)	Procurement Method	Expected Date of Advertisements	Prior Review Y/N	Comments
1	Turnkey contract for substations	17.65	ICB Works	2nd quarter, 2009	Y	Financed by ADB
2	Consultancy services for project implementation	2.30	QCBS	3rd quarter, 2007	Y	Financed by ADB
3	Supply of hardware and software for EDC data management system	0.50	ICB Goods	4th quarter, 2008	Y	Financed by ADB

ADB = Asian Development Bank, CQS = Consultants' Qualifications Selection, EDC = Electricité du Cambodge, ICB = international competitive bidding, LCS = least-cost selection, QCBS = quality- and cost-based selection, Y/N = yes/no.

Sources: EDC and ADB estimates.

Table A6.5: Proposed Contract Packages

Package No.	Item	Procurement Mode	Estimated Contract Value (\$ million)	Financed by
1	Turnkey contract for 230 kV transmission line (including spare parts and training)	ICB Works	17.20	JBIC
2	Turnkey contract for substations at Sihanoukville, Veal Rinh, and Kampot extension	ICB Works	17.65	ADB
3	Supply of materials and equipment, and installation of medium-voltage (22 kV) and low-voltage (400 V) distribution system	ICB	2.71	JBIC
4	Consultancy services for project implementation	QCBS	2.30	ADB
5	Supply of hardware and software for EDC information system	ICB Goods	0.50	ADB

ADB = Asian Development Bank, EDC = Electricité du Cambodge, ICB = international competitive bidding, JBIC = Japan Bank for International Cooperation, kV = kilovolt.

Note: The above figures include taxes, but exclude contingencies and interest during construction.

Sources: EDC and ADB estimates.

A. Procurement and Recruitment Procedures

1. Civil Works and Goods

1. For ADB-financed ICB contracts (Packages 2 and 5), the procurement method to be used will be single stage one envelope system, without prequalification. For this purpose, EDC shall submit the draft invitation for bids and all related documents for review and approval by ADB before they are issued. The invitation for bids are to be advertised in accordance with paras. 2.7–2.10 of the *Procurement Guidelines*. EDC will provide ADB a report on the advertising as part of the review requirements. A flowchart showing the main steps for procurement under ICB without prequalification is attached marked as Figure A5.1.

2. For all ADB administered contracts, ADB will review the bid evaluation report (BER) and proposal for award of contract on a prior review basis. The EA must submit copies of the BER in English to ADB for approval. Contracts funded by JBIC will be procured using JBIC procurement procedures.

3. EDC will create a Project website to disclose information about various matters on the Project, including procurement. With regard to procurement, the website will include information on the list of participating bidders, name of the winning bidder, basic details on bidding procedures adopted, amount of contract awarded, and the list of goods/services procured. The information for a contract can follow that presented on Appendix 5.3

2. Recruitment of Consultants

4. For ADB-administered contracts, the Borrower shall use Quality and Cost Based Selection (QCBS), ADB's preferred method. For this, Full Technical Proposals (FTP) will be requested from shortlisted firms. The EA is required to submit its short listing documents in ADB's standard format for ADB's approval. Apart from making sure the short list is composed of qualified firms that are reasonably geographically spread, ADB will review the following documents

- (i) the TOR and background information,
- (ii) the RFP, including the EA's budget for the assignment, the selection method and the type of technical proposals,
- (iii) the criteria for evaluating the technical proposals,
- (iv) the draft contract, and
- (v) the Consultant Recruitment Activities Monitoring (CRAM) frame.

5. The succeeding process will follow ADB guidelines for approvals of technical, financial and overall ranking of consultants as well as the draft contract. The procedures are explained in Volume IV, Handbook for Users of Consulting Services, and Guidelines for Executing Agencies' Submissions which can be downloaded from the ADB website. For JBIC-financed contracts, recruitment will follow JBIC procedures.

3. Monitoring the Consultant Recruitment Process

6. EDC and the ADB will use CRAM frames to monitor the activities in recruiting the consultant and to avoid delays. Indicative CRAM frames based on forecasted scheduling of recruitment for consulting packages have been provided to EDC. ADB will send a copy of the CRAM frame for the assignment to the EDC. EDC's CSC short-listing meeting will discuss and confirm the CRAM schedule. When the EDC submits its CSC meeting documents to ADB for approval, the CRAM frame shall be included. If ADB approves the EA's technical evaluation and

financial evaluation/overall ranking, ADB sends the EA an updated CRAM frame. The responsible EDC staff will monitor the recruitment process and reports to the ADB project officer the date when each activity is completed and the reason for any delays.

Figure A6.1: Indicative Flowchart of Procurement under International Competitive Bidding ¹

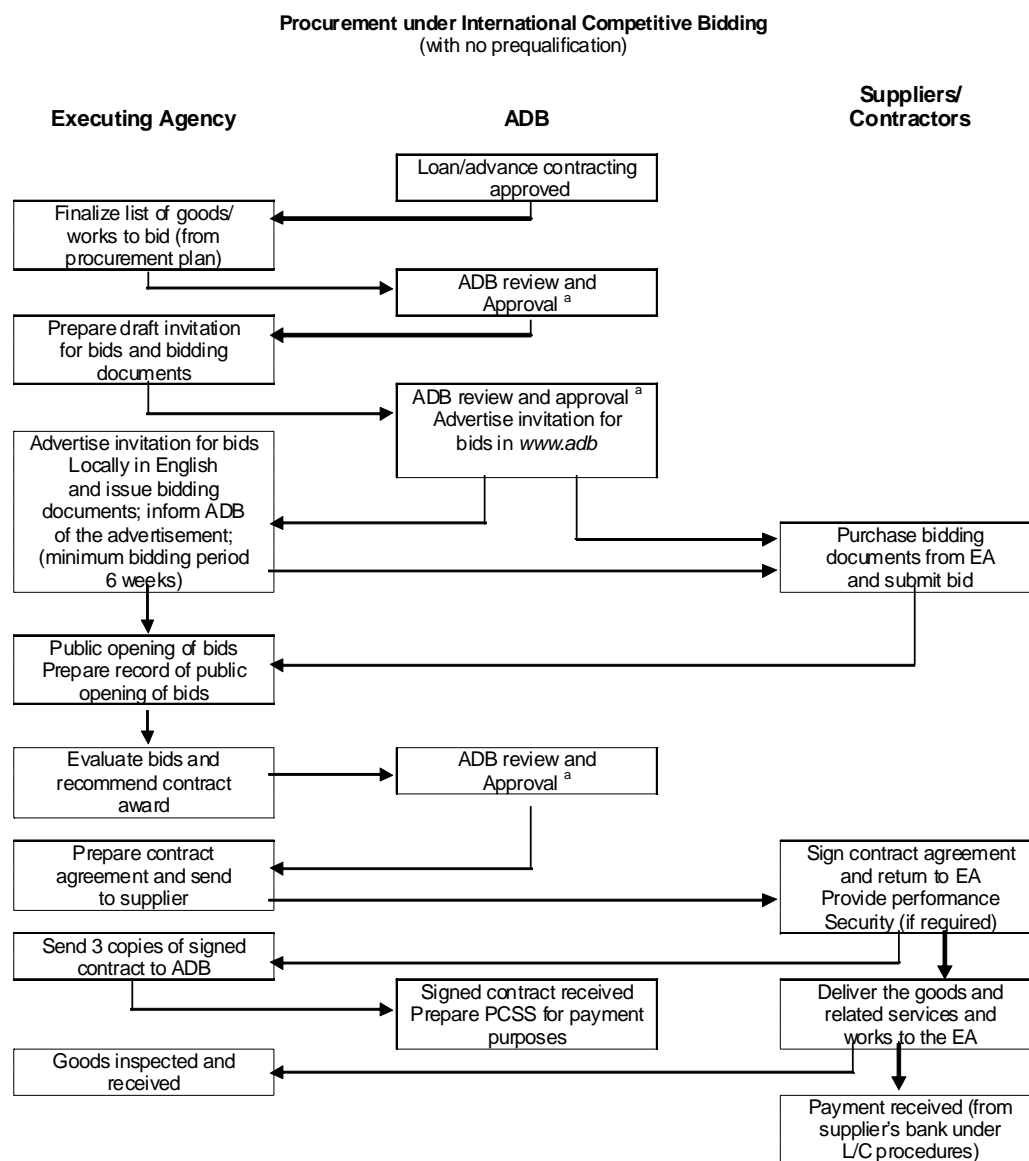
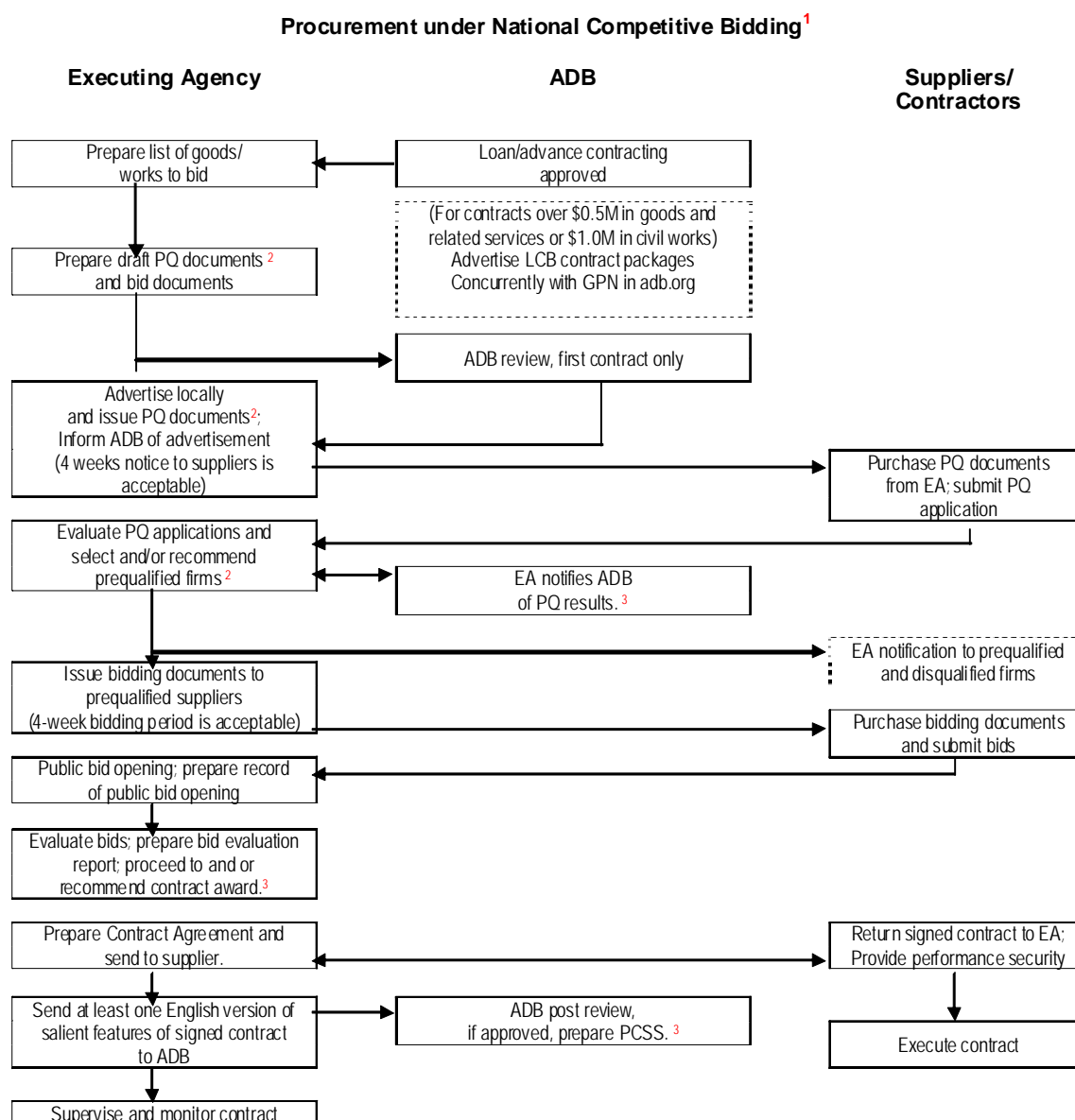


Figure A6.2: Indicative Flowchart of Procurement under National Competitive Bidding¹



¹ While NCB procedures are not required to be identical with ADB's ICB procedures, they must reflect the underlying principles and not contravene ADB's *Procurement Guidelines*.

² Prequalification is discouraged for NCB. DMCs may have a register of suppliers. The processing mission should ensure that the registration system is acceptable to ADB (e.g., it reflects the underlying principles of ADB's *Procurement Guidelines*); and where acceptable, a PQ may not be required.

³ If the prequalification or procurement requires prior consideration of the procurement committee, in accordance with PAI 3.11, the EA must be advised not to notify prequalified firms or award contract prior to the committee's deliberations and subsequent ADB approval.

A6.3 SAMPLE WEBSITE INFORMATION**SUMMARY OF CONTRACT****I. PROJECT DATA**

- A. Loan No. :
- B. Executing Agency :

II. OUTLINE OF CONTRACT

- A. Contract No. :
- B. Total Contract Amount :
- C. Contractor's Name and Address :

- D. Scope of Contract :

III. SUMMARY OF CONTRACT AGREEMENT

- A. Contract Amount :
- B. Taxes and Duties :
- C. Contract Period :
- Date of Contract Signing :
- Contract Period :
- Commencement Date :
- Completion Date :

IV. RESULT OF BIDDING

- A. Mode of Procurement :
- B. Date of Bid Invitation :
- C. Date of Bid Opening :
- D. Ranking/List of Bidders :

Rank	Name of Bidders	Bid No.	Amount of Bid As Opened	Amount of Bid As Evaluated
1				
2				
3				
4				

Note: Please provide a brief explanation if the contract was not awarded to the lowest bidder.

V. COUNTRY/COUNTRIES OF ORIGIN (for Goods only):

Seen and Approved:

Name
Project Director

DISBURSEMENT

A. Guidelines and Practices

a. General Guidelines

1. The recipient is responsible for implementing the project according to the grant agreement. ADB, on its part, monitors the project and reviews its progress to ensure that the Loan proceeds are spent as agreed upon.
2. When the Loan becomes effective, the Loan account is opened in ADB's books in the name of the recipient and the Loan amount is credited to that account. Withdrawal from the account is approved only after fulfillment of the requirements indicated under basic requirements below.

b. Disbursement Letter

3. Disbursement Letter will be dispatched by the Disbursement Division after the Loan agreement is signed. It outlines the disbursement procedures and other related arrangements for financial administration of the Project.

B. Requirements for Disbursement

a. Basic Requirement

4. The first withdrawal application from the Loan account requires that:
 - (i) ADB declared the Loan agreement effective;
 - (ii) The Recipient submitted to ADB sufficient evidence of the authority of the person(s) who will sign the withdrawal applications on behalf of the Borrower, together with the authenticated specific signature of each authorized person before the first withdrawal application is sent to ADB. (Any subsequent change in the list of authorized representatives must be reported immediately and authenticated specimen signatures of new representatives must also be provided); and
 - (iii) Disbursement conditions as specified in the Loan agreements are met.

b. Withdrawal Application

5. For all withdrawals, ADB must receive a withdrawal application in the prescribed form. A withdrawal application is a written request from the Recipient to ADB to pay funds against the Recipient's Loan account. No withdrawal application will be entertained after the Loan closing date. The Loan closing date is the date ADB may terminate the right of the recipient to make withdrawals from the Loan account. Expenditures incurred after the Loan closing date will not be financed under the Loan.
6. Before the first W/A is submitted to ADB, the name of the authorized representative(s) must be provided to ADB, through the Authorized Representatives of the Recipients, including the authenticated specimen signatures of the representative(s).

7. The W/A should be signed by the authorized representative(s), sequentially numbered and should not exceed five digits (00001, 00002, etc.)

8. The W/A forms and summary sheets to be used vary for the different procedures. A separate W/A for each currency requested should be submitted.

9. The W/A to be submitted to ADB must be the signed original copy. However, supporting documents may be in photocopies.

10. A withdrawal application consists of:

- (i) the application itself, in letter form, in 2 copies;
- (ii) summary sheet(s) for each category claimed; and
- (iii) original supporting documents.

11. A withdrawal application should:

- (iv) Indicate the payee's complete name.
- (v) Indicate the complete name and address of the designated payee's bank, including the name of a branch office, where applicable, and the payee's account number.
- (vi) Be sure to indicate the complete name and address of the payee bank's correspondent bank in the country of the currency of payment where applicable, and the account number of the payee's bank.

C. Allocation of Loan Proceeds

12. The Loan proceeds shall be disbursed on the basis of the percentages stated in the Loan Agreement.

D. Direct Payment (Page 24 of the Handbook)

13. It is a procedure whereby ADB, at the recipient's request, pays a designated beneficiary directly.

1. Supporting Documents for Direct Payment

- (i) Signed Withdrawal Application (ADB-DRP/RMP, Appendix 3 of Handbook);
- (ii) Summary Sheet (ADB-DRP-SS, Appendix 4 of Handbook);
- (iii) Contract or confirmed purchase order, indicating amount and due date;
- (iv) For payment of goods: supplier's invoice and bill of lading or other similar documents; and
- (v) For payment of services: consultants' claim or invoice

E. Other Instructions

14. The withdrawal application's signed original copy is submitted to ADB. Supporting documents may be submitted as photocopies.

F. Commitment Procedure (page 26 of Handbook)

15. This procedure is used for financing import of goods. A letter of credit is usually opened by a commercial bank. The negotiating bank is authorized to seek payment from ADB under the Loan.

16. ADB issues a Commitment Letter against a letter of credit (L/C), and agrees to pay (on behalf of the Recipient and out of Loan funds) the negotiating bank for the payments made or to be made to the supplier in accordance with the terms of the L/C.

1. Supporting Documents for Issuing Commitment Letter

- (i) Signed Application for Commitment Letter (ADB-CL, Appendix 5 of Handbook);
- (ii) Summary Sheet (Appendix 6)
- (iii) Contract or confirmed Purchase Order;
- (iv) Two signed copies of L/C.

17. ADB issues a Commitment Letter to the designated commercial bank (usually advising bank) as shown in Appendix 7 of Handbook. A copy of ADB's commitment letter is also sent to the EA for information.

2. ADB's Payment to the Negotiating Bank

18. The Commitment Letter provides for ADB's payment to the negotiating bank upon receipt of the reimbursement claim confirming that negotiation has been done in full compliance with the letter of credit terms. Such reimbursement claim is usually made by tested telex or authenticated SWIFT message.

3. Amendment to the Letter of Credit

19. ADB's approval is required for amendment to the letter of credit (L/C) involving:

- (i) terms of payment including currency and amount of L/C;
- (ii) the description or quantity of goods;
- (iii) beneficiary;
- (iv) country of origin; and
- (v) extension of the expiry date of L/C beyond the Loan closing date.

20. Amendments not mentioned above do not require ADB's approval. For example, extension of L/C expiry date within Loan closing date does not require ADB's approval, but simply inform ADB of such extension by filling out the form shown as Appendix 11 of Handbook and attaching one copy of the amendment.

G. Reimbursement Procedure (page 30 of Handbook)

21. ADB pays to the project account for eligible expenditures which have been incurred and paid for by the Government out of its budget allocation or its own resources (page 30 of Handbook).

1. Supporting Documents for Reimbursement Procedure

- (i) Signed Withdrawal Application (ADB-DRP/RMP, Appendix 3 of Handbook);

- (ii) Summary Sheet (ADB-RMP-SS, Appendix 4 of Handbook);
- (iii) Contract or confirmed Purchase order, if not yet submitted earlier to ADB; and
- (iv) Evidence or receipt of payment showing the amount paid, the date of receipt and the payee.

H. Statement of Expenditure (SOE) Procedure

22. This is a procedure requiring no submission of supporting documents. Any individual payment to be reimbursed or liquidated under the SOE procedure shall not exceed \$100,000 (including counterpart fund). The procedure derives its name from the Statement of Expenditure (SOE) form, which is submitted with the Withdrawal Application (W/A). The SOE is used in lieu of the usual supporting documents and the Summary Sheet. It may also be used in connection with the liquidation or replenishment of the Imprest Account (page 31 of Handbook).

23. Three types of SOE are available:

- (i) SOE form for contract items, mostly related to civil works (Appendix 12 and 13 of Handbook);
- (ii) SOE form for noncontract items, mostly related to operating expenses and overhead (Appendix 14 of Handbook); and
- (iii) SOE form (free format) for items not provided in the other SOE forms (Appendix 15 of Handbook).

24. Alterations on the application forms are initialed by the recipient's authorized representatives.

25. In the SOE, the borrower certifies that:

- Expenditures have been incurred and paid for under the terms and conditions of the Loan agreement; and
- Records are maintained and are available for examination by ADB disbursement/review missions and independent auditors.

26. The following conditions must exist before the recipient can use the procedure:

- Impracticability of Full Documentation – The SOE procedure is used where it is impractical to require full documentation. This may apply to EA operating costs or expenditures related to small civil works contracts scattered over a wide area.
- Recipient's Capability – The recipient must have sufficient administrative and accounting capabilities to prepare and maintain proper SOE records and make them readily available for examination.
- Audit Requirements – The recipient must be capable of arranging for periodic or annual audits of SOE transactions as part of the project's audit.

F. PCSS Numbers

27. The Procurement Contract Summary Sheet (PCSS) number is assigned by ADB for identifying a particular contract approved by the borrower and submitted to ADB under the Loan. The PCSS includes the following:

- ADB contract number;
- Date of contract approval;

- Mode of procurement;
- Name of contractor or supplier;
- Terms of payment and currency of contract; and
- Percentage of ADB financing.

28. On checking the details of payment made under a particular withdrawal application from the ADB Loan Financial Information System (GFIS) Website, the EA will use the PCSS Number under a particular Loan number.

29. Without the PCSS, ADB's Controller's Department could not proceed with the processing of payment for the W/A.

30. When an amendment or a variation of a contract is made, a copy of the variation order should also be sent to ADB, for updating of the PCSS.

31. To avoid delay in the processing of payment, the PCSS No. should be indicated in the W/A to be submitted by the EA. The PCSS No. should be shown in the summary sheet.

H. Disbursement Reports

32. Recipient, EA, and Donors are given information on the status of Loan disbursement in:

- semi-monthly listings of Loan disbursements (see page 120 of the Handbook);
- statement of withdrawal vouchers; and
- statements of amount capitalized.

33. The above reports and other information are available online at LFIS website at <URL://lfis.adb.org>. For access to the loan information website, requests may be sent by e-mail to lfis@adb.org.

34. The recipient and its EA provide ADB with the current names, mailing, and e-mail addresses of contact persons who should receive the reports. An updated list of contact persons is to be sent to ADB immediately when there are changes in contact persons or addresses.

PROCEDURES FOR ESTABLISHING AND OPERATING THE LOAN IMPREST ACCOUNT

A. Definition

1. Whenever used in this procedure, unless the context otherwise requires, several terms defined in the Loan Agreement between the Recipient and the Asian Development Bank (ADB) have the respective meanings therein set forth.

B. Imprest Account for Loan Proceeds

2. For the purpose of this project, and if applicable, the Recipient shall cause the Executing Agency to establish after the Effective Date, an Imprest Account. The Imprest Account shall be established, managed, replenished and liquidated in accordance with ADB's "Loan Disbursement Handbook" of January 2007, as amended from time to time and detailed arrangement between Kingdom of Cambodia and ADB.

C. Eligible Expenditures

3. Payments out of the Imprest Account will be made exclusively to meet eligible expenditures in accordance with the provisions of Schedule 2 of the Loan Agreement.

D. Account Name and Authorization for Withdrawals

4. The Imprest Account will be opened and maintained at the designated bank acceptable to ADB, in the name of the EDC and the person or persons duly authorized by EDC for making withdrawals from the Loan Account, under relevant provisions of the Loan Agreement will be responsible for operating the Imprest Account and withdrawals and payments therefrom.

E. Initial Advance and Ceiling

5. After the Effective Date, on the basis of a Withdrawal Application-Imprest Fund (Form ADB-IFP) and an Estimate of Expenditure Sheet (Form ADB-IFP-EES) from the PMU setting out the estimated expenditures for the first six months of project implementation, and submission of evidence satisfactory to ADB that the Imprest account has been duly opened, ADB will withdraw from the Loan Account and deposit into the Imprest account an initial amount based on the estimated expenditure for the first 6 months of project implementation or 10% of the total Loan, whichever is lower.

F. Liquidation and Replenishment

6. The EDC will, on a regular basis, furnish to ADB in respect of all payments out of the Imprest Account, the duly filled-in Withdrawal Application-Imprest Fund (Form ADB-IFP-WA) and Summary Sheet (ADB-IFP-SS), together with such supporting documents and other evidence as ADB will reasonably request, showing that each payment was made for eligible expenditures. ADB agrees to the use of the Statement of Expenditure (SOE) procedure for expenditures incurred not exceeding US\$100,000.

7. For every liquidation and replenishment request, the PMU will furnish to ADB (a) Statement of Account (Bank Statement) prepared by commercial banks, and (b) the Imprest Account

Reconciliation Statement (IARS) reconciling the abovementioned Bank statement against the EDC's records.

8. ADB may at any stage by notice to the EDC, suspend further replenishments to the Loan Imprest Account if they failed to comply with any of the provisions of this Appendix.

G. Accounts and Records

9. The EDC will ensure that all amounts received for or in connection with the Loan Imprest Account and amounts withdrawn therefrom are recorded in a separate account in accordance with consistently maintained sound accounting principles. The EDC will retain until one year after the closing date for withdrawals from the Loan account all accounts and records including orders, invoices, bills, receipts and other original documents evidencing the expenditures paid out of the Imprest Account, and will enable ADB's representatives to examine such account and records during disbursement and review missions.

H. Audit

10. The EDC will cause an independent auditor or government auditor acceptable to ADB to annually audit the Imprest Account/SGIAs and records referred to in Paragraph 43 above and furnish to ADB certified copies of audit report and audited financial statements not later than 6 months after the end of each fiscal year. An opinion on the examination of the Imprest Account and SGIAs should be separately set out in the said Auditor's Report.

I. Ineligible or Unjustified Payment

11. Where any withdrawal or payment from the Loan Imprest Account/SGIAs is determined by ADB (i) to have been utilized for any purpose not eligible, or (ii) not justified by the evidence furnished pursuant to Paragraph 10 of this Attachment, the EDC will, promptly upon notice from ADB, deposit into the Loan Imprest Account/SGIAs an amount equal to the amount of such payment or the portion thereof not eligible or justified, in the same currency as that in which the amount was withdrawn from the Loan Account. Alternatively, ADB may offset the unjustified payment against new withdrawal applications for replenishment.

J. Closing of the Imprest Account

12. In the event that ADB determines that (i) any amount outstanding in the Loan Imprest Account will not be required to cover further payments for eligible expenditures, or (ii) any amount remains outstanding in the Loan Imprest Account after the closing date, EDC will, promptly upon notice from ADB and unless otherwise agreed by ADB, refund such amount then outstanding in the Loan Imprest Account.

K. Other Issues

13. For matters not covered in the Attachment, the guidelines set forth in ADB's Loan Disbursement Handbook will apply.

REPORTS

A. Introduction

1. Loan regulations and Loan agreements require the Recipient and executing agency (EA) to provide ADB/Donors with reports and information it reasonably requests. These include the EA's periodic progress reports that enable the Recipient, EA, ADB and other Donors to monitor project progress, become aware of problems during implementation, and assess whether the immediate project objectives will be met.

B. Content and Format

2. The content of the progress report includes sufficient information in summary form to be useful to ADB and other Donors as a funding agency. The purpose of the report is to enable the Recipient, EA, and ADB to monitor the latest progress, become aware of current problems, and assess whether the project's immediate objectives will be met. More detailed reports are prepared by consultants or contractors for EDC and distributed to all stakeholders. These reports are to be held at EDC and are made available for ADB review, midterm review, and project completion review missions.

3. The progress report sent to ADB is an executive summary of the detailed reports; with format and content permitting ADB and other stakeholders to readily capture key information for inputting into the project performance report (PPR). When ADB requires detailed information (such as background to a particular problem), this is included as an appendix. Simple charts such as a bar or milestone charts to illustrate implementation progress, a chart showing actual versus planned expenditures, and the relationship between physical and financial performance are included. A framework and guidelines for calculating project progress and a sample implementation schedule are shown on page 45.

C. Reports Required by ADB

4. The following reports are required by ADB:

Description	Originator	Due Date
Quarterly Progress Report		Not later than 30 days after each period
Audited Project Account		Not later than 6 months after close of each fiscal year
Audited Corporate Financial Statements (CFS)		Not later than 6 months after close of each fiscal year
Baseline Survey for connection rates, electricity expenditures, others as agreed with ADB		Within first year of completion of 230 kV transmission line
Impact Survey Report		Within 2 years after baseline survey
Monitoring Report on the conduct of IEE and EMP		Semi-annual
Updated Resettlement Plan		After completion of DMS and detailed design, prior to implementation
Contract Awards and Disbursement Projections		Every January of the year during implementation
Project Completion Report		Within 3 months of project completion.

D. Quarterly Progress Reports

5. The EDC will prepare and submit to all Donors quarterly progress reports concerning procurement of services, design and preconstruction activities, and construction of all civil works included in the Project. The reports will identify problems and difficulties encountered during implementation and summarize the Project's accounts consisting of disbursements during the reporting period, year to date, and total to date. The report should be submitted to all financiers not later than 30 days after the end of the period covered by each report.

6. The quarterly report should indicate, among other things: (i) the progress made and problems encountered during the quarter; (ii) steps taken or proposed to be taken to remedy these problems; (iii) the updated bar chart prepared in an acceptable manner showing progress as compared to the schedule agreed, including the number of consumers connected; (iv) description of implementation of the RP, including status of completion of compensation, resettlement and rehabilitation activities, monitoring reports submitted by the IMO, and a description of problems encountered and anticipated with suggested corrective actions; (v) summary of accounts for the Project during the period, year to date and total to date; and (iv) expected progress during the following quarter.

7. Suggested outline of a quarterly progress report is shown below and pro-forma sample is shown in pages 43 - 44.

- a. Background and Introduction
- b. Project Scope
- c. Financial Progress/Utilization of Funds
- d. Covenants Complied During the Period
- e. Status of Implementation
 - i. Progress of Civil Works
 - ii. Project Coordination with Donors
 - iii. Disbursements (Operation of Imprest Fund, Receipt of Counterpart Funds)
 - iv. Problems Encountered and Action Taken During the Period
 - v. Planned Activities During the Next Period
- f. List of Annexes
 - Project Performance Report
 - Detailed List of Compliance with Loan Covenants
 - List of Contracts Awarded
 - Updated Implementation Schedule
 - Budget Schedule

E. Project Completion Report (PCR)

8. To facilitate post evaluation of the Project, the Recipient will provide ADB and other Donors within 3 months of physical completion of the Project, a completion report that will comprehensively cover details of project implementation, costs and potential benefits, and any other information that may be requested by ADB and other Donors concerning the Project. Relevant ADB instruction and outline of PCR is shown on Appendix 8 .

F. Contract Awards and Disbursement Projections

9. Effective monitoring of project implementation requires accurate projections of contract awards, commitments, and disbursements. Comparison of such projections with the actual

figures helps identify impediments to implementation progress and remedial measures. Accurate disbursement projection also helps ADB improve its overall liquidity, cash flow, and portfolio management.

10. ADB distributes the projections worksheet (in either hard copy or electronic form) by the second week of October to the executing agencies (EAs) to complete their projections of contract awards, commitments, and disbursement for the following year. The EA is to submit the completed worksheet to ADB for project implementation by the second week of each year.
11. Using information received from the EAs, ADB prepares annual projections of contract awards, commitments, and disbursement (with quarterly breakdowns) for all projects it administers (for Loans approved up to 31 December each year).

Pro Forma of the Executing Agency's Project Progress Report

A. Introduction and Basic Data

Provide the following:

- ADB Loan number, project title, borrower, executing agency(ies), implementing agency(ies);
- total estimated project cost and financing plan;
- status of project financing including availability of counterpart funds and co-financing;
- dates of approval, signing, and effectiveness of ADB Loan;
- original and revised (if applicable) ADB Loan closing date and elapsed Loan period based on original and revised (if applicable) Loan closing dates; and
- date of last ADB review mission.

B. Utilization of Funds (ADB Loan, Co-financing, 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
- re-estimated costs to completion, need for reallocation within ADB Loan categories, and whether an overall project cost overrun is likely.

C. Project Purpose

Provide the following:

- status of project 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 project scope and implementation arrangements;
- an assessment of changes to the key assumptions and risks that affect attainment of the development objectives; and
- other project 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 project implementation arrangements such as establishment, staffing, or funding of the PMU;

- information relating to other aspects of the EA's internal operations that may impact on the implementation arrangements or project progress;
- progress or achievements in implementation since the last progress report;
- assessment of the progress of each project 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 including examples are shown in Appendix 7); and
- an assessment of the validity of key assumptions and risks in achieving the quantifiable implementation targets.
- Report on the number of consumers connected
- Description on the implementation of the RP including status of completion of compensation, resettlement and rehabilitation activities, monitoring reports submitted by the IMO and a description of problems encountered and anticipated with suggested corrective actions;

E. Compliance with Covenants

Provide the following:

- the recipient's compliance with policy Loan covenants such as sector reform initiatives and EA reforms, and the reasons for any noncompliance or delay in compliance;
- the recipient's and EA's compliance with financial Loan covenants including the EA's financial management, and the provision of audited project accounts or audited agency financial statements; and
- the recipient's and EA'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).

FRAMEWORK AND GUIDELINES IN CALCULATING PROJECT PROGRESS

A. Introduction

1. To ensure that all implementation activities are reflected in measuring implementation progress against the project implementation schedule, the term "physical completion" in the PPR has been changed to "project progress."
2. Physical and pre-commencement activities are considered in calculating project implementation progress. These activities, which may include recruitment of consultants, capacity building, detailed design, preparation of bid and prequalification documents, etc., could constitute a significant proportion of overall implementation and therefore should be counted.
3. Each activity in the implementation schedule will be weighted according to its overall contribution (using time as a reference) to progress of project implementation. These weights will then be used to calculate the percentage of project progress along the entire time span of the project. This is to provide a holistic view of the pace of implementation.

B. Framework for Compiling Activity List and Assigning Weights

4. As implementation activities (with corresponding weights) will vary in terms of project, sector, and country, SEID will be responsible for incorporating them in the project administration memorandum. The actual project implementation progress of these activities should be reported regularly through the EA's quarterly project progress report. To ensure ADB-wide consistency, the following framework has been established. The application of this framework will be monitored through the PPR.

1. Compilation of Activity List

5. SEID will identify and include major implementation activities in the implementation schedule which is attached as an appendix in the Report and Recommendation of the President (RRP). The implementation schedule should follow the critical path of the project's major activities in project implementation taking account of various country, sector, and project constraints.

2. Assignment of Weights

6. Corresponding weights for each activity should be assigned to ensure that "project progress" measures the percentage of achievement (nonfinancial except when the project has credit components) for all events during the entire duration of the implementation schedule. To avoid disproportionate assignment of weights, to the extent possible these should be evenly distributed along the implementation schedule. When activities are concurrent, avoid "double counting."

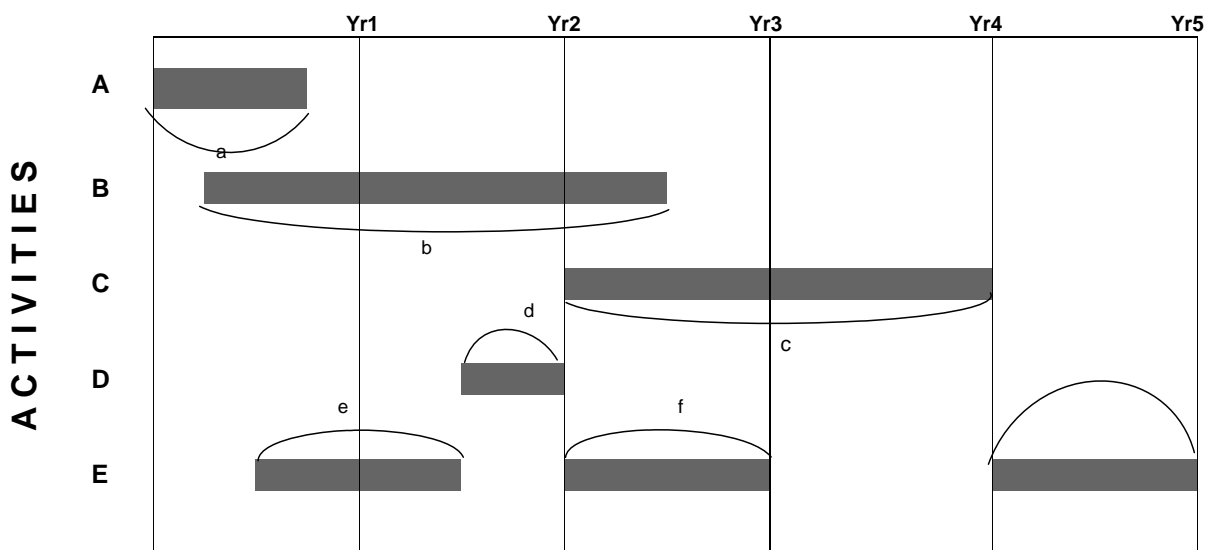
3. Computation of Project Progress

7. Once all activities are identified and corresponding weights assigned, project progress should be calculated using the following steps:
 - (i) Determine the actual percentage progress (non-financial) of each activity.

- (ii) Multiply these percentages by the assigned weight of each activity to arrive at the weighted progress.
- (iii) Add up the resulting weighted progress of all activities to determine the project progress.

The following figure provides an illustration of this calculation using a generic sample implementation schedule, and the next page shows a specific schedule for this Project.

Implementation Schedule with Activities and Weights



1. Sum of all weights should equal 100 percent ($a+b+c+d+e+f+g = 100\%$)
2. When calculating the percentage of "project progress," all completed activities should be counted as accomplished, regardless of when they were scheduled to be completed. For example, when calculating the percentage of "project progress" after year 3, if activity D is completed in year 3 rather than in year 2, it should still be included in the computation.
3. Total weight of each activity is as follows: Activity A— a ; Activity B— b ; Activity C— c ; Activity D— d ; and Activity E— $e + f + g$
4. Project progress of a project is the summation of the actual percentage of progress for each activity multiplied by the total weight of each activity.

No	DESCRIPTION	Weight (%)	Progress	Weighted Progress
I	ADB 1. EA's Recruitment of Consultants (ADB-QCBS-FTP) EA Shortlisting, Submission of RFP ADB Approval Issue RFP, Preparation/Submission of Proposals, ADB approval Financial Proposals Opening, Submission and Approval by ADB Contract Negotiations, Submission and ADB Approval of Draft Contract Contract Signing, Submission to ADB and Mobilization	2		
	2. Detailed Design Surveys and Final Design Stake Out and Detailed Measurement Surveys Resettlement Approval and Implementation Assist RGC in Resettlement Implementation	8		
	3. Construction Supervision	8		
	6. Civil Works Procurement Preparation and Approval of of Bid Documents Issuance of Bid Documents Bidding Period Bid Evaluation and Submission to ADB ADB Approval of Bid Evaluation Reports Contract Award and NTP	2		
	7. Civil Works Implementation	36		
	8. Procurement of Goods - hardware and software for EDC information system Preparation of bid documents and ADB approval Bidding and evaluation ADB Approval	1		
	9. Supply of hardware/software	2		
II	JBIC - Financed Portion			
	10. Civil Works Procurement	2		
	11. Civil Works Implementation 230 kV transmission line	36		
	12. Procurement Supply materials and equipment, install medium voltage and low voltage distribution system	1		
	13. Supply materials and equipment, install medium voltage and low voltage distribution system	2		
	TOTAL	100		

PROJECT COMPLETION REPORT FORMAT

A. General Guidelines for Preparing Project Completion Report

CONTENTS
BASIC DATA
MAP

I. PROJECT DESCRIPTION

II. EVALUATION OF DESIGN AND IMPLEMENTATION

- A. Relevance of Design and Formulation
- B. Project Outputs
- C. Project Costs
- D. Disbursements
- E. Project Schedule
- F. Implementation Arrangements
- G. Conditions and Covenants
- H. Consultant Recruitment and Procurement
- I. Performance of Consultants, Contractors, and Suppliers
- J. Performance of the Recipient and the Executing Agency
- K. Performance of the Asian Development Bank

III. EVALUATION OF PERFORMANCE

- A. Relevance
- B. Efficacy in Achievement of Purposes
- C. Efficiency in Achievement of Outputs and Purpose
- D. Preliminary Assessment of Sustainability

IV. EVALUATION OF SOCIAL DIMENSIONS AND SOCIAL SAFEGUARDS IMPACTS

- A. Social Dimensions (e.g. poverty reduction, gender equity, community and participatory mass organizations)
- B. Ethnic Groups Development Impacts

V. OVERALL ASSESSMENT AND RECOMMENDATIONS

- A. Overall Assessment
- B. Lessons Learned
- C. Recommendations

BASIC DATA

A. Loan Identification

1. Country
2. Loan Number
3. Project Title
4. Recipient
5. Executing Agency
6. Amount of Loan
7. Project Completion Report Number (to be provided by ADB)

B. Loan Data

1. Appraisal
 - Date Started
 - Date Completed
2. Loan Negotiations
 - Date Started
 - Date Completed
3. Date of Board Approval
4. Date of Loan Agreement
5. Date of Loan Effectiveness
 - In Loan Agreement
 - Actual
 - Number of Extensions
6. Closing Date
 - In Loan Agreement
 - Actual
 - Number of Extensions
7. Terms of Loan
 - No Interest
 - No repayment
 - Grace Period (number of years)

8. Disbursements

a. Dates

Initial Disbursement	Final Disbursement	Time Interval
----------------------	--------------------	---------------

Effective Date	Original Closing Date	Time Interval
----------------	-----------------------	---------------

Category	Component	Original Allocation	Last Revised Allocation	Net Amount Disbursed	Undisbursed Balance
Total					
C.	Project Data				
1.	Project Cost (\$ million)				
Cost		Appraisal Estimate		Actual	
Foreign Exchange Cost					
Total					
2.	Financing Plan (\$ million)				
		Appraisal Estimate		Actual	
Cost		Foreign	Total	Foreign	Total
Implementation Costs					
ADB-Financed					
Government					
Total					
3.	Cost Breakdown by Project Component (\$ million)				
		Appraisal Estimate		Actual	
Cost		Foreign	Total^a	Foreign	Total
TOTAL PROJECT COST					
Note					

4. Project Schedule

Item	Appraisal Estimate	Actual
Date of Contract with Consultants		
Equipment and Supplies		
Dates		
First Procurement		
Last Procurement		
Completion of Equipment Installation		
Start of Operations		
Other Milestones		
Start of Program		
Completion of Program		

D. Data on Asian Development Bank Missions

Name of Mission	Date	No. of Persons	No. of Person-Days	Specialization of Members ^a
Fact-Finding				
Appraisal				
Inception				
Review				
Review				
Review				
Review				
Midterm Review				
Review				
Review				
Review				
Review				
Completion Review ^b				

Note:

^a May use reference letters in table, e.g., a - engineer, b - financial analyst, c - counsel, d - economist, e - procurement consultant or specialist, f - control officer, g - assistant project analyst.

^b The project {Loan} completion report was prepared by {name}, {designation}.

B. 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. The 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 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.

FINANCIAL REPORTING AND AUDITING REQUIREMENTS

1. ADB's *Handbook for Borrowers on the Financial Governance and Management of Investment Projects Financed by the ADB* (the Booklet) provides guidelines to ensure timely compliance with the loan covenants and the quality of financial information as required by ADB.

2. ADB, by its Charter, is required to ensure that the proceeds of any loan/grant made, guaranteed, or participated in by ADB are used for the purposes for which the loan/grant was approved. ADB requires accurate and timely financial information from its borrowers/recipients to be assured that expenditure was for the purposes stated in the loan/grant agreement.

3. The following are the main requirements:

- (i) ADB requires the EA to maintain separate project accounts and records exclusively for the Project to ensure that the loan funds were used only for the objectives set out in the Loan Agreement.

The first set of project accounts to be submitted to ADB covers the fiscal year ending 31 December 2008. As stipulated in the Loan or Project Agreements, they are to be submitted up to six months after the end of the fiscal year. For this loan, the deadline is by 30 June 2009. A sample report format with explanatory notes is attached as Annex A of this Appendix.

- (ii) The accounts and records for the project are to be consistently maintained by using sound accounting principles. The 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 project accounts to use international accounting standards prescribed by the International Accounting Standards Committee. The name of external auditor is to comment on the impact of any deviations, by the Executing Agency from international accounting standards.

- (iii) The 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. The 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, the external auditor is requested to indicate in the Auditor's Report the extent of any differences and their impact on the audit.

- (iv) The external auditor's opinion is also required on whether
 - the proceeds of the ADB's loan have been utilized only for the project as stated in the Loan Agreement;
 - the financial information contains data specifically agreed upon between the Recipient or EA and 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.
- (v) The Auditor's Report is to clearly state the reasons for any opinions that are qualified, adverse, or disclaimers.
- (vi) Actions on deficiencies disclosed by the external auditor in its report are to be resolved by the Recipient or Executing Agency 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 Recipient or EA.
4. Compliance with these ADB requirements will be monitored by review missions and during normal project supervision, and followed up regularly with all concerned, including the external auditor.

ANNEX A: SAMPLE FORM OF AUDITOR'S OPINION

Imprest Account

We have examined the Statement of Imprest Account of Loan No 2261-CAM for the period 1 January 2008 to 31 December 2008, pursuant to the Agreement signed between the Government and the Asian Development Bank on 01 December 2006.

Our examination was made in accordance with generally accepted auditing standards emphasizing on the adequacy and completeness of the supporting documents of the Imprest Account and other auditing procedures as we considered necessary in the circumstances;

In our opinion, the Statement of Imprest Account and supporting documents and information submitted with them (can/ cannot) be fairly relied on to support the applications for reimbursement/payment in accordance with ADB's requirements as set out in the Loan Agreement.

STATEMENT OF EXPENDITURE

We have also examined the Statements of Expenditure submitted to ADB during the period in support of applications for liquidation of the Imprest, pursuant to the above-mentioned Loan Agreement. Our examination was made in accordance with generally accepted auditing standards, and, accordingly included such tests of the accounting records, verification of assets and other such auditing procedures as we considered necessary in the circumstances.

In our opinion, the Statement of Expenditures submitted, together with the internal control and procedures involved in their preparation, (can/cannot) be relied on to support the applications for liquidations in accordance with the requirements of the above mentioned Loan Agreement.

LOAN COVENANTS

	Reference in the Loan Agreement	Major Covenants	Deadline for Compliance
1	LA, Sched 5, para. 4	The Borrower shall promptly notify ADB of any proposal to amend, suspend, or repeal any provision of the Governing Laws that would have a material effect on the operations of EDC and EDC's ability to comply with the provisions under this Loan Agreement and the Project Agreement, and shall afford ADB an adequate opportunity to comment on such proposal prior to taking any action thereon	Throughout
2	LA Sched 5, para 10	No later than 3 months prior to the commencement of each fiscal year, beginning with FY 2007, the Borrower shall cause EDC to furnish to ADB a draft Power Development Plan setting forth EDC's power development plans and investment requirements for the subsequent 10 years, and which plan(s) demonstrate to the reasonable satisfaction of ADB, inter alia, that (i) investments are economically and technically justified and constitute a part of the least-cost power expansion program; (ii) EDC has adequate financial and managerial capacity to undertake each investment without adversely affecting its current work program, including timely implementation of the Project; and (iii) EDC is carrying out the Project in a timely manner.	March of every year of implementation
3	LA, Sched 5, para. 11	The Borrower shall ensure that its laws and regulations governing environmental impact assessments, as well as ADB's Environment Policy (2002), are followed. If there is any discrepancy between the Borrower's laws and regulations, and ADB's Environment Policy, then the ADB policy requirements shall apply	Throughout
4	LA, Sched 5, para. 12	The Borrower shall ensure that the contract documents for all civil works under the Project include specific measures in accordance with ADB's Environment Policy to mitigate negative environmental impacts caused by the construction and to give due consideration to prevention of damage to the natural environment in the design, construction, operation and maintenance of Project facilities.	April 2009
5	LA, Sched 5, para. 13	The Borrower shall ensure that EDC implements the Environmental Management Plan (EMP) for the Project, based on the IEE, ensuring that there are adequate budget and staff resources. The Borrower shall ensure that the Project complies with best environmental practices and meets the mitigation and monitoring requirements in a timely manner as described in the IEE and prevents damage to the natural environment as a result of the design, construction,	Throughout

Reference in the Loan Agreement	Major Covenants	Deadline for Compliance
	operation and maintenance of Project facilities. The Borrower and EDC shall cause (i) the contractors engaged under the civil works contracts to comply strictly with all environmental impact mitigation and monitoring requirements set out in the contract documents, and (ii) the consultants engaged for construction supervision to monitor closely the compliance by the contractors with the environmental impact mitigation and monitoring requirements.	
6 LA, Sched 5, para. 14	The Borrower shall ensure that EDC submits a semi-annual monitoring report on the conduct of the IEE and EMP to ADB for review, and which report shall include updates on the development and implementation of mitigation measures. The Borrower shall further ensure that a description of all special measures taken when the Project facilities are being constructed within or adjacent to Bokor National Park's buffer zone, so as to minimize impacts to Bokor National Park, is included in the reports.	June and December of every year
7 LA, Sched 5, para. 15	Land Acquisition and Resettlement. EDC shall be responsible for the acquisition of the land required for the Project and for compensation and, if required, relocation, resettlement, and rehabilitation of Project affected people. EDC shall ensure that such land acquisition, compensation, relocation, resettlement and rehabilitation is carried out in accordance with RPs and RF agreed upon between the Borrower and ADB, the Borrower's laws, regulations, and procedures and ADB's requirements as defined in ADB's Policy on Involuntary Resettlement. In case of discrepancies between the Borrower's laws, regulations, and procedures and ADB's requirements, ADB's requirements shall apply.	Throughout
8 LA, Sched 5, para. 16	Prior to commencement of any resettlement activities, including the detailed measurement survey, EDC shall engage and mobilize (a) resettlement specialist consultants (as part of the Project implementation consultants) to assist in preparing and implementing the RPs, and (b) an independent monitoring organization (IMO). EDC shall appoint at least one full-time resettlement staff who is a recent social science graduate and ensure, through its PMU, that provincial and district resettlement committee authorities are appointed.	15 August 2008
9 LA Sched 5, para 17	The Borrower shall ensure that EDC has taken all needed actions to ensure that (a) the resettlement planning and implementation is carried out promptly and efficiently in accordance with all Government laws and regulations, ADB's Policy on Involuntary Resettlement, and the approved RP and RF for complementary mitigation and enhancement	Throughout

Reference in the Loan Agreement	Major Covenants	Deadline for Compliance
	activities to assist socially and economically vulnerable groups such as women-headed families, children and elderly people without support structures, people living in extreme poverty and indigenous and ethnic minorities.; (b) all affected people are given adequate opportunity to participate in resettlement planning and implementation; (c) all APs are compensated and assisted prior to displacement from their houses, land, and assets; (d) implementation of RPs is monitored by EDC and provincial resettlement committees, and the IMO, and related reports are submitted to ADB and EDC through the quarterly monitoring reports; (e) the RP for the distribution is prepared in accordance with the RF, and disclosed to the APs before being submitted to ADB for review and approval; (f) each final and updated RP including compensation rates is translated into Khmer and placed in commune and district offices, and summaries in the form of information booklets including compensation rates are distributed to all APs.	
10 LA Sched 5, para 18	The Borrower shall ensure that EDC; (a) allocates and disburses funds needed for land acquisition and resettlement in a timely manner; (b) the RP is updated and submitted to ADB after completing the DMS and detailed design and approved by ADB before it is implemented; and (c) ADB is promptly advised of any changes in the resettlement impacts and if necessary a revised RP is submitted to ADB for concurrence.	Throughout
11 LA Sched 5, para 19	The Borrower shall ensure timely provision of counterpart funds to EDC for land acquisition, resettlement and monitoring activities specified in the RPs and will meet any unforeseen obligations in excess of the RP budget estimate in order to satisfy resettlement objectives. The Borrower shall ensure that counterpart funds for compensation and entitlements under the RPs are fully directed to APs prior to their displacement from housing and prior to loss of land,-livelihood and other assets or both.	Throughout
12 LA Sched 5, para 20	No Construction civil works shall commence in a specified geographic area prior to EDC having satisfactorily completed in that area, and in accordance with the approved RP, compensation payment and relocation, if any, and having ensured that all rehabilitation assistance to Project affected persons is in place and that the specified geographic area required for civil works is free of all encumbrances.	Throughout
13 LA Sched 5, para 21	The Borrower shall provide to the IMO, at no cost, all documents required to monitor the resettlement process, specifically including the RPs, RF, DMS documents, signed	Throughout

Reference in the Loan Agreement	Major Covenants	Deadline for Compliance
	agreements with APs and all associated documents which may be requested by the IMO.	
14 LA Sched 5, para 22	The Borrower shall ensure that EDC includes the following conditions in the civil works contract documents: (i) mandatory provisions on health, sanitation and appropriate working conditions, including accommodation, for construction workers at campsites during the construction period; (ii) requirements that the contractor comply with all applicable labor laws, including elimination of gender differentiated employment conditions, wages or food rations, and that it will not employ child labor in construction activities; (iii) employment targets for women; (iv) appropriate child care facilities in campsites with women employees will be provided; and (v) requirements that the contractor will carry out through a budgeted line item for a qualified NGO or other appropriate body, a dissemination campaign or campaigns on the risks of sexually transmitted disease (including HIV/AIDS), and on the risks of trafficking women and children, to (a) those employed during Project implementation and (b) communities in the Project area.	Throughout
15 LA, Sched 5, III. 5a-d	The Borrower shall ensure that EDC, unless otherwise agreed with ADB, meets the following conditions. For the purposes of this Loan Agreement, all financial calculations, ratios, and financial covenants shall be calculated from EDC's consolidated financial statements: (a) A minimum debt service coverage ratio of 1.3 is achieved in FY2007 and maintained thereafter; (b) A debt to equity ratio (as those terms are defined in the Project Agreement) of 70:30 shall be maintained through fiscal year 2010; (c) EDC shall produce a revenue breakeven thereafter, such that total operating revenues are equivalent to or not less than the sum of total operating expenses less depreciation costs; (d) Total accounts receivable shall be maintained at a level that does not exceed the equivalent of 3 months' average sales revenue.	Every year
16 LA, Sched 5, III. 6	Beginning with the proposed Budget Law for 2007, and for every fiscal year thereafter, unless otherwise agreed by the Borrower and ADB, the Borrower shall earmark an estimated expenditure, in the contingency line items (Chapter 40) of the draft Budget Law, equivalent to input VAT chargeable to EDC as recorded by the CD against an estimated amount that the CD would record as revenue in from VAT. Pursuant to such budget allocation, the Borrower shall annually offset against the input VAT owed by EDC to CD.	Yearly
17 LA, Sched 5, III. 7	Beginning with the proposed Budget Law for 2007, and for	Yearly

Reference in the Loan Agreement	Major Covenants	Deadline for Compliance
	every fiscal year thereafter, unless otherwise agreed by the Borrower and ADB, the Borrower shall earmark an estimated expenditure, in the contingency line item (Chapter 40) of the draft Budget Law, equivalent to the amount levied by TD for input VAT against EDC's liability on interest and principal payments due to the Borrower under subsidiary loans to EDC using funds provided by ADB and the World Bank. Pursuant to such budget allocation, the Borrower shall annually offset against the input VAT owed by EDC to TD.	
18 LA, Sched 5, III. 8	Beginning with the proposed Budget Law for 2007, and every fiscal year thereafter, unless otherwise agreed by the Borrower and ADB, the Borrower shall make a budget estimate for each fiscal year of the electricity consumption of the Borrower's agencies, institutions and local authorities, taking into account their respective actual electricity consumption of the previous year as calculated by EDC. Using this calculation, the Borrower shall, 3 months prior to the end of the fiscal year, earmark from a total budget for each agency, institution, and local authority a sufficient amount to meet expected electricity consumption, and shall deduct such amount from the respective budgets for direct payment or credit to EDC. By 30 June 2007 the Borrower shall have used a similar procedure to pay or credit in full to EDC the past due arrears of the Borrower's agencies, institutions, and local authorities for the fiscal year 2006.	Yearly
19 LA Sched 5, V.10	EDC's Power Development Plan. No later than 3 months prior to the commencement of each fiscal year, beginning with FY 2007, the Borrower shall cause EDC to furnish to ADB a draft Power Development Plan setting forth EDC's power development plans and investment requirements for the subsequent 10 years, and which plan(s) demonstrate to the reasonable satisfaction of ADB, inter alia, that (i) investments are economically and technically justified and constitute a part of the least-cost power expansion program; (ii) EDC has adequate financial and managerial capacity to undertake each investment without adversely affecting its current work program, including timely implementation of the Project; and (iii) EDC is carrying out the Project in a timely manner.	March of every year
20 LA Sched 5, para 1	Established, Staffed, and Operating PMU/PIU EDC, as the Project EA shall be responsible for Project Implementation. EDC shall ensure that throughout Project implementation the PMU shall be headed by a senior staff member with experience and qualifications acceptable to ADB as Project Manager, and shall further include an adequate number of suitably qualified and experienced administrative and technical staff assigned on a full time basis experienced in previous ADB-financed transmission	Throughout

Reference in the Loan Agreement	Major Covenants	Deadline for Compliance
	line projects .EDC will assign at least three experienced and qualified engineers on a full time basis to liaise and work with Project implementation consultants.	
21	Fielding of Consultants	
22	By 30 June 2007 EC shall have appointed two recent graduates in environmental and social science (or other disciplinary area as agreed by ADB) assigned to the EDC social and environmental unit.	30 June 2007
23 LA Sched 5, para 3	The PMU shall manage and supervise the Project and shall assign appropriate qualified resettlement staff for the periods necessary and with responsibilities for social issues, including (i) resettlement planning and management, (ii) HIV/AIDS awareness program, (iii) poverty and social impact assessment, and (iv) labor practices.	June 2008
24 LA, Sched 5, para 9	Operational Matters. Except as the Borrower and ADB may otherwise agree, the Borrower shall ensure that EDC takes all necessary action to maintain transmission and distribution losses at a level not exceeding 16% in FY2006 and in each subsequent fiscal year.	Yearly
25 LA Sched 5, para 23	The Borrower shall ensure that EDC conducts performance monitoring using agreed upon and measurable performance targets utilizing EDC's customer database, with a separate category for poor consumers (defined as those utilizing 50 kilowatt hours of electricity per month or less). Monitoring of EDC's Sihanoukville branch shall include an assessment of the effectiveness of demand management and consumer services.	Yearly
26 LA Sched 5, para 24	The Borrower shall ensure that within the first year after completion of the 230 kV transmission lines from Kampot to Sihanoukville a baseline survey is carried out by EDC to monitor connection rates of households, electricity expenditures, and other relevant indicators as agreed upon with ADB.)	June 2010
27 LA Sched 5, para 25	The Borrower shall ensure that within two years after the baseline survey is concluded, EDC conducts an impact survey, including indicators as agreed upon with ADB, to monitor the Project's sustainability and development impacts. The impact survey shall cover the same households, to the extent possible, as were included in the	June 2012

	Reference in the Loan Agreement	Major Covenants	Deadline for Compliance
		baseline survey. Analysis or survey data shall be submitted to ADB within one month of the impact survey's completion.	
28	LA Sched 5, para 26	The Borrower shall establish committees on procurement in accordance with the Borrower's Procurement Manual (2005), which shall supervise the entire procurement process. The Major Committee on Procurement, as defined by the Procurement Manual, shall be established by 31 March 2007 and chaired by a representative from EDC.	31 March 2007

RELEVANT DOCUMENTS

The following are a list of ADB's reference materials.

A. Project Related

1. Report and Recommendation of the President to the Board of Directors
2. Loan Agreement
3. e-Handbook on Project Implementation
<http://www.adb.org/Documents/Handbooks/Project-Implementation/default.asp>

B. Consultants. May be downloaded from the following website:

<http://www.adb.org/Consulting/documents.asp>

4. Guidelines on the Use of Consultants by ADB and Its Borrowers
5. Handbook for Users of Consulting Services

C. Procurement. May be downloaded from the following website:

<http://www.adb.org/Procurement/prequalification-bid-documents.asp>

6. Guidelines on Procurement under ADB Loans
7. Guide on Bid Evaluation
8. Handbook on Policies, Practices and Procedures Relating to Procurement Under ADB Loans
9. Handbook on Problems in Procurement for Projects Financed by ADB
10. Standard Bidding Documents: Procurement of Goods (including related services)
 Single-stage: One-Envelope
 Single-stage: Two-Envelope
 Two-stage: Two-Envelope
 Two-stage User's Guide
11. Guide on Prequalification of Civil Works Contractors
12. Sample Bidding Documents – Procurement of Civil Works
13. Sample Bidding Documents – Procurement of Civil Works (Small Contracts)
14. Guide on Community Participation in Procurement
15. Contract Awards and Disbursement Projections

D. Disbursement

16. Disbursement Letter issued by Controller's Department
17. Loan Disbursement Handbook

http://www.adb.org/documents/handbooks/loan_disbursement/default.asp

E. General – may be downloaded or browsed from the following website:

<http://www.adb.org/Integrity/>
<http://www.adb.org/Documents/Policies/Environment/default.asp>
http://www.adb.org/Documents/Policies/Involuntary_Resettlement/default.asp
http://www.adb.org/Documents/Policies/Indigenous_Peoples/default.asp

18. Anticorruption Policy
19. Anticorruption Policy: Description and Answers to Frequently Asked Questions
20. Guidelines for Economic Analysis of Projects
21. Ethnic Group Development Plan Framework
22. Environmental Assessment and Review Procedure
23. Handbook on Management of Project Implementation
24. e-Handbook on Project Implementation
<http://www.adb.org/Documents/Handbooks/Project-Implementation/default.asp>