

# Project Administration Manual

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Project Number: 42378  
Loan No.: XXXX  
November 2013

People's Republic of Bangladesh: Power System  
Expansion and Efficiency Improvement Investment  
Program-Tranche 2



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## **Project Administration Manual Purpose and Process**

The project administration manual (PAM) describes the essential administrative and management requirements to implement the Tranche 2 on time, within budget, and in accordance with Government and Asian Development Bank (ADB) policies and procedures. The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The executing and implementing agencies are wholly responsible for the implementation of ADB financed Tranche 2, as agreed jointly between the borrower and ADB, and in accordance with Government and ADB's policies and procedures. ADB staff is responsible to support implementation including compliance by executing and implementing agencies of their obligations and responsibilities for Tranche 2 implementation in accordance with ADB's policies and procedures.

At Loan Negotiations the borrower and ADB shall agree to the PAM and ensure consistency with the Loan agreement. Such agreement shall be reflected in the minutes of the Loan Negotiations. In the event of any discrepancy or contradiction between the PAM and the Loan Agreement, the provisions of the Loan Agreement shall prevail.

After ADB Management approval of the Tranche's Periodic Financing Request Report changes in implementation arrangements are subject to agreement and approval pursuant to relevant Government and ADB administrative procedures (including the Project Administration Instructions) and upon such approval they will be subsequently incorporated in the PAM.

## ABBREVIATIONS

ADB	=	Asian Development Bank
ADF	=	Asian Development Fund
AFD	=	French Agency for Development
AFS	=	audited financial statements
DESCO	=	Dhaka Electricity Supply Company Limited
DMF	=	design and monitoring framework
DPDC	=	Dhaka Power Distribution Company Limited
DPP	=	Development Project Proposal
EA	=	executing agency
EIA	=	environmental impact assessment
EMP	=	environmental management plan
ERD	=	Economic Relations Division
FMA	=	financial management assessment
FFA	=	framework financing agreement
FIRR	=	financial internal rate of return
GACAP	=	governance and anticorruption action plan
GDP	=	gross domestic product
IA	=	implementing agency
ICB	=	international competitive bidding
IEE	=	initial environmental examination
IsDB	=	Islamic Development Bank
kV	=	kilo volt
LIBOR	=	London interbank offer rate
MFF	=	multitranches financing facility
MOU	=	memorandum of understanding
MPEMR	=	Ministry of Power, Energy and Mineral Resources
MW	=	megawatt
OCR	=	ordinary capital resources
PAI	=	project administration instructions
PAM	=	project administration manual
PGCB	=	Power Grid Company of Bangladesh
PMU	=	project management unit
RP	=	resettlement plan
RRP	=	report and recommendation of the President to the Board
SOE	=	statement of expenditures
SPS	=	Safeguard Policy Statement
TOR	=	terms of reference



## I. PROJECT DESCRIPTION

1. The Government of Bangladesh has prepared an investment program worth of \$12.15 billion for the period of 2012-2015 with the objectives of increasing electrification rate to 68%, eliminating the supply demand gap and resolving reliability and supply quality issues. The Government's investment program plans to expand generation and undertake matching investments of transmission and distribution improvements. The multitranche financing facility (MFF) approved on 28 Nov 2012 supports selected items from the Government's investment program<sup>1</sup>. The MFF funds power sector investments in generation, transmission and distribution systems in Bangladesh to improve efficiency in these systems and add capacity for increased and reliable energy access to the population. The MFF consisted of three tranches to undertake these investments in a staggered manner. The proposed tranche 2 meets the selection criteria set forth in the Schedule 4 of the FFA. It will undertake investments in transmission and distribution network strengthening. Thus the Tranche 2 helps achieving the outcome of the MFF – Increased access to clean and reliable supply of electricity in Bangladesh.

### A. Impact and outcome

2. The proposed Tranche 2 will contribute to the overall impact of the MFF on increased energy sector contribution to low-carbon economic growth in Bangladesh. The specific impact of the Tranche 2 will be increased access to reliable supply of electricity. The outcome of Tranche 2 is increased transmission and distribution capability in the power system. This will allow increased power transfer from Ghorasal to Tongi and to increased transmission capability to satisfy the increasing demand in Dhaka, Chittagong and Sylhet areas. Also the investments will allow improved distribution networks in the Dhaka region to supply increasing demand in the system to ensure no load-shedding due to network constraints by 2018.

### B. B. Outputs

3. Tranche 2 consists of three outputs; (i) increased Transmission Capacity where 400kV, 230kV and 132kV transmission system is strengthened with 157.3 km of transmission lines and substations with a total capacity of 4410MVA (ii) increased south Dhaka distribution network capacity with a total of 1700MVA transformer capacity and associated lines (750km) added to the distribution network and (iii) increased north Dhaka distribution network capacity with a total of 1800MVA of transformer capacity and 770 circuit kilometers of associated lines added to the distribution network. Within the distribution system related outputs are the implementation of a program of support for community development addressing three distinct areas (i) minimizing and avoiding where possible, the adverse impact of subprojects on women and children and (iii) facilitate economic benefits to women during project implementation and (iii) support the process of improvement of socio-economic conditions of women within the project.

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<sup>1</sup> ADB. 2012. *Report and Recommendation of the President to the Board of Directors: Multitranche Financing Facility to Bangladesh for the Power System Expansion and Efficiency Improvement Program*. Manila.

## II. IMPLEMENTATION PLANS

4. The Tranche will be implemented over 5 years starting from January 2014. The physical completion is expected by 31 December 2018. The loan closing date is 30 June 2019. Details on the implementation arrangements are shown in below.

### Implementation Arrangements

Aspects	Arrangements		
Implementation period	1 Jan 2014 – 31 Dec 2018		
Estimated completion date	30 Jun 2019		
Management			
(i) Oversight body	Power Division, MPE&MR		
(ii) Executing agencies	PGCB, DPDC, DESCO		
(iii) Implementation unit	Project Management Unit established in each of the EAs each with 6-8 professional staff and other support staff		
Procurement	International competitive bidding	5 packages	\$338.09 million <sup>a</sup>
Consulting services	None funded under ADB financing		
Retroactive finance and advance contracting	(i) Retroactive financing has been requested for eligible expenditure, not exceeding the amount of 20% of the loan amount, incurred before loan effectiveness, but not earlier than 12 months before the signing of the loan agreement. (ii) Advance contracting is to be undertaken, including preparation of bidding documents, inviting and receiving bids for contracts.		
Disbursement	The loan proceeds will be disbursed in accordance with ADB's Loan Disbursement Handbook (2012, as amended from time to time) and detailed arrangements agreed upon between the government and ADB.		

<sup>a</sup> Includes \$ 36.13 million to be financed by DPDC and DESCO to cover a portion of the base cost.

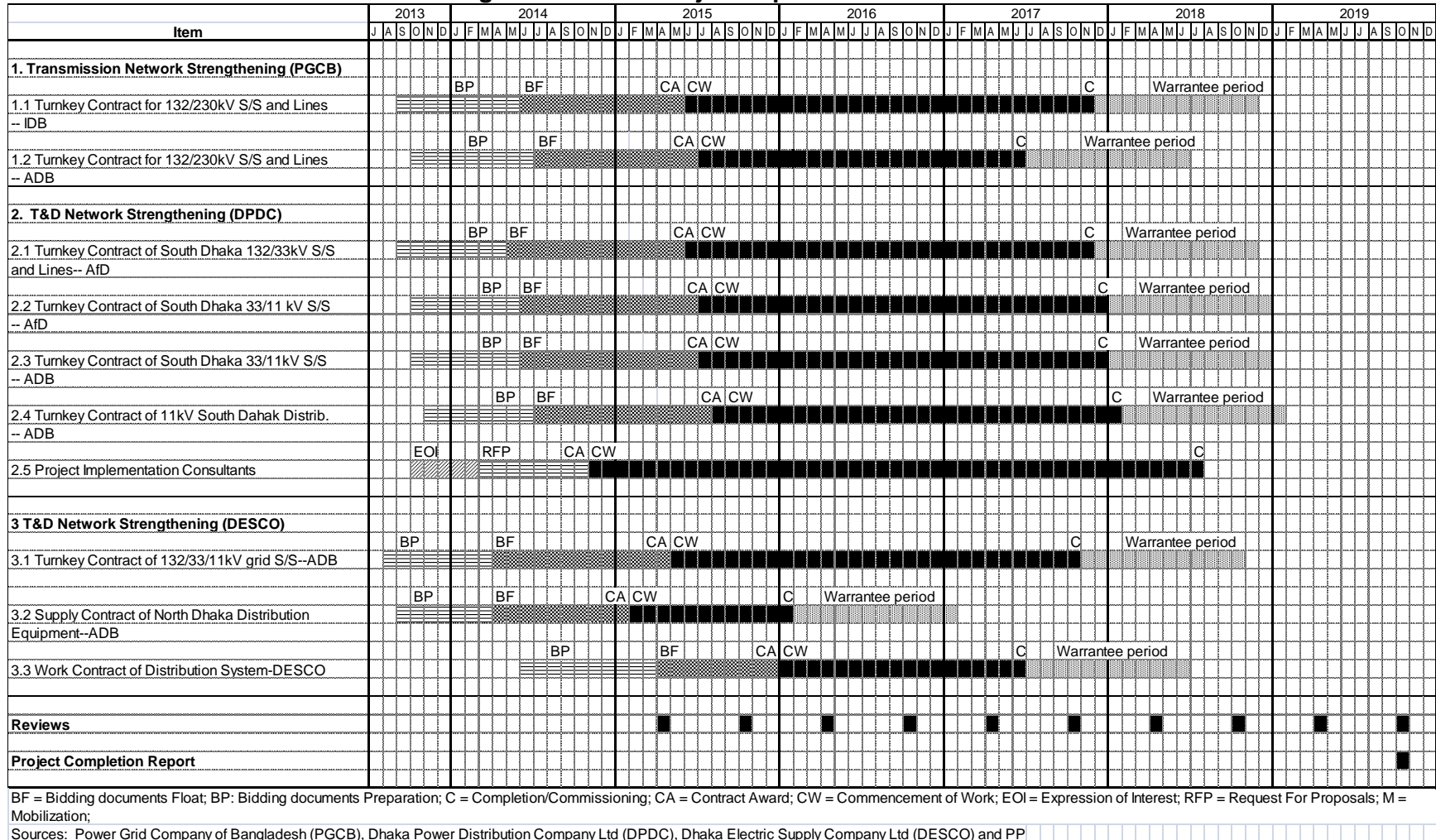
### A. Project Readiness Activities

	2013						2014						Responsibility
	Month						Month						
Indicative Activities	7	8	9	10	11	12	1	2	3	4	5	6	
Advance contracting actions			x										PGCB/DPDC/DESCO/MPEMR
Retroactive financing actions			x										PGCB/DPDC/DESCO/MPEMR
ADB approval						x							ADB
Loan signing							x						ERD/ADB
Government legal opinion provided								x					Ministry of Laws
Government budget inclusion											x		MPEMR
Loan effectiveness										x			ADB



## B. Overall Project Implementation Plan

Figure 1: Overall Project Implementation Plan



### III. PROJECT MANAGEMENT ARRANGEMENTS

#### A. Project Stakeholders – Roles and Responsibilities

Project Stakeholders	Management Roles and Responsibilities
<i>Steering Committee:</i>	<ul style="list-style-type: none"> <li>Chaired by Secretary, Power Division, MOPEMR, and consisting of Chairman BPDB, Managing Directors of PGCB, NWPGCB, DESCO, DPDC and Chairman REB, responsible for coordination among the Executive Agencies.</li> </ul>
<i>Executing Agencies:</i>  Power Grid Company of Bangladesh (PGCB)  Dhaka Power Distribution Company Limited (DPDC)  Dhaka Electricity Supply Company Limited (DESCO)	<ul style="list-style-type: none"> <li>PGCB will implement transmission component</li> <li>DPDC will implement south Dhaka distribution network component</li> <li>DESCO will implement north Dhaka distribution network component</li> </ul>
<i>Project Management Units</i>	<ul style="list-style-type: none"> <li>PMUs will be established within each EA for implementing, monitoring, and reporting on the progress of project implementation to ADB and the government</li> </ul>
<i>Asian Development Bank</i>	<ul style="list-style-type: none"> <li>Will undertake regular project reviews and facilitate in implementation of the projects</li> </ul>

#### B. Key Persons Involved in Implementation

Executing Agencies	
PGCB	Chowdhury Alamgir Hossain Managing Director (In-charge) Telephone: +880 2 9560883 Fax: +880 2 7171833 E-mail: <a href="mailto:md@pgcb.org.bd">md@pgcb.org.bd</a>
DPDC	Md. Nazrul Hasan Managing Director Telephone: +880 2 9563520 Cell: +880 1 730 335000 Fax: +880 2 9566699 E-mail: <a href="mailto:md@dpdc.org">md@dpdc.org</a>  Eftekhar Uddin Feroz Chief Engineer, Contracts & Procurement Telephone: +880 2 9564168 Cell: +880 1 713 255006 Fax: +880 2 9567258 E-mail: <a href="mailto:gmtcp@dpdc.org">gmtcp@dpdc.org</a> <a href="mailto:eftekharferoz@yahoo.com">eftekharferoz@yahoo.com</a>

DESCO	<p>Shah Alam  Director (Engineering)  Telephone: +880 2 8900808  Cell: +880 1 713 090467  Fax: +880 2 8900100  E-mail: <a href="mailto:sed.ho@desco.org.bd">sed.ho@desco.org.bd</a></p> <p>Md. Sazzad Ahmed  Sub-Divisional Engineer (Project Planning)  Telephone: +880 2 8900110  Cell: +880 1 755 637508  Fax: +880 2 8900100  E-mail: <a href="mailto:sazzad@desco.org.bd">sazzad@desco.org.bd</a></p>
<b>Asian Development Bank</b>	
Division Director	<p>Yongping Zhai  Director, Energy Division  Telephone No.: (63-2) 632-5976  Email address: <a href="mailto:yzhai@adb.org">yzhai@adb.org</a></p>
Mission Leader	<p>Priyantah Wijayatunga  Principal Energy Specialist  Telephone No.: (63-2)  Email address: <a href="mailto:pwijayatunga@adb.org">pwijayatunga@adb.org</a></p>

### C. Project Organization Structure

5. Power Grid Company of Bangladesh (PGCB), Dhaka Power Distribution Company Limited (DPDC), and Dhaka Electricity Supply Company Limited (DESCO) will be the executing agencies with overall responsibility for the implementation of respective project components. PGCB will implement transmission components. DPDC and DESCO will implement distribution components. Project management units (PMU) will be established within each executing agency for implementing, monitoring, and reporting on the progress of project implementation to ADB and the government. The PMUs' responsibilities will include (i) overall coordination, macro level project management and monitoring; (ii) annual budget preparation and monitoring utilization of loan proceeds; (iii) progress reporting, including reports on cost management and project impact; and (iv) ensuring compliance with loan covenants. The PMUs will also be responsible for administration, and financial and technical supervision of the subprojects, including procurement of goods and services, engagement of consultants, engineering and construction contractors, and monitoring subproject operation performance.

### IV. COSTS AND FINANCING

6. The Tranche 2 is estimated to cost \$ 1,055 million. The cost estimate is inclusive of taxes, duties, interest and other charges on the loan during construction. The Government has requested a loan of \$310 million from ADB's ordinary capital resources (OCR) to finance the key components of the project. The loan will have a twenty five - year term including a grace period of five years, and annual interest rate determine in accordance with ADB's London interbank

offered rate (LIBOR)–based lending facility, a commitment charge of 0.15% and such other terms and conditions as agreed in the draft the loan and project agreements. The government has provided ADB with (i) the reasons for its decision to borrow under ADB’s LIBOR-based lending facility based on these terms and conditions, and (ii) an undertaking that these choices were its own independent decisions and not made in reliance on any communications or advice from ADB.

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

	Component								
	Total	Part A		Part B				Part C	
		1&2	3	4	5	6	7	8	9
<b>A. Investment Costs<sup>1</sup></b>									
Turnkey and supply contract Costs	626.12	206.76	31.3	88.86	28.56	35.00	40.00	115.79	79.85
Social Safeguards	1.25	0.99	0.25					0.01	
Support for community development	0.24						0.08		0.16
Implementation support	1.00						1.00		
Taxes & Duties	168.18	39.24	5.95	25.18	8.09	9.92	11.33	40.52	27.95
<b>B. Recurrent Costs</b>	137.95		20.00	7.50	8.41	10.85	7.30	17.98	65.91
<b>C. Total Base Costs</b>	<b>934.77</b>	<b>246.99</b>	<b>57.50</b>	<b>121.54</b>	<b>45.06</b>	<b>55.77</b>	<b>59.71</b>	<b>174.30</b>	<b>173.87</b>
<b>D. Contingencies<sup>2</sup></b>	<b>97.35</b>	<b>31.03</b>	<b>4.12</b>	<b>12.25</b>	<b>4.74</b>	<b>5.89</b>	<b>6.02</b>	<b>22.09</b>	<b>11.21</b>
<b>Physical</b>	46.74	12.34	2.875	6.077	2.253	2.7885	2.9855	8.715	8.6935
<b>Price</b>	50.61	18.68	1.25	6.18	2.49	3.1	3.03	13.37	2.52
<b>A. Financing Charges During Implementation<sup>3</sup></b>	22.91		10.89				7.45		4.57
<b>Total Project Cost</b>	<b>1,055.00</b>		<b>350.53</b>				<b>318.43</b>		<b>386.04</b>

<sup>1</sup> In 2013 prices.

<sup>2</sup> Price contingencies are computed using foreign cost escalation factors of 2.2%, 1.9% and 1.8% for year 2014, 2015 and 2016 respectively; and local currency escalation factors of 7.0%, 6.5% and 6.5% for year 2014, 2015 and 2016 respectively; and are subject to adjustment.

<sup>3</sup> Including interest and commitment charge. Interest during implementation is calculated at 1.40%; and commitment charge at 0.15% of undisbursed funds.

Source: Asian Development Bank assessment

7. Table 2 provides the details of costs and the financing sources. ADB will provide \$310 million to finance components 3, 6, 7, 8 and 9 of the project. The component 1 of the project will be financed by Islamic Development Bank (IDB) while components 3 and 4 will be financed by Agence Française de Développement (AFD). The funds of IDB and AFD will be administered by themselves. Counterpart funding will also be provided by the EAs and the Government for each of the components. The Government will on-lend the funds to the EAs in equivalent local currency at an interest rate of 4% per annum.

**Table 2: Financing Plan**

Financing	Part A	Part B	Part C	Total	%
Asian Development Bank	35	75	200	310.00	29%
Islamic Development Bank	220	-	-	220.00	21%
Agence Française de Développement	-	125	-	125.00	12%
GoB/EA <sup>1</sup>	95	118	187	400.00	38%
<b>Total Project Cost</b>				1,055.00	100%

GOB = Government of Bangladesh; EA = executing agency

Source: Asian Development Bank assessment

## A. Detailed Cost Estimates by Expenditure Category

Item	Bangladesh Taka million	US \$ million	% of Total
	Total Cost	Total Cost	Base Cost
<b>A. Investment Cost</b>			
<b>1. Transmission Network Strengthening (PGCB)</b>			
1.1 Turnkey Contract for 132&230 kV S/S and Lines-IDB	16,127.28	206.76	22.1%
1.2 Turnkey Contract for 132/230kV S/S and Lines-ADB	2,443.74	31.33	3.4%
<b>2. T&amp;D Network Strengthening (DPDC)</b>		0.00	
2.1 Turnkey Contract of South Dhaka 132/33kV S/S and Lines-AfD	6,931.08	88.86	9.5%
2.2 Turnkey Contract of South Dhaka 33/11 kV S/S - AfD	2,227.68	28.56	3.1%
2.3 Turnkey Contract of South Dhaka 33/11kV S/S -ADB	2,730.00	35.00	3.7%
2.4 Turnkey Contract of 11kV South Dhaka Distribution-ADB	3,120.00	40.00	4.3%
2.5 Implementation Support Consultants	78.00	1.00	0.1%
<b>3. T&amp;D Network Strengthening (DESCO)</b>			
3.1 Turnkey Contract of 132/33/11kV grid S/S	9,031.62	115.79	12.4%
3.2 Supply Contract of North Dhaka Distribution Equipment	6,228.30	79.85	8.5%
<b>4. Safeguards Mitigation Cost</b>	116.22	1.49	0.2%
<b>5. Taxes and duties</b>			
5.1 Taxes and duties for PGCB	3,524.82	45.19	4.8%
5.2 Taxes and duties for DPDC	4,252.56	54.52	5.8%
5.3 Taxes and duties for DESCO	5,340.66	68.47	7.3%
<b>B. Recurrent Costs</b>			
1. Overhead, administration cost of PGCB	1,560.00	20.00	2.1%
2. Overhead, administration cost of DPDC	2,656.68	34.06	3.6%
3. Overhead, administration cost of DESCO	6,543.42	83.89	9.0%
<b>Total Base Cost</b>	<b>72,912.06</b>	<b>934.77</b>	<b>100.0%</b>
<b>C. Contingencies</b>			
for PGCB	2757.17	27.94	3.8%
for DPDC	2266.92	23.54	3.1%
for DESCO	2612.05	27.55	3.6%
<b>D. Interest during Implementation</b>	1797.06	22.91	2.5%
<b>Total Project Cost (A+B+C+D)</b>	<b>82,290.00</b>	<b>1,055.00</b>	<b>112.9%</b>

### Assumptions:

- 1 Cost updated as on Q2 2013 Prices  
IDC for ADB loan has been calculated at rate of Libor plus. IDC for other cofinancers is subject to negotiation. All financers' IDC are paid by
- 2 GOB.

**B. Allocation and Withdrawal of Loan Proceeds**

CATEGORY			ADB FINANCING BASIS	
S.N.	Item	Amount Allocated for ADB Financing (US\$ million)		Percentage and Basis for Withdrawal from the Loan Account
		Category	Subcateg.	
1	PGCB's 132/230kV S/S and Lines	31.33		100% of total expenditure claimed*
2	DPDC's S/S and Distribution Lines	75.00		100% of total expenditure claimed*
3	DESCO's S/S and Distribution Equipment	195.64		100% of total expenditure claimed*
4	Unallocated	8.03		
	Unallocated for PGCB		3.67	
	Unallocated for DESCO		4.36	
5	Total	310.00		

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

### C. Detailed Cost Estimates by Financers

Item	Total Cost	ADB Loan	%	(US \$million)		IsDB Fund	%	GOB Fund	%
				AfD Fund	%				
<b>A. Investment Cost</b>									
<b>1. Transmission Network Strengthening (PGCB)</b>									
1.1 Turnkey Contract for 132&230 kV S/S and Lines-IDB	206.76					206.76	100%		
1.2 Turnkey Contract for 132/230kV S/S and Lines-ADB	31.33	31.33	100%						
<b>2. T&amp;D Network Strengthening (DPDC)</b>									
2.1 Turnkey Contract of South Dhaka 132/33kV S/S and Lines-AfD	88.86			88.86	100%				
2.2 Turnkey Contract of South Dhaka 33/11 kV S/S - AfD	28.56			28.56	100%				
2.3 Turnkey Contract of South Dhaka 33/11kV S/S -ADB	35.00	35.00	100%						
2.4 Turnkey Contract of 11kV South Dhaka Distribution-ADB	40.00	40.00	100%						
2.5 Implementation Support Consultants	1.00							1.00	100%
<b>3. T&amp;D Network Strengthening (DESCO)</b>									
3.1 Turnkey Contract of 132/33/11kV grid S/S	115.79	115.79	100%						
3.2 Supply Contract of North Dhaka Distribution Equipment	79.85	79.85	100%						
<b>4. Safeguards Mitigation Cost</b>	1.49							1.49	100%
<b>5. Taxes and duties</b>									
5.1 Taxes and duties for PGCB	45.19							45.19	100%
5.2 Taxes and duties for DPDC	54.52							54.52	100%
5.3 Taxes and duties for DESCO	68.47							68.47	100%
<b>B. Recurrent Costs</b>									
1. Overhead, administration cost of PGCB	20.00							20.00	100%
2. Overhead, administration cost of DPDC	34.06							34.06	100%
3. Overhead, administration cost of DESCO	83.89							83.89	100%
<b>Total Base Cost</b>	<b>934.77</b>	<b>301.97</b>	<b>32%</b>	<b>117.42</b>	<b>13%</b>	<b>206.76</b>	<b>22%</b>	<b>308.62</b>	<b>33%</b>
<b>C. Contingencies</b>									
for PGCB	35.15	3.67	10%			13.24	38%	18.24	52%
for DPDC	28.90	0.00	0%	7.58	26%			21.32	74%
for DESCO	33.30	4.36	13%					28.94	87%
<b>D. Interest during Implementation</b>	22.91							22.91	100%
<b>Total Project Cost (A+B+C+D)</b>	<b>1,055.00</b>	<b>310.00</b>	<b>29%</b>	<b>125.00</b>	<b>12%</b>	<b>220.00</b>	<b>21%</b>	<b>400.00</b>	<b>38%</b>

Assumptions:

- 1 Cost updated as on Q2 2013 Prices
- 2 IDC for ADB loan was calculated at rate of Libor plus. IDC for other cofinancers is subject to negotiation. All financers' IDC are paid by GOB.

## D. Detailed Cost Estimates by Outputs (Parts A, B and C)

Item	Total Cost	(US \$million)					
		Output 1 Amount	Output 1 % of Cost Category	Output 2 Amount	Output 2 % of Cost Category	Output 3 Amount	Output 3 % of Cost Category
<b>A. Investment Cost</b>							
<b>1. Transmission Network Strengthening (PGCB)</b>							
1.1 Turnkey Contract for 132/230kV S/S and Lines-IDB	206.76	206.76	100.0%				
1.2 Turnkey Contract for 132/230kV S/S and Lines-ADB	31.33	31.33	100.0%				
<b>2. T&amp;D Network Strengthening (DPDC)</b>							
2.1 Turnkey Contract of South Dhaka 132/33kV S/S and Lines-AfD	88.86			88.86	100.0%		
2.2 Turnkey Contract of South Dhaka 33/11 kV S/S - AfD	28.56			28.56	100.0%		
2.3 Turnkey Contract of South Dhaka 33/11kV S/S -ADB	35.00			35.00	100.0%		
2.4 Turnkey Contract of 11kV South Dhaka Distribution-ADB	40.00			40.00	100.0%		
2.5 Implementation Support Consultants	1.00			1.00	100.0%		
<b>3. T&amp;D Network Strengthening (DESCO)</b>							
3.1 Turnkey Contract of 132/33/11kV grid S/S	115.79					115.79	100.0%
3.2 Supply Contract of North Dhaka Distribution Equipment	79.85					79.85	100.0%
<b>4. Safeguards Mitigation Cost</b>	1.49	1.24	83.2%	0.08	5.4%	0.17	11.4%
<b>5. Taxes and duties</b>	168.18	45.19	26.9%	54.52	32.4%	68.47	40.7%
<b>B. Recurrent Costs</b>	137.95	20.00	14.5%	34.06	24.7%	83.89	60.8%
<b>Total Base Cost</b>	<b>934.77</b>	<b>304.52</b>	<b>32.6%</b>	<b>282.08</b>	<b>30.2%</b>	<b>348.17</b>	<b>37.2%</b>
<b>C. Contingencies</b>	97.35	35.15	36.1%	28.9	29.7%	33.3	34.2%
<b>D. Interest during Implementation</b>	22.91	10.89	47.5%	7.45	32.5%	4.57	20.0%
<b>Total Project Cost (A+B+C+D)</b>	<b>1,055.00</b>	<b>349.79</b>	<b>33.2%</b>	<b>318.49</b>	<b>30.2%</b>	<b>386.72</b>	<b>36.7%</b>

### Assumptions:

- 1 Cost updated as on Q2 2013 Prices
- 2 IDC for ADB loan was calculated at rate of Libor plus. IDC for other cofinancers is subject to negotiation. All financiers' IDC are paid by GOB.



## E. Detailed Cost Estimates by Year

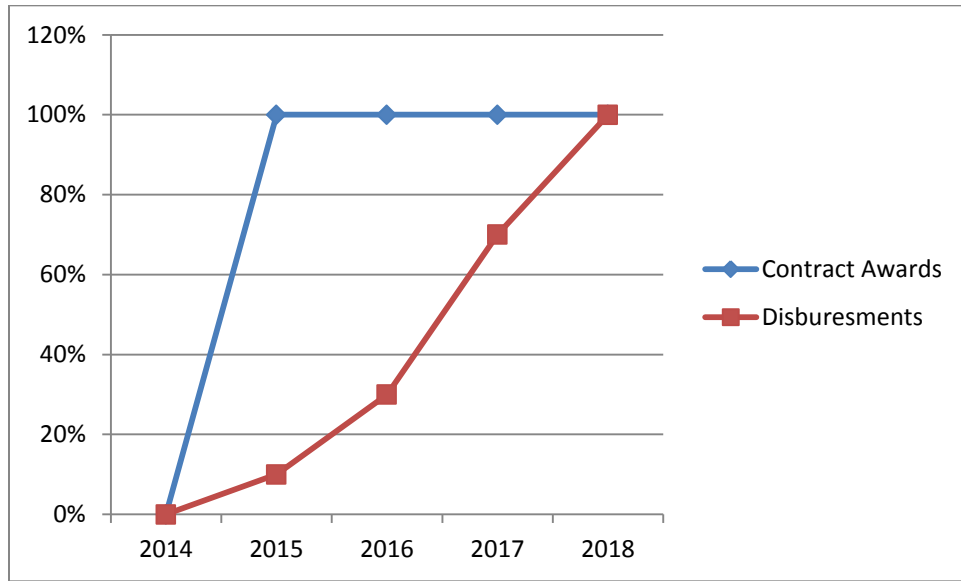
Item	Total Cost*	(US \$million)				
		Year 1	Year 2	Year 3	Year 4	Year 5
<b>A. Investment Cost</b>			0.10	0.20	0.40	0.30
1. <b>Transmission Network Strengthening (PGCB)</b>						
1.1 Turnkey Contract for 132/230kV S/S and Lines-IDB	0.00					
1.2 Turnkey Contract for 132/230kV S/S and Lines-ADB	31.33	0.00	3.13	6.27	12.53	9.40
2. <b>T&amp;D Network Strengthening (DPDC)</b>						
2.1 Turnkey Contract of South Dhaka 132/33kV S/S and Lines-AfD	0.00					
2.2 Turnkey Contract of South Dhaka 33/11 kV S/S - AfD	0.00					
2.3 Turnkey Contract of South Dhaka 33/11kV S/S -ADB	35.00	0.00	3.50	7.00	14.00	10.50
2.4 Turnkey Contract of 11kV South Dhaka Distribution-ADB	40.00	0.00	4.00	8.00	16.00	12.00
2.5 Implementation Support Consultants	0.00					
3. <b>T&amp;D Network Strengthening (DESCO)</b>	0.00					
3.1 Turnkey Contract of 132/33/11kV grid S/S	115.79	0.00	11.58	23.16	46.32	34.74
3.2 Supply Contract of North Dhaka Distribution Equipment	79.85	0.00	7.99	15.97	31.94	23.96
4. <b>Safeguards Mitigation Cost</b>	0.00					
5. <b>Taxes and duties</b>	0.00					
<b>B. Recurrent Costs</b>	0.00					
<b>Total Base Cost</b>	<b>301.97</b>	<b>0.00</b>	<b>30.20</b>	<b>60.39</b>	<b>120.79</b>	<b>90.59</b>
<b>C. Contingencies</b>	8.03				2.03	6.00
<b>D. Interest during Implementation</b>	0.00					
<b>Total Project Cost (A+B+C+D)</b>	<b>310.00</b>	<b>0.00</b>	<b>30.20</b>	<b>60.39</b>	<b>122.82</b>	<b>96.59</b>

Assumptions:

<sup>1</sup> Cost updated as on Q2 2013 Prices

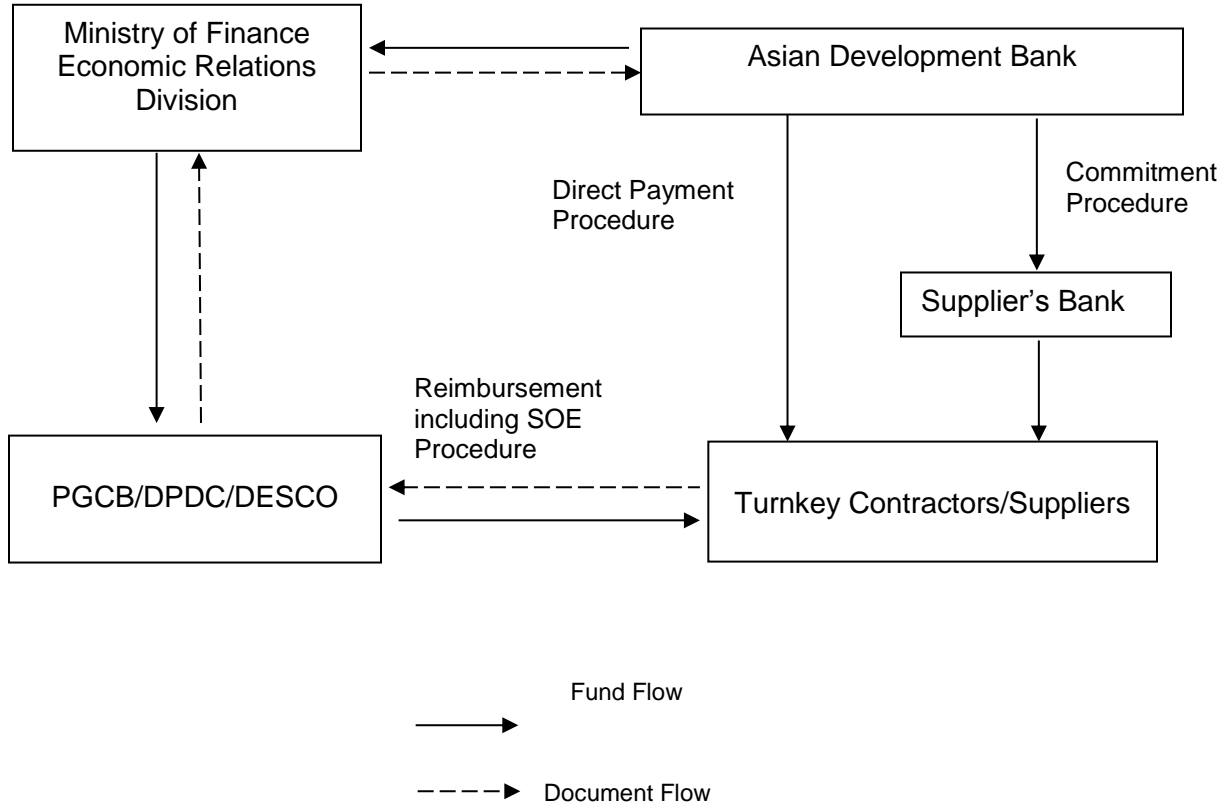
\* ADB or ADB administered co-financer's fund.

**F. Contract Award and Disbursement S-curve for Tranche 2**



**G. Fund Flow for Tranche 2**

**Figure 1: Fund Flow Diagram**



## V. FINANCIAL MANAGEMENT

### A. Summary of Financial Management Assessment for Tranche 2

8. The financial management assessment (FMA) was conducted in accordance with ADB's Guidelines for the Financial Management and Analysis of Projects<sup>2</sup> and Financial Due Diligence: a Methodology Note, and Technical Guidance Notes.<sup>3</sup> The FMA considered the capacity of the PGCB, DPDC, and DESCO, including funds-flow arrangements, governance, staffing, budgeting, accounting and financial reporting systems, internal control procedures, financial information systems, and internal and external auditing arrangements. Based on the analysis, the existing organizational structures are generally well designed and appropriate for the entities and the Project. The fund flow arrangements for all the executing agencies are clearly defined. The current accounting standards, policies, accounting and invoice procedures, asset management, budget, internal and external audits, financial reports, and accounting system are effective for the agencies and appropriate for the Project. The assessment for each EA is in below paragraphs.

9. **PGCB** was incorporated in 1996 in accordance with Companies Act 1994 with main business of power transmission. PGCB has over 2,000 employees and listed on the Dhaka Stock exchange and the Chittagong Stock Exchange. PGCB is the EA for Part A. PGCB follows the accruals basis of accounting. It has an accounting system which is adequate for the recording of all relevant financial transactions of the projects being implemented. The Chart of Accounts of PGCB is adequate to properly record and report on project activities and disbursement categories. The accounts of PGCB are prepared in accordance with the requirements of Bangladesh Financial Reporting Standards (BFRS) and audited annually by a firm of Chartered Accountants. The Financial Statements of PGCB are audited by a firm of Chartered Accountants. The Audit is carried out in accordance with the International Standards of Auditing (ISA), as adopted by the Institute of Chartered Accountants of Bangladesh (ICAB). PGCB is also subject to annual statutory audits of the Commercial Audit Directorate of the Office of the Comptroller and Auditor General (OCAG) of Bangladesh, the Supreme Audit Institution (SAI), for its non-development operations and its development projects are annually audited by the Foreign Aided Projects Audit Directorate (FAPAD) of the OCAG. PGCB has years of experience of implementing Projects financed by ADB and other donors. It has adequately trained personnel to look after all aspects of a foreign-funded project. PGCB has a number of qualified professional accountants heading various accounting/finance offices. Personnel are conversant with all aspects of ADB procedures. The PMU has adequate accounting staff guided by those senior accountants employed at the central level.

10. PGCB's audited financial statements indicate that the company needs to take steps for proper fixed asset register and physical verification of assets and PGCB is undertaking studies for this starting 2012. Audited project financial statements for the past ADB loans were received on time and presented a fair view with audit observations being settled by PGCB. The recommendations on tariff notification, fixed asset register, verification of assets need to be addressed. The audit report for 2012 indicated that a firm of chartered accountants has been hired to undertake valuation and impairment studies and ADB would review the results and the recommendations made by the study on fixed asset register, verification of assts and

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<sup>2</sup> ADB. 2005. *Financial Management and Analysis of Projects*. Manila. Available: <http://www.adb.org/Documents/Guidelines/Financial/default.asp>

<sup>3</sup> ADB. 2009. *Financial Due Diligence: A Methodology Note*. Manila. Available: <http://www.adb.org/documents/financial-due-diligence-methodology-note>

impairments. Review the requirement to support investments and capacity building for PGCB to implement this once identified - Could be under a future Tranche 3 of the MFF.

11. **DPDC** and **DESCO** were incorporated in 2004 and 1996 respectively. DPDC the EA for Part B, and DESCO is the EA for Part C. Both entities have extensive experience in implementing the externally finance projects, especially the ADB projects. The two EAs have experience in the management of foreign exchange risk. Most senior accounting staffs especially general manager, deputy general managers, managers and deputy managers in both EAs have extensive experience on finance and accounting. The accounting staffs in both EAs have been trained in ADB procedures. Both EAs follow Bangladesh Accounting Standards that guide the accounting practice in the country. The two EAs have both entity accounting and project accounting systems. The manuals for the standards, policies, and regulations are used to guide the routine accounting. The existing accounting policies, procedures and regulations are complete and effective, and will apply to the Project. In addition, there are also internal rules and regulations on accounting and finance. The charts of accounts for both entity accounting and project accounting are appropriate for the entity and the Project. The current accounting procedures and invoice procedures are in place and are suitable for the entity and the Project. Both EAs have effective cash management systems, fixed asset management system, and budget systems for control purposes. They have internal audit departments with extensively experienced staff. Both EAs' financial statements are regularly audited by the external auditors based on ISA. The firm's auditor will also be the auditor of the Project. Both the organizations are also subject to annual statutory audits by the Office of the Comptroller and Auditor General (OCAG) of Bangladesh, the Supreme Audit Institution (SAI). Their non-development operations are audited by the Commercial Audit Directorate of the OCAG, while the development projects are audited by the Foreign Aided Projects Audit Directorate (FAPAD) of the OCAG. The financial Statements of the EAs are prepared based on Bangladesh Accounting Standards. The EAs are required to prepare balance sheet, income statement, and cash flow statement every month, and submit those statements with other reports to Board of the firms. The entity accounting system has been computerized for DESCO, but not for DPDC. Based on above, each EA is capable of managing the funds flow, disbursement procedure, accounting and financial reporting under the project. The PMUs in both EAs have adequate accounting staff guided by those senior accountants employed at the central level.

## **B. Disbursement**

12. The Loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2012, as amended from time to time), and detailed arrangements agreed upon between the Government and ADB.

13. Pursuant to ADB's *Safeguard Policy Statement (2009)* (SPS), ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the SPS.

14. ADB's direct payment, commitment, reimbursement including statement of expenditures (SOE) procedures will be followed. Regarding SOE procedure, it will be used for reimbursement for eligible expenditures not exceeding \$100,000 per individual payment. SOE records should be maintained and made readily available for review by ADB's disbursement and review mission or upon ADB's request for submission of supporting documents on a sampling basis, and for independent audit.

15. Before the submission of the first withdrawal application, the Borrower should submit 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 specimen signatures of each authorized person. The minimum value per withdrawal application is US\$100,000, unless

otherwise approved by ADB. The Borrower will consolidate claims to meet this limit for reimbursement claims.

16. Each EA will be responsible for (i) preparing disbursement projections for each year, (ii) requesting budgetary allocations for counterpart funds, (iii) collecting supporting documents, and (iv) preparing and sending withdrawal applications. Withdrawal applications and supporting documents will demonstrate, among other things that the goods, and/or services for all the packages were produced in or from ADB members, and are eligible for ADB financing.

17. Government counterpart funds will be used to finance the remaining miscellaneous works, services, taxes and duties.

### **C. Accounting**

18. Each EA will maintain, or cause to be maintained, separate books and records by funding source for all expenditures incurred on the project. Each EA will prepare consolidated project financial statements in accordance with the government's accounting laws and regulations which are consistent with international accounting principles and practices.

### **D. Auditing and Public Disclosure**

19. Each EA will cause the detailed consolidated project financial statements to be audited in accordance with International Standards on Auditing and with the Government's audit regulations, by an independent auditor acceptable to ADB. The audited project financial statements will be submitted in the English language to ADB within six months of the end of the fiscal year by each EA.

20. Each EA will also cause the entity-level financial statements to be audited in accordance with International Standards on Auditing and with the Government's audit regulations, by an independent auditor acceptable to ADB. The audited entity-level financial statements, together with the auditors' report and management letter, will be submitted in the English language to ADB within one month after their approval by the competent authority.

21. The annual audit report for the project accounts will include an audit management letter and audit opinions which cover (i) whether the project financial statements present a true and fair view or are presented fairly, in all material respects, in accordance with the applicable financial reporting framework; (ii) whether loan and grant proceeds were used only for the purposes of the project or not; (iii) the level of compliance for each financial covenant contained in the legal agreements for the project; (iv) use of the imprest fund procedure; and (v) the use of the statement of expenditure (SOE) procedure certifying to the eligibility of those expenditures claimed under SOE procedures, and proper use of the SOE and imprest procedures in accordance with ADB's Loan Disbursement Handbook and the project documents.

22. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal program supervision, and followed up regularly with all concerned, including the external auditor.

23. The Government and the EAs have been made aware of ADB's policy on delayed submission, and the requirements for satisfactory and acceptable quality of the audited project financial statements.<sup>4</sup> ADB reserves the right to require a change in the auditor (in a manner

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<sup>4</sup> ADB Policy on delayed submission of audited project financial statements:

consistent with the constitution of the borrower), or for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed. ADB reserves the right to verify the project's financial accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures.

24. Public disclosure of the project financial statements, including the audit report on the project financial statements, will be guided by ADB's Public Communications Policy (2011)<sup>5</sup>. After review, ADB will disclose the project financial statements for the project and the opinion of the auditors on the financial statements within 30 days of the date of their receipt by posting them on ADB's website. The Audit Management Letter will not be disclosed.

## VI. PROCUREMENT AND CONSULTING SERVICES

### A. Advance Contracting

25. In order to expedite project implementation, the Borrower has requested and ADB has approved advance contracting actions for the procurement and consulting service. All advance contracting will be undertaken in conformity with ADB's *Procurement Guidelines* (2013, as amended from time to time) (ADB's *Procurement Guidelines*). The issuance of invitations to bid under advance contracting will be subject to ADB's prior approval. The Borrower and the EAs have been advised that approval of advance contracting does not commit ADB to finance the Project.

### B. Procurement of Goods, Works and Consulting Services

26. Goods and works to be financed under the project will be procured in accordance with ADB's Procurement Guidelines (2013, as amended from time to time), except the packages to be funded by Agence Française de Développement (AfD) and Islamic Development Bank (IsDB). Those packages will be procured in accordance with the respective co-financier's procurement guidelines. No Project Implementation Management Support consultants will be funded by ADB.

27. An 18-month procurement plan indicating threshold and review procedures is in Section C.

### C. Procurement Plan

## VII. PROCUREMENT PLAN

### Basic Data

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<b>Project Name:</b>	Power System Expansion and Efficiency Improvement Investment Program (Tranche2)
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- When audited project financial statements are not received by the due date, ADB will write to the executing agency advising that (i) the audit documents are overdue; and (ii) if they are not received within the next six months, requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed.
- When audited project financial statements have not been received within 6 months after the due date, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters. ADB will (i) inform the executing agency of ADB's actions; and (ii) advise that the loan may be suspended if the audit documents are not received within the next six months.
- When audited project financial statements have not been received within 12 months after the due date, ADB may suspend the loan.

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<sup>5</sup> Available from <http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications>

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<b>Country:</b>	Bangladesh
<b>Executing Agency:</b>	Power Grid Company of Bangladesh Ltd. (PGCB) Dhaka Power Distribution Company (DPDC) Dhaka Electric Supply Company (DESCO)
<b>Loan Amount:</b>	\$310 million
<b>Loan (Grant) Number:</b>	
<b>Date of First Procurement Plan</b>	26 July 2013
<b>Date of this Procurement Plan</b>	

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**A. Process Thresholds, Review and 18-Month Procurement Plan**

**1. Project Procurement Thresholds**

28. Except as the Asian Development Bank (ADB) may otherwise agree, the following process thresholds shall apply to procurement of goods and works.

<b>Procurement of Goods and Works</b>	
<b>Method</b>	<b>Threshold</b>
International Competitive Bidding (ICB) for Works	\$1,000,000
International Competitive Bidding for Goods	\$500,000

**2. ADB Prior or Post Review**

29. Except as ADB may otherwise agree, the following prior or post review requirements apply to the various procurement and consultant recruitment methods used for the project.

<b>Procurement Method</b>	<b>Prior or Post</b>	<b>Comments</b>
<b>Procurement of Goods and Works</b>		
ICB Works	Prior	
ICB Goods	Prior	
<b>Recruitment of Consulting Firms</b>		
Quality- and Cost-Based Selection (QCBS)	Prior	
<b>Recruitment of Individual Consultants</b>		
Individual Consultants	Prior	

**3. Goods and Works Contracts Estimated to Cost More Than \$1 Million**

30. The following table lists goods and works contracts for which procurement activity is either ongoing or expected to commence within the next 18 months.

<b>General Description</b>	<b>Contract Value (\$million)<sup>a</sup></b>	<b>Procurement Method</b>	<b>Pre-qualification of Bidders (y/n)</b>	<b>Advertisement Date (quarter/year)</b>	<b>Comments</b>
1.1 Turnkey Contract for 132&230kV S/S and Lines-IDB	206.76	ICB	N	Q2/ 2014	Financed by IDB
1.2 Turnkey Contract for 132/230kV S/S and Lines-ADB	31.33	ICB	N	Q1/2014	Financed by ADB
2.1 Turnkey Contract of South Dhaka 132/33kV S/S and Lines	93.36	ICB	N	Q1/2014	Financed by AfD and GOB
2.2 Turnkey Contract of South Dhaka 33/11 kV S/S - AfD	36.97	ICB	N	Q2/2014	Financed by AfD and GOB
2.3 Turnkey Contract of South Dhaka 33/11kV S/S -ADB	45.85	ICB	N	Q2/2014	Financed by ADB and GOB
2.4 Turnkey Contract of 11kV South Dhaka Distribution	47.28	ICB	N	Q2/2014	Financed by ADB and GOB
3.1 Turnkey Contract for 132/33/11 kV S/S	133.77	ICB	N	Q2/2014	Financed by ADB and GOB
3.2 Supply Contract of North Dhaka Distribution Equipment	79.85	ICB	N	Q1/2014	Financed by ADB
Notes a	Excludes taxes, duties and contingencies				

#### 4. Consulting Services Contracts Estimated to Cost More Than \$100,000

31. The following table lists consulting services contracts for which procurement activity is either ongoing or expected to commence within the next 18 months.

<b>General Description</b>	<b>Contract Value</b>	<b>Recruitment Method<sup>1</sup></b>	<b>Advertisement Date (quarter/year)</b>	<b>International or National Assignment</b>	<b>Comments</b>
Implementation support consultant for DPDC	\$1,000,000	Per GOB's guidelines	Q4/2013	National	Financed by GOB

#### 5. Goods and Works Contracts Estimated to Cost Less than \$1 Million and Consulting Services Contracts Less than \$100,000

32. The following table groups smaller-value goods, works and consulting services contracts for which procurement activity is either ongoing or expected to commence within the next 18 months.

<b>General Description</b>	<b>Value of Contracts (cumulative)</b>	<b>Number of Contracts</b>	<b>Procurement / Recruitment Method<sup>1</sup></b>	<b>Comments</b>
N.A.				

#### B. Indicative List of Packages Required Under the Project

33. The following table provides an indicative list of all procurement (goods, works and consulting services) over the life of the project. Contracts financed by the Borrower and others should also be indicated, with an appropriate notation in the comments section.



General Description	Estimated Value (\$million)	Estimated Number of Contracts	Procurement Method	Domestic Preference Applicable	Comments
<b>Part A: Transmission Network Improvement (PGCB)</b>					
1.1 Turnkey Contract for 132/230kV S/S and Lines-IDB	206.76	1	ICB	Y	Financed by IDB
1.2 Turnkey Contract for 132/230kV S/S and Lines-ADB	31.33	2	ICB	Y	Financed by ADB
Lot 1: Substations	29.03		ICB	Y	2 substations 4km 230kV and 2 km 132kV LILO
Lot 2: Associated lines	2.30		ICB	Y	
<b>Part B: South Dhaka Distribution Improvement (DPDC)</b>					
2.1 Turnkey Contract of South Dhaka 132/33kV S/S and Lines	93.36	3	ICB	Y	Financed by AfD and GOB
2.2 Turnkey Contract of South Dhaka 33/11 kV S/S - AfD	36.97	1	ICB	Y	Financed by AfD and GOB
2.3 Turnkey Contract of South Dhaka 33/11kV S/S	45.85	2	ICB	Y	Financed by ADB and GOB 8 S/S
Lot 1: 33/11kV S/S	25.85		ICB	Y	
Lot 2: 33kV U/G cables	20.00		ICB	Y	
2.4 Turnkey Contract of 11kV South Dhaka Distribution	47.28	2	ICB	Y	Financed by ADB and GOB
Lot 1: North zone	17.66		ICB	Y	
Lot 2: South zone	29.64		ICB	Y	
<b>Part C: North Dhaka Distribution Improvement (DESCO)</b>					
3.1 Turnkey Contract for 132/33/11 kV S/S	133.77	2	ICB	Y	Financed by ADB and GOB 5 S/S 24 S/S
Lot 1: 132/33kV Grid S/S	73.34		ICB	Y	
Lot 2: 33/11kV S/S	60.43		ICB	Y	
3.2 Supply Contract of North Dhaka Distribution Equipment	79.85	5	ICB	Y	Financed by ADB and GOB
Lot 1: XLPE U/G cable	39.61		ICB	Y	
Lot 2: SPC and steel pole	9.07		ICB	Y	
Lot 3: DT and RMU	11.24		ICB	Y	
Lot 4: Protection/Capacity Bank/meters	7.53		ICB	Y	
Lot 5: Conductor/insular	12.39		ICB	Y	
3.3 Work Contract of Distribution System	65.91	Several	NCB	Y	Financed by GOB
<b>Project Implementation Management Support</b>					
DPDC	\$1,000,000	Several	National	-	Financed by GOB

### C. Detailed Cost Estimate (Lot-wise)

S. N.	Item	Base cost* (\$ million)		Total \$ million	Implementation Time (Contract award-- Taking over certificate)
		Donors	EA		
<b>A</b>	<b>Transmission Network Strengthening (PGCB)</b>				
A.1	Turnkey Contract for 132/230kV S/S and Lines-IDB			<b>206.76</b>	
	Lot-1 S/S	82.10	0.00	82.10	30 months
	Lot-2 Associated lines	124.66	0.00	124.66	30 months
A.2	Turnkey Contract for 132/230kV S/S and Lines-ADB			<b>31.33</b>	
	Lot-1 S/S	29.03	0.00	29.03	24 months
	Lot-2 Associated lines	2.30	0.00	2.30	24 months
<b>B</b>	<b>T&amp;D Network Strengthening (DPDC)</b>				
B.1	Turnkey Contract of South Dhaka 132/33kV S/S and Lines	88.86	7.50	<b>96.36</b>	30 months
B.2	Turnkey Contract of South Dhaka 33/11 kV S/S - AfD	28.56	8.41	<b>36.97</b>	30 months
B.3	Turnkey Contract of South Dhaka 33/11kV S/S -ADB			<b>45.85</b>	30 months
	Lot-1 Turnkey Contract of 33/11 kV S/S	15.00	10.85	25.85	
	Lot-2 Turnkey Contract of 33kV U/G cables	20.00	0.00	20.00	
B.4	Turnkey Contract of 11kV South Dahak Distribution -ADB			<b>47.30</b>	30 months
	Lot-1 Turnkey Contract of Distribution System North Zone	15.00	2.66	17.66	
	Lot-2 Turnkey Contract of Distribution System South Zone	25.00	4.64	29.64	
<b>C</b>	<b>T&amp;D Network Strengthening (DESCO)</b>				
C.1	Turnkey Contract of 132/33/11kV grid S/S			<b>133.77</b>	30 months
	Lot-1 Turnkey Contract of 132/33kV Grid S/S and lines	61.84	11.50	73.34	
	Lot-2 Turnkey Contract of 33/11kV S/S and accessories	53.95	6.48	60.43	
C.2	Supply Contract of North Dhaka Distribution Equipment			<b>79.84</b>	12 months
	Lot-1 33kV and 11kV XLPE U/G Copper Cable	39.61		39.61	
	Lot-2 Spun Pre-stressed Concrete (SPC) and Telescopic Galvanized Steel Pole	9.07		9.07	
	Lot-3 11/0.4 kV, 200kVA, 11/0.23 kV, 25kVA DT and RMU	11.24		11.24	
	Lot-4 Transformer Protection equipments/Capacitor Bank/Pre-paid meters	7.53		7.53	
	Lot-5 Conductor and Insular	12.39		12.39	
C.3	Work Contract of Distribution System		65.91	<b>65.91</b>	

\* Excluding taxes and duties, contingency and IDC.

## VIII. SAFEGUARDS

34. **Environment.** An environmental assessment and review framework (EARF) for the MFF was prepared in September 2012 to ensure that project components in succeeding tranches comply with ADB's Safeguard Policy Statement 2009 (SPS 2009). Tranche 2 is classified as B according to SPS 2009 requiring an initial environmental examination (IEE). Following SPS 2009 and EARF, an IEE was prepared and the draft IEE was disclosed to ADB website on 15 Sept 2013.

35. Subproject selection for Tranche 2 was guided by the environmental criteria outlined in the EARF and Schedule 4 of the FFA. Components of Tranche 2 are not expected to cause significant adverse environmental impacts. Transmission line routes will traverse mainly agricultural lands and no forest, sanctuaries or protected areas will be affected. Environmental management plans have been prepared with adequate resources for implementation. PGCB, DPDC and DESCO will obtain all the required environmental clearances from the Department of Environment prior to construction and copies submitted to ADB. A project brief in Bangla will be prepared by PGCB, DPDC, and DESCO and will be made available to the public at their field offices.

36. The EAs will ensure the timely and adequate implementation of the environmental management plans (EMP) and the Resettlement Plans (RPs) for each project component (as relevant), and will ensure that all activities comply with the applicable national and local environmental laws and regulations, in addition to ADB's SPS 2009. In the event a sub project requires modifications to its design or configuration prior or during project construction, the EA will ensure to revise and update the IEE, EMP and RPs accordingly, and will submit these to ADB for approval and clearance. The EAs will assist in promoting environmentally and socially responsible implementation of the contracts. Contracts shall include provisions that comply with host country employment laws and ADB guidance on labor standards, wages and acceptable working conditions, including measures to avoid and prevent discrimination against women in the workplace, equal pay for equal work, and also public awareness and sensitization of the risks and prevention of the spread of HIV/AIDS. Ensuring these measures are implemented will be the responsibility of the EAs.

37. The mitigation measures will be incorporated into the contractor's contract document. The EA will monitor, audit, and report to ADB on the implementation of the EMP for each subproject semiannually during construction and annually during operation.

38. The contractor/subcontractor shall prepare and submit the semi-annual progress reports in conformance with the EMP to the EAs and shall indicate when, how and at what cost the contractors plan to satisfy the requirements as per detailed design. From these progress reports, the EAs will prepare an environmental monitoring report and submit to ADB semi-annually during construction and annually during operation. The environmental monitoring report will be publicly disclosed to ADB website as required by SPS 2009 and Public Communications Policy 2011. The construction schedules shall detail the resources to be provided or utilized and any related sub contracting proposed.

39. Project implementation is expected to pose minor impacts of a temporary and reversible nature on peoples living in the direct/indirect area of influence of construction sites. The EA/IA and its contractors will be responsible for designing and implementing culturally acceptable and sensitive measures to manage and address significant community, health, safety, and labor

issues, in consultation with locally affected peoples, and in accordance with national laws and ADB safeguard requirements.

40. **Involuntary resettlement.** According to ADB Safeguard Policy Statement 2009 (SPS 2009), Tranche 2 is classified as A or involuntary resettlement impacts. Three resettlement plans have been in accordance with the resettlement framework based on national laws and policies and the Safeguard Policy Statement of ADB.

41. Private land acquisition of 22.0 acres for 3 subprojects of PGCB would potentially lead to permanent economic displacement of about 59 persons and temporary economic displacement for about 168 farmers. Land acquisition for 2 subprojects of DPDC will result in physical displacement of 15 households and 80 persons. One subproject of DESCO will result in economic displacement for six persons. The estimated total number of persons to be displaced by subprojects under Tranche 2 will be about 313.

42. Compensation rates for the loss of land and structures, shifting assistance, income restoration assistance, and additional support for vulnerable groups and indigenous groups are provided in the resettlement plans. The compensation entitlements are endorsed by the EA and adequate budget will be allocated. Meaningful consultation and information disclosure were undertaken with (i) project-displaced persons and (ii) the general public through the ADB website. If any changes or additional land requirements or involuntary resettlement impacts are identified, a new or updated resettlement plan will be prepared or modified according to the applicable laws referred to in the resettlement plan. ADB's approval will be obtained before further implementation of the sub project. The EA will set up a Program Management Unit (PMU) which will be responsible for RP implementation, monitoring and reporting. The PMU will be headed by a Program Director. The implementation of the resettlement plans will be monitored internally by the EA and externally by qualified and experienced external experts, who will undertake the overall monitoring of the safeguards and relevant social issues and submit semiannual monitoring reports to EA for submission to ADB.

43. **Indigenous people.** The tranche 2 is classified as category C in accordance with the ADB's Safeguard Policy Statement (2009). None of the subprojects would impact communities of indigenous populations or interfere with the territories of the indigenous populations or ethnic minorities, their livelihood systems, customary properties or their natural or cultural resources. However, if there are any unanticipated impacts on indigenous people during project implementation an indigenous peoples plan will be prepared accordance with the indigenous peoples planning framework and submitted to ADB for review. The same will further be approved by ADB before award of related civil works contract and implemented before commencement of the civil works contract for the relevant subproject, as applicable.

## **IX. GENDER AND SOCIAL DIMENSIONS**

44. The poverty and social assessment brought forth that the power sector has significant potential to contribute to economic development and social wellbeing, and is both directly and indirectly linked to poverty reduction. Reliable and adequate electricity supply improves living conditions, promotes the business expansion, and increases employment opportunities, which will have a positive impact on poverty reduction. A good quality, reliable electricity supply is also a key to meeting the basic human needs of health and education. Poor and vulnerable consumers, as well as public institutions such as public hospitals and schools, are often

particularly disadvantaged by an inadequate power supply, load shedding, and poor power quality, and will therefore benefit directly from the project.

45. **Gender.** Tranche 2 is classified as Some Gender Elements. DPDC and DESCO have identified and committed to implementation of specific interventions such as awareness programs on efficient energy use and income generating opportunities for women in the project areas. The EAs will ensure at least 50% participation of women from the local communities .

46. The loan agreement includes a standard assurance related to compliance with labor standards for contractors, including provisions to ensure equal pay for work of equal value, and the provision of awareness training on sexually transmitted infections (incl. HIV), forced/bonded labor and human trafficking. Dialogue and communication (both written and verbal) with stakeholders will be carried out in a gender-specific and culturally sensitive manner and in local languages, as required during RP implementation. There are special provisions for the vulnerable households including the women headed households in the resettlement framework and the Resettlement Plans.

47. **HIV /AIDS.** Based on the poverty and social assessment, there is no risk that the project will increase HIV/AIDS incidence. However contractors will carry out HIV/AIDS awareness for their laborers at work sites, which will be monitored by the construction supervision consultants. The EAs with the help of civil society organizations and public health agencies will carry out the awareness amongst the communities in the project influence area and ensure at least 30% participation of women.

48. **Health.** The EAs will ensure that contractors provide adequately for the health and safety of construction workers and further ensure that bidding documents include measures on how contractors will address this, including an information and awareness raising campaign for construction workers on sexually transmitted diseases including HIV/AIDS, and human trafficking.

49. **Labor.** The EAs will ensure that civil works contractors comply with all applicable labor laws and regulations, do not employ child labor for construction and maintenance activities, and provide appropriate facilities for women and children in construction campsites; contractors do not differentiate wages between men and women for work of equal value; and specific clauses ensuring these will be included in bidding documents.

**X. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION**

**A. Project Design and Monitoring Framework**

**DESIGN AND MONITORING FRAMEWORK FOR THE PROJECT**

<b>Design Summary</b>	<b>Performance Targets/Indicators</b>	<b>Data Sources / Reporting Mechanism</b>	<b>Assumptions and Risk</b>
<p><b>Impact</b> Increased access to reliable supply of electricity</p>	<p>Electrification rate increased from 50% in 2012 to 68% by 2025</p> <p>Electricity Supply increased from 26.6 TWh in 2011 to 40.8 TWh by 2020</p>	<p>BPDB Annual Report</p> <p>BPDB Annual Report</p>	<p><b>Assumption</b></p> <p>GOB emphasis on energy sector development to continue</p> <p>Improved regulatory environment</p>
<p><b>Outcome</b> Increased Transmission and Distribution capability in the power system</p>	<p>Increase of capacity to evacuate additional 1250 MW from Ghorashal to Tongi by 2018.</p> <p>Average loading of 132kV/33kV grid substations (to meet demand in Dhaka, Chittagong &amp; Sylhet) reduced to 60% by 2018 from the 83% in 2013.</p> <p>770,000 equivalent of new consumer connections (to meet demand in Dhaka) by 2018 in Dhaka.</p>	<p>PGCB annual report</p> <p>PGCB annual report</p> <p>DPDC &amp; DESCO annual reports</p>	<p><b>Assumption</b></p> <p>Power companies are provided adequate independence in decision making</p> <p>Adequate cost recovery allowed through electricity tariff</p>
<p><b>Output</b> Increased Transmission Capacity</p>	<p>By Dec 2018</p> <p>750MVA of 230kV/132kV and 132kV/33kV substation capacity and 6km of 230kV and 132kV transmission lines in PGCB built. (ADB component)</p> <p>3660MVA of 230kV/132kV and 132kV/33kV substation capacity and 151.3km of 400kV (energized at 230kV), 230kV and 132kV transmission lines in PGCB built. (IsDB component)</p>	<p>Annual report PGCB</p> <p>Annual report PGCB</p>	<p><b>Assumptions</b></p> <p>Timely availability of counterpart funds from GOB and EAs.</p> <p><b>Risks</b></p> <p>Cost overruns due to delayed implementation and increase in cost of equipment and materials beyond predicted levels</p> <p>Delay in funding from co-financiers</p>
<p>Increased south Dhaka distribution network capacity</p>	<p>315MVA of 33kV/11kV substation capacity, 300MVA of 11kV/400V substation capacity and 450km of 11kV distribution lines in DPDC built. (ADB component)</p>	<p>Annual Report DPDC</p>	

Design Summary	Performance Targets/Indicators	Data Sources / Reporting Mechanism	Assumptions and Risk
	1925MVA of 132kV/33kV and 33kV/11kV substation capacity in DPDC built. (AFD component)	Annual Report DPDC	
Increased north Dhaka distribution network capacity	1800MVA of 132kV/33kV, 33kV/11kV and 11kV/400V substation capacity and 770 circuit km of 11kV distribution lines in DESCO built. (ADB component)	Annual Report DESCO	
Efficiently managed project	Timely completion of the project by Dec 2018	Annual reports of PGCB, DESCO and DPDC	
<b>Activities with Milestones</b> <ol style="list-style-type: none"> <li><b>1. Increased transmission capacity</b> <ol style="list-style-type: none"> <li>1.1. land acquisition, compensation payment and handing over of land to the borrower by Dec 2014</li> <li>1.2. Construction of 28km of 400 kV (energized at 230kV) 51 km of 230kV transmission lines and 78.3 km of 132kV transmission lines by Dec 2018.</li> <li>1.3. Construction of 4 nos. 230/132 kV substations and 11 nos. 132/33 kV substations with total capacity of 3,390 MVA and 1,770 MVA respectively and one 230 kV switching station by Dec 2018</li> </ol> </li> <li><b>2. Increased South Dhaka distribution capacity</b> <ol style="list-style-type: none"> <li>2.1. land acquisition, compensation payment and handing over of land to the borrower by June 2014</li> <li>2.2. Construction of 450 km 11kV distribution lines by Dec 2018</li> <li>2.3. Construction of 7 nos.132/33 kV substations and 16 nos. 33/ 11 kV with total capacity of 1680MVA and 560 MVA respectively by Dec 2018.</li> <li>2.4. Construction of 11kv/400V substations with total capacity of 300 MVA by Dec 2018.</li> </ol> </li> <li><b>3. Increased North Dhaka distribution capacity</b> <ol style="list-style-type: none"> <li>3.1. land acquisition, compensation payment and handing over of land to the borrower by June 2014</li> <li>3.2. Construction of 770 km 11kV distribution lines by Dec 2018</li> <li>3.3. Construction of 5 nos.132/33 kV substations and 24 nos. 33/ 11 kV with total capacity of 600 MVA and 900 MVA respectively by Dec 2018.</li> <li>3.4. Construction of 11kv/400V substations with total capacity of 300 MVA by Dec 2018.</li> </ol> </li> </ol>			<b>Inputs</b>  <b>For Tranche -2 only</b> ADB (ordinary capital resources):- \$310 million  Cofinancing:  IsDB (loan) :- \$220 million AFD (loan) :- \$125 million  Government of Bangladesh:-- \$400 million  <b>Total : 1,055 million</b>

Activities with Milestones
<p><b>4. Project Management Unit</b></p> <p>4.1 Approval of the bid documents for tranche 2 by 15 Jan 2014</p> <p>4.2 Advertisement of bids by 30 Jan 2014</p> <p>4.3 Award of contracts by 30 April 2014</p>

ADB = Asian Development Bank; IsDB= Islamic Development Bank; AFD= Agence Francaise Developpement; BPDB=Bangladesh Power Development Board; PGCB = Power Grid Company of Bangladesh; DESCO = Dhaka Electricity Supply Company; DPDC = Dhaka Power Distribution Company; km = kilometer, kV = kilovolt; MW = megawatt; MVA=Mega Volt Ampere, PFR = periodic financing request

## B. Monitoring

50. **Project performance monitoring.** EAs will undertake overall monitoring of the Project in terms of progress. ADB, the government and EAs will conduct semiannual reviews throughout the implementation of the Project. The review will monitor the (i) project output quality, (ii) implementation arrangements, (iii) implementation progress, and (iv) disbursements. Performance will be monitored based on indicators and targets stipulated in the design and monitoring framework.

51. **Compliance monitoring.** In addition to the standard assurances, compliance with the specific assurances will be monitored. They will be based on the Loan Agreement and Project Agreement as well as include Consulting Services, Procurement and Disbursement Guidelines. All consultants will be recruited according to ADB's *Guidelines on the Use of Consultants* (2013, as amended from time to time). The procurement of goods, related services, and works financed by the loan will follow procedures outlined in the ADB's *Procurement Guidelines* (2013 as amended from time to time). The loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2012, as amended from time to time).

## C. Evaluation

52. ADB will field regular review missions every six months at the minimum to review status of contract awards, disbursements, physical progress, and implementation of the environmental management plan and resettlement plans. Within 6 months of physical completion of the Project, each EA will submit the project completion report (PCR) to ADB. Subsequently, ADB will field a mission to finalize the PCR.

**Table 1: Evaluation Methodology**

Evaluation Activity	Purpose	Methodology	Who responsible and involved
Review Mission	Review the progress of the project and provide guidance to facilitate implementation	Site visits and meetings with EA officials, contractors, consultants at least twice a year	ADB/ EAs
Mid Term Review	Comprehensive review of the project	Not needed as review missions will be conducted regularly and the project implementation is only 3 years	



<b>Evaluation Activity</b>	<b>Purpose</b>	<b>Methodology</b>	<b>Who responsible and involved</b>
Project completion report	Evaluate the overall output of the project and its relevance and suitability	Site visit and meetings with EA officials, contractors, consultants	ADB/EAs

#### **D. Reporting**

53. EAs will provide ADB with (i) quarterly progress reports in a format consistent with ADB's project performance reporting system; (ii) consolidated annual reports including (a) progress achieved by output as measured through the indicator's performance targets, (b) key implementation issues and solutions; (c) updated procurement plan, and (d) updated implementation plan for next 12 months; and (iii) a project completion report within 6 months of physical completion of the Project. To ensure projects continue to be both viable and sustainable, project accounts and the AFSs, together with the associated auditor's report, should be adequately reviewed.

#### **E. Stakeholder Communication Strategy**

54. The Stakeholder Communications Strategy is described in the following table. EAs will post all relevant information on their websites. The website will include at minimum information regarding the bidding process, bidders, contract awards, use of funds disbursed under the Project and physical progress.

**Table 2: Stakeholder Communication Strategy**

<b>Project information to be communicated</b>	<b>Means of Communication</b>	<b>Responsibility</b>	<b>Audience</b>	<b>Frequency</b>
Report and Recommendation of the President (RRP) with linked documents	ADB website	ADB	ADB, Government of Bangladesh, Development Partners, Civil Society, Individuals	Once
Project information while planning/ designing	Discussions and stakeholder consultations	EAs	Project beneficiaries	Regular intervals during planning and design
Status of implementation during construction	Boards at site	EA/ Contractors	Project beneficiaries and affected people	All the time at construction sites
Project Performance Reports and Project Information Documents	ADB website	ADB	ADB, Government of Bangladesh, Development Partners, Civil Society, Individuals	Every quarter
Safeguards Monitoring during Implementation (i.e., environmental and social monitoring)	ADB website	ADB	ADB, Government of Bangladesh, Development Partners, Civil Society, Individuals	Semiannual during construction, and annually during operation

<b>Project information to be communicated</b>	<b>Means of Communication</b>	<b>Responsibility</b>	<b>Audience</b>	<b>Frequency</b>
report)				
Monthly progress reports	Website of EAs,	EAs	ADB, Government of Bangladesh, Development Partners, Civil Society, Individuals	Monthly
Project completion report	ADB website	ADB	ADB, Government of Bangladesh, Development Partners, Civil Society, Individuals	Once

## **XI. ANTICORRUPTION POLICY**

55. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the Project. All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all Project contractors, suppliers, consultants and other service providers. Individuals/entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the Project. To support these efforts, relevant provisions are included in the loan and project agreements and the bidding documents for the Project.

56. Bid evaluations and contract negotiations for the ADB-funded packages will be facilitated by ADB, supported by expert consultants. Once the evaluations are undertaken, the evaluation report will be submitted to a Government Steering Committee by the evaluation team. ADB and its consultants will facilitate the meetings, assist in their administration, and have full access to all relevant documents. The consultants will be funded by ADB and will be responsible for their recruitment and remuneration. Their Terms of Reference will be prepared by ADB at a later stage. Evaluation and negotiation meetings can be held on a retreat basis to allow related administrative issues within the Government to still be addressed expediently.

## **XII. ACCOUNTABILITY MECHANISM**

57. People who are, or may in the future be, adversely affected by the project may address complaints to ADB, or request the review of ADB's compliance under the Accountability Mechanism.

## **XIII. RECORD OF PAM CHANGES**

To be inserted as and when any changes are necessary and agreed by both sides.

**SIGNED IN DHAKA, BANGLADESH ON \_\_\_\_\_**

On behalf of PGCB

On behalf of DPDC

On behalf of DESCO

On behalf of Asian Development Bank