PROJECT PREPARATORY TECHNICAL ASSISTANCE

A. Justification

- 1. The proposed project will support the government of Cambodia in improving urban services and enhancing climate resilience in four participating towns in the Tonle Sap Basin. The project will support urban infrastructure investments, including drainage and flood protection, wastewater treatment and management and solid waste management, in the municipalities of Steung Sen, Serei Saophoan, Kampong Chhnang and Pursat. By enhancing drainage and flood protection, the project will improve climate resilience and adaption capacity in the four towns. The project will also improve climate resilient urban planning and disaster risk management and strengthen institutional capacity for sector coordination and managing public investments.
- 2. A project preparation technical assistance (PPTA) is needed for the preparation of (i) feasibility studies and (ii) detailed design and bidding documents, for selected subprojects under the project; a (iii) capacity development plan for Steung Sen and Serei Saophoan and (iv) a consolidated proposal and procurement plan. The PPTA will directly build on pre-feasibility studies (PFS) to be conducted under the Cities Development Initiative for Asia (CDIA), between October 2016 and May 2017.³

B. Major Outputs and Activities

- 3. The activities and outputs under the PPTA are organized into four components, summarized below.
- 4. **Component 1: Development of feasibility studies.** The consultant will develop feasibility studies for selected subprojects under Output 1 and Output 2. The selection of Output 1 subprojects that would be developed to feasibility level will be confirmed as part of the prefeasibility study.
- 5. Component 2: Development of detailed design and bidding documents. The consultant will develop detailed design and bidding documents for selected subprojects under Output 1. Consultants will carry out all necessary surveys—including detailed topographical and soil surveys, field verification, studies, collection of data, and analyses needed to prepare the detailed engineering designs and contract documents for the subprojects. The consultants will prepare detailed designs and cost estimates—accurate to plus or minus five percent—and prepare bidding documents in line with the procurement plan. The selection of Output 1 subprojects that would be developed to detailed design level will be confirmed as part of the pre-feasibility study, and will include those sub projects which are assessed as being the highest priority investments across the four towns.
- 6. **Component 3: Capacity building program.** The consultant will develop a capacity building program to be adopted and implemented under Output 3 of the project. The purpose of the program will be to train staff for the effective and efficient implementation of the project, management of urban services, operations and maintenance of the project facilities, and

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The project is included in ADB. 2015. Country Operations Business Plan: Cambodia, 2016–2018. Manila.

These are the top four of six towns prioritized under the Tonle Sap Urban Development Strategic Framework (2014-2030) based on strategic importance, potential impacts on the lake, incidence of floods, population, and extent of ongoing/planned development assistance. The last two priority towns are Battambang and Siem Reap.

³ TA 8556 (Supporting the Cities Development Initiative for Asia).

strengthening monitoring, reporting and evaluation of the project. Potential areas covered by the capacity building program could include procurement, financial management, customer relations, social and environmental safeguards, gender mainstreaming, environmental management, operations and maintenance of project facilities, monitoring, reporting and evaluation, solid waste management, wastewater treatment, and drainage operations. The program will be coordinated by the national institutional specialist and training coordinator, with all team members serving as resource persons in their relevant areas of expertise for development of the program.

- 7. **Component 4: Consolidated proposal and procurement plan.** The consultant will consolidate and package all consultancy outputs to produce a cohesive and comprehensive project proposal, including a procurement plan and detailed cost tables. This proposal would include consolidated technical, economic and financial, governance, poverty and social (including gender), safeguards, and risk assessments, covering all outputs of the proposed project.
- 8. Climate resilient features. The consultant will actively explore and incorporate green, nature-based and climate resilient features into subproject designs, as appropriate. These features could include incorporating green infrastructure and nature-based elements and/or enhancing flood protection measures for subproject designs. It will also include exploring the viability of waste-to-energy solutions and maximization of recycling and mulching opportunities for solid waste management, and the design of climate resilient urban planning and DRM activities, including on climate and flood risk modeling, mapping and land use planning.

Table A3.1: Summary of Major Outputs and Activities

Major Activities	Expected Completion Date	Major Outputs ^a	Expected Completion Date
Development of work program and schedule; identification of subprojects to be developed to detailed engineering design and bidding documents stage, and subprojects to be developed to feasibility stage; and phasing of outputs.	May 2017	Inception Report	May 2017
Completion of interim phase of consultancy outputs, as defined at the inception stage, for presentation and further discussion.	October 2017	Interim Report	October 2017
Completion of all draft final outputs, including feasibility studies, detailed design and bidding documents, capacity building program, and consolidated proposal and procurement plan for presentation, discussion and finalization during loan fact-finding.	February 2018	Draft final report	February 2018
Finalization of all outputs, including feasibility studies, detailed design and bidding documents, capacity building program, and consolidated proposal and procurement plan following feedback and discussions during loan fact-finding review.	March 2018	Final Report	March 2018

^a All outputs will be prepared following prevailing ADB and government guidelines. Source: Asian Development Bank estimates.

C. Cost Estimate and Proposed Financing Arrangement

8. The PPTA is estimated to cost \$1,150,000 of which \$50,000 will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-V) and \$1,000,000 will be financed by the Project Readiness Improvement Trust Fund (PRI fund). Government will provide counterpart support in the form of staff, staff's travel expenses, office space, data and reports,

and other in-kind contributions.⁴ The government of Cambodia has been advised that approval of the PPTA does not commit ADB to finance any ensuing project. Cost estimates and financing plan are shown in Table 3.

Table A3.2: Cost Estimates and Financing Plan (\$'000)

Item		(+ 333)	Total Cost
Α.	Asian Development Bank a		
	1. Consultants		
		a. Remuneration and per diem	717.0
		b. International and local travel	43.0
		c. Reports and communications	10.0
	2.	Equipment (computer, printer, etc.) ^b	14.0
	3.	Workshops, training, seminars, and conferences ^c	
		a. Facilitators	5.0
		b. Workshops/training	15.0
	4.	Vehicles ^d	11.0
	5.	Surveys and investigations	150.0
	6.	Miscellaneous administration and support costs	15.0
	7.	Contingencies ^e	70.0
		Total	1,050.0

^a Financed by the Asian Development Bank's Technical Assistance Special Fund (TASF-V) and the Project Readiness Improvement Trust Fund (PRI fund). The amount of \$50,000 financed through TASF-V will be used for activities under the PPTA excluding DED. All DED activities will be financed through the PRI Fund. Regarding DED, the executing agency will hold the consultants accountable for any defect liability, and the consultant contract will reflect such arrangements, where necessary.

^b Technical Assistance Supervising Units need to report equipment purchased under TA budget to OAS Asset Management and Commercial Services in compliance with AO 4.02, Appendix 2, paragraphs 1.5 and 1.6. All equipment procured under the PPTA will be turned over to the executing agency upon completion of the PPTA, which will include the following:

Type	Quantity	Cost
Desktop and laptop computers with software, 1 color laser printer, 1 blace	k and white 1 set	\$14,000
laser printer, 1 photocopy machine, and office furniture.		
C		

Workshops, training, seminars, and conferences will be prepared and conducted by the TA consultants.

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Purpose	Venue
Inception, interim, and final workshops	Government Offices or hotel
d	

Vehicle (vehicle hire to supplement ministry vehicles, where available)

	Expected length of use
Vehicle hire for consultants use for fieldwork (multiple locations) and liaison	11 vehicle months
purpose	

^e Contingencies may be used to engage additional consultants to assist the EA advance actions, ADB procedures and documentation, recruitment of the project implementation assistance consultant, and other support as needed. Source: Asian Development Bank estimates.

D. Consulting Services

9. The consulting firm will include an estimated 80 person-months (24 international and 56 national). The consulting firm will be recruited using the quality- and cost-based selection (QCBS) method with a standard quality-cost ratio of 80:20. Consulting services requirements are summarized in Table A3.3.

⁴ The government's in-kind contribution is estimated at about 9% of the total cost of the TA.

10. This assignment will require technical specialists (including urban planning, urban infrastructure, engineering, climate resilience and green design), economic and financial specialists, procurement specialists, safeguards (environmental and resettlement) specialists, gender specialist, institutional and training specialist, a private sector specialist and others. Provisions for equipment, workshops, training and seminars, reports and communication, ground transportation, and other miscellaneous and support costs will also be included.

Table A3.3: Summary of Consulting Services Requirements

rable A3.3. Sulfillary of Consulting Services negative ments			
International Specialists	pm	National Specialists	pm
Team Leader & Urban Planner	8	Deputy Team Leader/ Civil Engineer	11
Wastewater and Drainage Specialist	4	Senior Civil Engineers (3)	9
Solid Waste Management Specialist	3	Procurement Specialist	6
River Engineering Specialist	2	Finance / Financial Management Specialist	6
Climate Resilience / Green Design Specialist	3	Geotechnical Engineer or Specialist	3
Procurement Advisor	2	Resettlement Specialist	3
Economist/Municipal Finance Specialist	2	Environment Specialist	3
		Municipal Finance /Tariff / Economic Specialist	3
		Institutional Specialist / Training Coordinator	4
		Gender and Development Specialist	2
		Private Sector Specialist	2
Total International	24	Total National	56

pm = person months.

E. Implementation Arrangements

- 11. The Executing Agency (EA) will be Ministry of Public Works and Transport (MPWT). The implementing agencies will be the Department of Public Works and Transport (DPWT) of the respective provinces. Disbursements under the TA will be done in accordance with the ADB's Technical Assistance Disbursement Handbook (2015, amended from time to time). A project management unit (PMU) within the General Department of Public Works in MPWT will be established. Project Implementation Units (PIUs) will be established in Steung Sen and Serei Saophoan. Existing PIUs will be utilized in Pursat and Kampong Chhnang.
- 12. The PPTA is expected to commence in October 2016 and conclude by 31 December 2018. The consultancy is expected to commence in April 2017 and conclude by March 2018. The assignment will build directly on the pre-feasibility studies (PFS) conducted under the Cities Development Initiative for Asia (CDIA) between October 2016 and May 2017. The assignment will also inform the ADB loan fact-finding mission, scheduled for January 2018.

Table A3.4: Technical Assistance Processing and Implementation Schedule

Expe	
Major Milestones	Completion Date
PPTA approval	October 2016
Consultants mobilized	April 2017
Consultants final reports delivered	March 2018
Closure of the PPTA	30 December 2018

PPTA = project preparatory technical assistance. TBC = to be confirmed.

Source: Asian Development Bank.