



Technical Assistance Report

Project Number: 51365-002
Transaction Technical Assistance (TRTA)
December 2017

Republic of Kazakhstan: Preparing the Kazakhstan Urban Infrastructure Modernization Program and Finance Facility

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 2 November 2017)

Currency unit	–	tenge (Tenge)
T1.00	=	\$0.0030
\$1.00	=	T332.85

ABBREVIATIONS

ADB	–	Asian Development Bank
KUIFF	–	Kazakhstan Urban Infrastructure Financing Facility
TRTA	–	transaction technical assistance

NOTE

In this report, "\$" refers to United States dollars.

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TRANSACTION TECHNICAL ASSISTANCE AT A GLANCE

1. Basic Data		Project Number: 51365-002	
Project Name	Kazakhstan Urban Infrastructure Modernization Program and Finance Facility	Department /Division	CWRD/CWUW
Nature of Activity	Project Preparation	Executing Agency	Asian Development Bank
Modality	Regular		
Country	Kazakhstan		
2. Sector	Subsector(s)	ADB Financing (\$ million)	
✓ Water and other urban infrastructure and services	Urban policy, institutional and capacity development		0.35
	Urban sanitation		0.15
	Urban water supply		0.10
Finance	Infrastructure finance and investment funds		0.30
	Money and capital markets		0.10
Total			1.00
3. Strategic Agenda	Subcomponents	Climate Change Information	
Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive	Climate Change impact on the Project	Medium
Environmentally sustainable growth (ESG)	Eco-efficiency Urban environmental improvement		
4. Drivers of Change	Components	Gender Equity and Mainstreaming	
Governance and capacity development (GCD)	Institutional development Public financial governance	Effective gender mainstreaming (EGM)	✓
Knowledge solutions (KNS)	Application and use of new knowledge solutions in key operational areas Pilot-testing innovation and learning		
Partnerships (PAR)	International finance institutions (IFI) Official cofinancing Private Sector		
Private sector development (PSD)	Conducive policy and institutional environment Promotion of private sector investment		
5. Poverty and SDG Targeting	Location Impact		
Geographic Targeting	No	Urban	High
Household Targeting	No		
SDG Targeting	Yes		
SDG Goals	SDG6, SDG11		
6. Risk Categorization			
7. Safeguard Categorization	Safeguard Policy Statement does not apply		
8. Financing			
Modality and Sources		Amount (\$ million)	
ADB			1.00
Transaction technical assistance: Technical Assistance Special Fund			1.00
Cofinancing			0.00
None			0.00
Counterpart			0.00
None			0.00
Total			1.00

I. THE ENSUING PROJECT

1. Seventy-five percent of Kazakhstan's urban infrastructure needs replacement and/or rehabilitation. An estimated \$2.8 billion is needed for water supply improvements and \$1.3 billion for sewage treatment in 28 cities, \$2.0 billion for solid waste management, \$3.0 billion for urban transport, and up to \$8.0 billion for integrated investments covering district heating, energy efficiency and housing improvement measures.¹ To put these amounts in perspective, Kazakhstan's gross domestic product in 2016 was equivalent to about \$133.0 billion, a substantial reduction from the high of about \$224.0 billion in 2013.² Overall, annual investment requirements projected to total of at least \$20.0 billion are required for promoting economic diversification and environmentally sustainable and inclusive growth aligned with the government's Strategic Plan for Development of Kazakhstan 2025: *Technological Modernization for Accelerated Growth and Better Quality of Life*.³ The government prefers to avoid sovereign borrowing given their current financial constraints, but its own funding for infrastructure investment is only about Tenge 90.0 billion in 2016 from both the government's budget subsidies and investments. Private sector participation is limited due to a weak enabling environment i.e. policy, legal, institutional, and financial frameworks; weak technical and operational efficiency and financial management of municipalities and utilities; as well as the lack of a pipeline of bankable projects.

2. The proposed Kazakhstan Urban Infrastructure Modernization Program and Finance Facility (the Project) is a medium to long-term roadmap to ensure sustainable development and financing of urban infrastructure operationalized through a national level facility — Kazakhstan Urban Infrastructure Financing Facility (KUIFF).⁴ KUIFF will be designed to help the government to more effectively utilize its funds by addressing specific systemic weaknesses identified through the Asian Development Bank's (ADB's) earlier policy advisory and research engagements with the government. Some of these weaknesses are at an overarching national level e.g. lack of capital markets instruments to make long-term local currency (tenge) funding available to utilities for capital expenditures, short-term budgeting plans, and inefficiencies in tariff setting. Some are local level such as weak corporate financial management and operational inefficiency of individual utility companies. Specifically, KUIFF will comprise a:

- (i) technical unit to (a) develop sustainable business model(s) with effective operations and maintenance and financial management of urban utility companies to improve creditworthiness, corporate governance, and asset management; (b) establish criterion for screening projects and parameters for implementation including safeguards through environmental and social management system; (c) recommend systemic policy, regulatory, and institutional reforms, including tariff setting and regulation, and framework to enable private sector participation; (d) improve the capacity of local administrations to appraise, develop, and manage urban projects with trainings for the technical, institutional, and financial management; and (e) structure and implement bankable projects.
- (ii) financing unit to (a) raise sovereign long-term finance from ADB, World Bank, and other development partners; and (b) blend these sovereign funds and deploy them to lower overall financing cost of projects including project structuring costs, crowd-in private funds as well as technological and managerial efficiencies including

¹ ADB. 2017. *Country Partnership Strategy: Kazakhstan, 2017–2021*. Manila.

² Kazakhstan GDP 1990-2017. Trading Economics. www.tradingeconomics.com/kazakhstan/gdp

³ Government of Kazakhstan. 2017. *Strategic Plan for Development of Kazakhstan 2025: Technological Modernization for Accelerated Growth and Better Quality of Life*. Astana.

⁴ Project presented to the government on 29 October 2017 during a joint ADB-WB Mission; included in Country Operations Business Plan 2018 -2020 for 2019 Board consideration as Urban Water Supply and Sanitation Project.

through private public partnerships, and provide lower cost finance for the riskiest period (pre-construction) of projects to make projects financially bankable.

3. Overall, the blended finance approach of KUIFF enables: (i) projects and utilities to be more financially sustainable and therefore directly meet all financing costs including sovereign government obligations; and (ii) ADB's long-term, low interest (sovereign) funds to leverage private sector finance. The transaction technical assistance (TRTA) is included in the country operations business plan, 2018–2020, for Kazakhstan for urban water supply and sanitation and is proposed as a larger urban infrastructure modernization program in response to the government's request for ADB support to the urban sector.⁵ The total project cost is estimated at \$560 million equivalent, of which \$250 million will be financed by ADB's ordinary capital resources as a project loan, \$250 million will be financed by the World Bank as cofinancing, and \$60 million (12% of total project cost) will be financed by the government toward taxes and duties, land acquisition and resettlement costs, as required.

II. THE TECHNICAL ASSISTANCE

A. Justification

4. The TRTA will help the government to design the project including: (i) conceptually designing the KUIFF; (ii) identifying urgent urban infrastructure and services projects for sovereign funding and at least three demonstration projects for private sector participation and undertaking preliminary technical, financial, economic, social, and environmental due diligence of these projects; (iii) identifying and designing the key policy, institutional, legal, and financial measures for enabling private sector participation; and (iv) developing a medium-term capacity development plan for government staff. TRTA consultants will prepare the project to ensure that the ensuing loan complies with ADB and government requirements.⁶

B. Outputs and Activities

5. **Output 1: Kazakhstan Urban Infrastructure Modernization Program (KUIMP) and KUIFF designed.** This output will design the: (i) KUIMP, as a roadmap for urban sector development, and (ii) KUIFF, as a technical support and financing facility to operationalize the KUIMP. Specifically, the output will develop the institutional and governance structure and the operational guidelines for KUIMP's financing and technical support units, including selection criteria for projects. It will assess the suitability of the financial intermediary (FI) modality for the project and accordingly conduct financial due diligence of KUIFF (and relevant government financial institutions). It will also design a robust financial management system including internal control (s) for KUIFF to ensure effective and efficient deployment of funds in line with qualifying criteria established for projects and to facilitate accurate, detailed and timely project accounting, auditing and reporting. The output will explore the possibility of KUIFF creating investible long-dated debt securities attractive to long-term liability holders such as the Unified National Pension Fund and functioning as a performance-based long-term lender to utilities.

6. **Output 2: Demonstration projects identified and developed.** This output will review the existing public investment pipeline of local governments to identify demonstration projects, undertake preliminary technical, financial, economic, legal, institutional, social and environmental due diligence of five to six projects, and prepare project briefs to develop a pipeline. The criteria

⁵ ADB. 2017. *Country Operations Business Plan: Kazakhstan, 2018–2020*. Manila.

⁶ The TA first appeared in the business opportunities section of ADB's website on 17 November 2017.

prepared under output 1 will be used to select two to three demonstration projects for KUIFF's technical support unit. The types of projects to be prepared will be two-fold: (i) bankable projects for blended financing; and (ii) urgent local urban infrastructure investments through sovereign financing. A technical support unit team comprising international and national experts including relevant staff from designated ministries and local government will be formed to: (i) undertake prefeasibility studies for the identified demonstration projects; (ii) prepare tender and bid documents; and (iii) provide management support services to help improve operations and maintenance, and financial management of utilities. This output is to help kick-start the development and financing of Kazakhstan's municipal infrastructure rehabilitation and development with simple and conventional projects backed by feasible financing plans, and to slowly and steadily build a track record of successful smaller projects before launching major projects.

7. Output 3: Key policy, institutional, legal, regulatory, and financial measures for improved private sector participation identified. This output will identify the systemic constraints i.e. policy, institutional, legal and regulatory, and financial frameworks, that are impeding the sustainable financing and delivery of urban infrastructure and services, including through private sector participation. Based on the constraints identified, it will propose key measures both at the national and local level that are critical to further developing and or strengthening key elements of these enabling frameworks.

8. Output 4: Medium-term capacity development plan developed. This output will develop a medium- to long-term capacity development plan with a set of coordinated and highly-targeted technical assistance activities. These would be used to build sustainable professional capacity in key institutions of the Government of Kazakhstan to support them in performing their functions related to the KUIFF, including project identification, screening, preparation, appraisal and evaluation, and implementation. All relevant organizations at national level would be covered, together with Akimat-level entities in oblasts and cities whose utility companies will qualify for technical support and financing under KUIFF.

C. Cost and Financing

9. The technical assistance (TA) is estimated to cost \$1,100,000 equivalent, of which \$1,000,000 equivalent will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-Others) and 10% of the TA cost will be financed by the Government of Kazakhstan for in-kind contribution. The key expenditure items are listed in Appendix 1. The government will provide counterpart support in the form of counterpart staff, office space, office supplies, secretarial assistance, domestic transportation, and other in-kind contributions. The government was informed that approval of the TA does not commit ADB to finance any ensuing project.

D. Implementation Arrangements

10. The TA implementation period will be from March 2018 to March 2019. ADB will administer the TA. The Central and West Asia Department through its Urban Development and Water Division and the Public Management, Trade, and Finance Division will select, supervise, and evaluate consultants. ADB will be the executing agency while the Ministry of National Economy, Ministry for Investment and Development, and Akimats will be the implementing agencies. The implementation arrangements are summarized in the Table 1.

Table 1: Implementation Arrangements

Aspects	Arrangements		
Indicative implementation period	March 2018-March 2019		
Executing agency	Asian Development Bank		
Implementing agencies	Ministry of National Economy, Ministry of Investment and Development, Akimats		
Consultants	To be selected and engaged by ADB		
	International Consultants	44 person-months	\$750,000
	National Consultants	34 person-months	\$250,000
Procurement	To be procured by consultants		
	Shopping	x contracts	\$
Advance contracting and retroactive financing	Not Applicable		
Disbursement	The TA resources will be disbursed following ADB's <i>Technical Assistance Disbursement Handbook</i> (2010, as amended from time to time).		
Asset turnover or disposal arrangement upon TA completion	None		

Source: Asian Development Bank.

11. **Consulting services.** ADB will engage a firm or individual consultants to implement the TRTA. It is estimated that 44 person-months of international and 34 person-months of national consultants' services will be engaged through a firm or individuals as required. The quality- and cost-based selection method, using 90:10 quality cost ratio will be followed, due to the high degree of technical quality needed. The multi-disciplinary team of consultants' will have expertise in structured finance, project finance, financial management, urban infrastructure development, economics, law, and social, gender and environmental safeguards for infrastructure projects. Technical resource persons will also be recruited as individual consultants, as required. ADB will select and engage consultants following the ADB Procurement Policy (2017, as amended from time to time) and its associated project administration instructions and/or staff instructions.⁷

12. The summary of consultant requirements for the TRTA is in Table 2.

Table 2: Summary of Consulting Services Requirement

Positions	Person-Months Required
International	
Structured finance specialist-team leader	6.0
Public-private partnerships specialist	5.0
Financial management specialist	4.0
Urban infrastructure and development specialist	5.0
Capital markets specialist	3.0
Urban economist	3.0
Legal specialist	4.0
Water Utilities Specialist	4.0
Environmental safeguards specialist	3.0
Social safeguards and gender specialist	3.0
Procurement specialist	4.0
Total	44.0

⁷ Terms of Reference for Consultants are accessible in Annexure 2.

Positions	Person-Months Required
National	
PPP specialist	5.0
Financial management specialist	4.0
Urban infrastructure and development specialist	3.0
Capital markets specialist	4.0
Urban economist	3.0
Legal specialist	3.0
Environmental safeguards specialist	4.0
Social safeguards and gender specialist	5.0
Procurement specialist	3.0
Total	34.0

Source: Asian Development Bank.

E. Governance

13. The TRTA will undertake financial management assessment of the executing and implementing agencies including procurement and market risk assessment, financial intermediary capability assessment of KUIFF and/or other relevant government entities and propose strengthening measures as needed. It will undertake preliminary safeguards screening (social, environmental, indigenous people), gender analysis including collection of sex-disaggregated data and development of the Gender Action Plan, categorization assessment of the pilot projects, and prepare documents as needed.

COST ESTIMATES AND FINANCING PLAN (\$'000)

Item	Total Cost
A. Asian Development Bank^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants (44 person-months)	600
ii. National consultants (34 person-months)	225
b. Out-of-pocket expenditures	
i. International and local travel	105
ii. Miscellaneous administration and support costs	10
2. Workshops, training, seminars, and conferences ^b	15
3. Surveys	5
4. Contingencies	40
Total	1,000

Note: The transaction technical assistance is estimated to cost \$1,000,000, of which contributions from the Asian Development Bank are presented in the table above. The government will provide in-kind contributions, including taxes, counterpart staff and office space. The government contribution is estimated to account for 10% of the TRTA cost.

^a Financed by the Asian Development Bank's Technical Assistance Special Fund (TASF-Others).

^b Workshops, training, seminars, and conferences

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

Source: Asian Development Bank estimates.

TERMS OF REFERENCE FOR CONSULTANTS

1. The transaction technical assistance will engage 44 person-months of international and 34 person-months of national consultants' services. All international and national consultants will be engaged on an individual basis in accordance with ADB's Procurement Policy (2017, as amended from time to time), and Procurement Regulations for ADB Borrowers (2017, as amended from time to time). ADB staff will oversee the consultants' work. Technical and language translators will be hired. A working knowledge of Russian and experience in the former CIS countries will be desirable for all international consultants. Experience leading similar ADB feasibility study/ies in Kazakhstan and/or other Central and West Asia region countries is highly desirable.

A. International Consultants

2. The Team Leader will have a minimum 20 years of professional experience in corporate and investment finance including related to municipal infrastructure financing structures for water supply and sanitation (WSS), solid waste management (SWM) and/or district heating, and extensive experience in project management and team leadership preferably with ADB or other multi-lateral and bilateral donors. The Team Leader will lead the team of international and national specialists, and be responsible for delivering all the technical assistance (TA) outputs. The Team Leader is expected to be well acquainted with ADB procedures for feasibility study, be conversant with ADB procedures, methods, and modes of procurement as well as safeguards policy. The Team Leader will work closely with the executing agency, implementing agencies and the ADB project team and other consultants to prepare the project including: (i) conceptually designing the Kazakhstan Urban Infrastructure Financing Facility (KUIFF); (ii) identifying urgent urban infrastructure and services projects for sovereign funding and at least three demonstration projects for private sector participation and undertaking preliminary technical, financial, economic, social, and environmental due diligence of these projects; (iii) identifying and designing the key policy, institutional, legal and financial measures for enabling private sector participation; and (iv) developing a medium-term capacity development plan for government staff.

3. Based on a thorough review of the policy, regulatory, institutional challenges and constraints in urban infrastructure development and finance as well as private sector participation, the Team Leader, jointly with the relevant international and national specialists, will provide overall coordination of the TA and be responsible for all the outputs outlined. S/he will, in coordination with the government and relevant specialists:

- (i) assess the most suitable ADB (financing) modality for the proposed project;
- (ii) conceptually design and structure the proposed Kazakhstan Urban Infrastructure Financing Facility (KUIFF) including its governance and management structure;
- (iii) develop KUIFF's operational guidelines;
- (iv) conduct financial due diligence of KUIFF and relevant government financial institutions if financial intermediary (FI) modality is determined as the best option for the project; the due diligence should include assessment of capability to function as a financial intermediary (credit assessment and credit monitoring capability), compliance with prudential regulations, etc. particularly referring to ADB's "Financial Management and Analysis of Projects" (2005, Chapter 6, relating to financial due diligence of financial institutions.
- (v) in coordination with the finance, public private partnership (PPP), capital markets specialists, develop parameters/criteria for projects' eligibility for KUIFF's technical and financial support;

- (vi) prepare a roadmap for institutional investors' participation in KUIFF as well as a roadmap for KUIFF to access long-term Tenge from capital markets including from the country's pension fund/s;
- (vii) oversee the technical, financial, legal, safeguards due diligence of pilot projects;
- (viii) undertake, as needed, due diligence on host financial institutions from a financial management (FM), financial viability and risk perspective;
- (ix) in coordination with the financial management specialist, develop FM/governance conditionality's for pilot projects, review, contribute to, and ensure the quality of capacity development plans for line ministries/local governments; and
- (x) coordinate specifically with the PPP specialist and capital markets specialist to identify and propose new and alternative forms of finance, credit enhancement, and technical and capacity building support to help mobilize financing from the capital market. The team leader will coordinate with development partners to ensure that work on strengthening the enabling environment for private sector participation and projects' selection and development across line ministries and local governments is harmonized, and help the KUIFF secretariat develop a management information system that acts as a repository of projects and monitors progress on projects. The Team Leader will consolidate all team inputs, finalize, and prepare all ADB related documents for the loan processing.

4. **Public Private Partnership (PPP) Specialist (5 person-months).** The specialist will have at least 15 years of international experience in the areas of project evaluation, development, and financing, and well versed in private sector participation including PPPs in urban infrastructure. The specialist will have knowledge of and experience in advising governments on developing institutional, legal and regulatory frameworks for private sector participation in infrastructure. The specialist will, in coordination with the team lead and other relevant international and national specialists, propose to the central government and concerned local government as options alternative ownership, management and financing structures for each identified pilot project, which will de-risk or better allocate risks during pre- and post-completion periods, set the stage for private sector participation at the right time and maximize government's economic return on its investment (via KUIFF). The specialist will help:

- (i) prepare tools and guidelines for identifying, screening and evaluating potential PPP projects;
- (ii) provide guidance to sponsors (local governments) and make recommendations to improve the proposals, where needed;
- (iii) prepare tools and guidelines for financial viability analysis and PPP suitability checks;
- (iv) review, contribute to, and ensure rigor, completeness and accuracy of analyses to ensure project development support (pre-feasibility, feasibility, transaction advisory) and or financing support by KUIFF, as appropriate; (v) prepare guidelines for sample terms of reference for pre/feasibility studies and transaction advisory services;
- (v) oversee the preparation of pre-feasibility studies (in-house or external);
- (vi) analyze and recommend PPP risk allocation and develop an appropriate risk profile for the projects; and
- (vii) help assess the financial support requirements for PPP projects, undertake discussions with KUIFF and Ministry of Finance on the proposed PPP activity, its strengths and weaknesses, and specific mechanisms for support, including viability gap funding and long-term debt. The specialist will also assess how ADB's guarantee facilities can be used to support private sector participation and PPPs.

5. **Financial Management Specialist (4 person-months).** The specialist will have a post graduate qualification in public finance, accounting, or a related field with at least 12 years of international experience in public sector planning, budgeting, revenue and taxation, accounting, public procurement, and internal and external audit at the central or local levels. Preference will be given to a chartered accountant or a certified public accountant. Experience in the former CIS countries will be an advantage. S/he will have demonstrated experience delivering institutional strengthening assistance to national and/or sub-national entities in public financial management including designing training materials and delivering training. S/he support various aspects of financial management of the project as well as of the demonstration projects to be financed by the project. Specifically, the specialist will:

- (i) ensure robust design of the financial management system for KUIFF and implementation of effective internal control (s) to ensure effective and efficient deployment of funds in line with qualifying criteria established for projects;
- (ii) help maintain/ensure proper functioning of the financial management system to adequately reflect operations, resources and expenditures related to the project and facilitate accurate, detailed and timely project accounting, auditing and reporting in compliance with the government and ADB requirements;
- (iii) provide technical advice necessary for selection of projects for KUIFF support i.e., undertake financial management assessment of the utilities/demonstration projects and recommend appropriate measures for improvement of key aspects (e.g., finance strategy, income generation plans, financial management, etc.) to improve utilities' creditworthiness – i. e., ensuring more effective, efficient, and transparent financial management;
- (iv) review information systems and procedures (e.g., finance business processes, operating procedures in the finance units, etc.) in each utility/demonstration project, propose measures for financial management improvement and prepare a time-bound, monitorable action plan with a focus on efficiency and effectiveness;
- (v) prepare a program for on-the-job training of concerned utilities' staff to upgrade their expertise in financial management and internal control procedures; and
- (vi) undertake the financial management assessment of the proposed executing agency (ministry or government financial institution) and propose improvements as needed to ensure proper use of public funds and reach agreement on financial reporting, auditing and public disclosure arrangements for the project.

The specialist will be part of key project meetings and provide technical advice, as needed, in relation to financial management (issues) and provide inputs, as needed, for processing of the ensuing loan.

6. **Urban/Municipal Infrastructure Development Specialist (5 person-months).** The specialist will have a minimum 15 years of professional experience in municipal infrastructure development, preferably in emerging markets, with a focus on WSS, SWM and or district heating; extensive experience in technical assessments and feasibility studies; and a civil engineering degree. The specialist, in coordination with the team leader and relevant international and national specialists, will help local governments, central government and KUIFF to identify five to six high priority projects (pilots) in two or three cities. The specialist will subsequently help prepare pre-feasibility analysis i.e., project briefs covering preliminary technical, financial, legal, institutional, economic, social and environmental due diligence) of the proposed investment projects.

7. **Capital Markets Development Specialist (3 person-months).** The specialist will have a minimum 15 years of experience in developing financial and capital markets in emerging markets/transition economies of the former Soviet Union countries. The specialist will assess and make recommendations that will help the domestic capital market be a source of additional equity

and long-term debt financing for urban infrastructure development. S/he will work with the team leader and all the relevant international and national specialists to:

- (i) help market participants to better understand, allocate and price pre- and post-completion period risks in urban infrastructure in general and the selected priority projects in particular, and
- (ii) propose reforms to strengthen the supervisory and regulatory capacities of the pension and insurance regulator about such risks. The specialist will consult with pension funds, other institutional investors and commercial banks in Kazakhstan, with international banks, official export credit agencies and export import banks, political risk insurers, and multi-lateral and bilateral development partners and then identify and propose (in coordination with the team leader and the other relevant international and national specialists) new and alternative forms of finance, credit enhancement, and technical and capacity building support to help mobilize commercial co-financing which will give a clear exit strategy for government's initial investment.

8. **Urban Economist (3 person-months).** The specialist will have a minimum of 15 years of professional experience in urban planning and/or urban development, preferably in emerging markets; and experience in economic/ sector assessments of urban development project desirable. The specialist will perform project economic analysis following the 10 Key Areas of economic analysis as outlined in the Guidelines for Economic Analysis of Projects (ADB, 2017). The specialist will identify the policy and regulatory frameworks that need to be strengthened in terms of urban planning and assessment of long-term investment needs in the cities/regions in which pilot projects will be identified (refer 3 above). The specialist will also assist the selected cities/local governments, central government and potential institutional investors to properly understand, assess and price pre-completion 'construction' period risk and post completion 'operation and maintenance' period risks in the selected priority projects; and assist in understanding of best allocation of construction, technology, operating, financing, commercial, political, natural and other project risks in the selected pilot projects.

9. **Legal Specialist (4 person-months).** The legal expert will be responsible for all legal and regulatory aspects of each project proposal and will certify their completeness and accuracy. S/he will also be responsible for recommending standard contracting provisions and drafting and reviewing of project agreements and compliance with regulatory requirements. S/he will preferably have at least 10 years of successful experience in a project finance environment, preferably the legal department of an investment bank or a private law firm acting on behalf of

private sector investors in project finance transactions. Experience of working in post-soviet countries will be an advantage. Specifically, the expert will:

- (i) liaise with project sponsors on all legal and regulatory matters pertaining to their proposals;
- (ii) vet and comment on specific contracts and agreements;
- (iii) provide written opinions on legal and regulatory matters related to project development;
- (iv) help develop standardized contractual provisions and security documents;
- (v) assist with identifying and assessing possible legal (and financial) risks for different ownership and financing agreements and recommend appropriate risk mitigation in the Kazakhstan context;
- (vi) develop model contract templates/service agreements for different types of PPP contracts ensuring compliance (both by the state and the private partner) to the different laws and acts pertaining to the PPP Law and other applicable laws; and
- (vii) develop model guidelines for different PPP models including, development of templates for Expression of Interest, Terms of Reference, Tender, etc.

10. Environmental Safeguards Specialist (3 person-months). The specialist should have at least a Master's degree in environmental engineering or environmental management and extensive experience in conducting environmental assessments. S/he will: (i) examine the environmental implications of civil works planned under the demonstration projects; (ii) carry out a diagnostic assessment of applicable and relevant laws, regulations, rules, and procedures for managing and mitigating the environmental impact of the projects; and (iii) prepare initial environmental assessment reports for the demonstration projects which will include an evaluation of the project's arrangements for early screening and mitigation of environmental impacts, information disclosure mechanisms and consultations with stakeholders, and grievance redress procedures, as needed. The specialist will provide advice to Team Leader on environment-related aspects, including inputs in designing the Environmental and Social Safeguards Management system; ensuring appropriate due diligence and safeguard compliance within the framework of ADB Safeguard Policy Statement; review environmental safeguards monitoring and evaluation aspects of the pilot projects; assist implementing agencies, project management units, consultants, and external monitors to improve their monitoring and evaluation. The specialist will also provide inputs to all documents required for processing of the ensuing loan.

11. Social Safeguards and Gender Specialist (3 person-months). The specialist should have at least a Master's degree in gender studies, social sciences, sociology or related discipline and at least 10 years' experience in gender and social analysis and operations, including for ADB or other international financial institutions. The specialist should have expertise in conducting gender, poverty and social analysis and assessments in Kazakhstan, and expertise in the use of participatory methodologies to collect and analyze information, as well as a good understanding of ADB policies and requirements. Key tasks include: (i) prepare poverty, social and gender analyses, including disaggregated analysis of the gender and social impacts and benefits of the demonstration projects; (ii) identify priority interventions and procedures to promote participation by, and benefits, to the poor, girls and women, and other disadvantaged groups; and (iii) prepare a gender action plan and the summary poverty reduction and social strategy as needed. The specialist will provide advice to Team Leader on social and gender-related aspects, including inputs in designing the Environmental and Social Safeguards Management system; ensuring appropriate due diligence and safeguard compliance within the framework of ADB Safeguard Policy Statement; review social safeguards monitoring and evaluation aspects of the demonstration projects; assist the implementing agencies, project management units,

consultants, and external monitors to improve their monitoring and evaluation. The specialist will also provide inputs to all documents required for processing of the ensuing loan.

12. Procurement specialist (4 person-months). The specialist should have at least a Bachelor's degree in logistics, engineering, business administration or related field, with at least 10 years' experience in the urban infrastructure sector. The specialist should have experience in undertaking procurement capacity assessments, conducting project procurement and market risk assessment and preparing procurement planning, developing procurement plans and preparing bidding documents for international financial institutions, and preferably for ADB. The specialist's tasks will include, but are not limited to, the following: (i) prepare the procurement plan and procurement capacity assessment of the executing and implementing agencies, in accordance with ADB Procurement Policy (2017, as amended from time to time) and the associated Project Administration Instructions / Technical Assistance Staff Instructions; (ii) supporting the implementing agencies prepare required plans for procurement activities covering the project implementation period; (iii) identifying procurement constraints and challenges and proposing mechanisms for addressing these; (iv) collecting necessary data and information required for estimating the costs of construction and or rehabilitation of assets (demonstration projects) and in preparing project cost tables; and (v) developing realistic schedule (s) and cost estimate for the design, supervision, inspection, and maintenance of proposed procurement activities; The procurement specialist will also (vi) draft the necessary procurement documentation including (a) reviewing project proposals and bidding documents for tendering projects; (b) posting of advertisements for consulting requirements, short-listing of candidates, drafting of consultant's contracts; (c) ensure compliance with ADB's Procurement Policy (2017, as amended from time to time), and Procurement Regulations for ADB Borrowers (2017, as amended from time to time); (ii) monitor quality control of procured items; and (iii) ensure timely and appropriate payments for contracts entered into by KUIFF. The specialist will also provide inputs to all documents required for processing of the ensuing loan.

13. Water Utility Specialist/Team Leader (4 person-months). The Water Utility Specialist/Team Leader will be a senior expert with a degree in environmental engineering, or related field and at least 15 years of work experience in urban water supply and sanitation projects and utility performance management. Specific experience in non-revenue water management, sector policy dialogue and development and water utility management, are supplementary assets. The Water Utility Specialist/Team Leader will be responsible for the following tasks:

- (i) review of the policy, legal, regulatory, financial and institutional frameworks for the sector, determine areas for improvement in urban water supply and sanitation sector to provide suitable recommendations and institutional structure;
- (ii) propose mechanisms aimed to foster improved coordination among various organizations and stakeholders involved in the water supply and sanitation sector;
- (iii) identify specific needs and tailor suitable capacity building programs targeting particularly: (a) financial sustainability, (b) tariff setting, (c) system management, and (d) utility management; (iv) identify and propose a capacity building program for strengthening institutional structure and implementation capacity with respect to financial sustainability and tariff setting, governance, utility performance, and private sector participation for (a) the management, and (b) the operational staff of the utility companies, identifying specific needs for technical capacity building that must be provided to the utility companies' personnel in charge of O&M through on-the-job training during construction or specifically tailored training inland or abroad, to secure sustainable O&M of the assets in the long term;
- (iv) identify the needs for consultants, both national and international, required to be assigned under the detailed design and construction supervision program of the

- project in order to ensure the proper implementation of the capacity building program, and prepare a descriptive scope of work for said experts;
- (v) identify the demonstration projects to be undertaken; and (vii) provide support and guidance to the Procurement expert for the: assessment of the procurement capacity of both EA and IA, preparation of contract packaging, arrangements for project implementation, project implementation schedule, scope of work for consultants.

B. National consultants

14. **PPP Specialist (5 person-months).** The specialist must have a minimum 5 years of experience in developing infrastructure projects on a PPP basis preferably in emerging markets/transition economies of the former Soviet Union countries. Experience with developing institutional capacity for municipalities and in the urban sector environment, particularly in Kazakhstan, is desirable. The specialist will assist the international PPP Specialist, the team leader and the international specialists as needed.

15. **Financial Management Specialist (4 person-months).** The specialist be a chartered accountant or a certified public accountant with at least 6 years of experience in the region. S/he will have experience in public sector planning, budgeting, revenue and taxation, accounting, public procurement, and internal and external audit at the central or local levels. S/he will have demonstrated experience delivering institutional strengthening assistance to national and/or sub-national entities in public financial management including designing training materials and delivering training. The specialist will directly work with the international financial management specialist (and other specialists as needed) to ensure effective and timely achievement of the terms of reference pertaining to the financial management and related capacity building aspects of KUIFF and the demonstration projects/utilities to be supported by KUIFF.

16. **Urban/Municipal Infrastructure and Development Specialist (5 person-months).** The specialist will have a minimum 10 years of professional experience in municipal infrastructure development in Kazakhstan with a focus on WSS, district heating and SWM, and some experience in technical assessments and feasibility studies. A civil engineering degree would be desirable. The specialist will assist the international Urban/Municipal Infrastructure and Development Specialist, the team leader and other international specialists as needed in the preparation of the pre-feasibility analysis of the priority projects.

17. **Capital Markets Development Specialist (3 person-months).** The specialist will have a minimum 5 years of experience in developing financial and capital markets sector in emerging markets/transition economies of the former Soviet Union countries. The specialist will assist the international Capital Markets Development Specialist, the team leader and the other international specialists as needed.

18. **Urban Economist (3 person-months).** The specialist will have a minimum of 5 years of professional experience in urban planning and/or urban development; and experience in economic/sector assessments of urban development project in Kazakhstan would be desirable. The specialist will perform project economic analysis following the 10 Key Areas of economic analysis as outlined in the Guidelines for Economic Analysis of Projects (ADB, 2017). The specialist will assist the international Urban Economist, the team leader and other international specialists as needed.

19. **Legal Specialist (4 person-months).** The specialist must have at least 6 years' experience of working with national or state level agencies / governments / law firms on legal and regulatory framework for private sector participation in urban infrastructure including PPPs. Knowledge of the national laws and policies pertaining to public private partnerships, contracts, partnerships, commercial and company laws, etc. is essential. Some experience in contracts preparation, financial and legal due diligence of investment proposals will be desirable. The expert should be a law graduate from any recognized university in Kazakhstan or abroad, preferably with post graduate qualifications in law.

20. **Environmental Safeguards Specialist (3 person-months).** The specialist will assist the international environmental safeguards specialist, and other specialists as needed, and will provide advice on environment-related aspects, including due diligence and safeguard compliance within the framework of ADB Safeguard Policy Statement; review environmental safeguards monitoring and evaluation aspects of subprojects; assist the implementing agencies, project management units, consultants, and external monitors to improve their monitoring and evaluation.

21. **Social Safeguards and Gender Specialist (3 person-months).** The specialist will assist the international environmental safeguards specialist, and other specialists as needed, and will provide advice on social and gender-related aspects, including due diligence and safeguard compliance within the framework of ADB Safeguard Policy Statement; review social safeguards monitoring and evaluation aspects of subprojects; assist the implementing agencies, project management units, consultants, and external monitors to improve their monitoring and evaluation.

22. **Procurement Specialist (4 person-months).** The specialist will assist the international procurement specialist in all matters related to procurement including ensuring rigorous checking of bidding documents for projects prepared by the project sponsors and procurement management capacity building of project sponsors.

23. Overall, the national specialists will be required to (i) provide technical and administrative support to assist the international consultant team; (ii) support activities of international specialists in the field, reviewing and translating documents and literature, collecting data and information, research and analysis (both quantitative and qualitative), and preparing notes and briefs; and (iii) coordinate with the Executing Agency and the Implementing Agencies. Based on their national experience, they will help develop strategies, mechanisms, programs, and/or policy interventions that maximize the technical assistance effective utilization to develop the ensuing project.