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Kazakhstan: Alternative Urban Infrastructure Financing Modalities

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ABBREVIATIONS[1]

ADB	-	Asian Development Bank
ALE	-	Association of Legal Entities
AREM	-	Agency for the Regulation of Natural Monopolies *(post-Reorganization, the Committee for Regulation of Natural Monopolies CREM)*
BOT	-	Build-Operate-Transfer
BTO	-	Build-Transfer-Operate
CHP	-	Combined Heat and Power plant
CIS	-	Commonwealth of Independent States
CREM	-	Committee for Regulation of Natural Monopolies *(formerly known as AREM, and now under the new Ministry of National Economy)*
CSO	-	civil society organization
CWR	-	Committee for Water Resources *(pre-Reorganization, under the Ministry of Environment and Water Resources, now under Ministry of Agriculture)*
DBK	-	Development Bank of Kazakhstan
DFI	-	Development Financing Institution
EA	-	executing agency
EBRD	-	European Bank for Reconstruction and Development
ECA	-	export credit agency
EDB	-	Eurasian Development Bank
EU	-	European Union
GHG	-	Greenhouse Gases
GKP	-	State Communal Enterprise *(Gosudarstvennoe Komunalnoe Predpriyatiye)*
GOK	-	Government of Kazakhstan
HGA	-	Host Government Agreement
IFK	-	Investment Fund of Kazakhstan
IPO	-	Initial Public Offering
IsDB	-	Islamic Development Bank
HOA	-	Home Owners' Association
JSC	-	Joint Stock Company
KASE	-	Kazakhstan Stock Exchange
KAZ	-	Republic of Kazakhstan
Kcal/h	-	Kilocalories per hour
KEGOC	-	JSC "KEGOC" (KAZ national power grid company)
KfW	-	Kreditanstalt für Wiederaufbau (German)
Km	-	Kilometer
KZT	-	Kazakhstan Tenge *(currency of the Republic of Kazakhstan)*
IA	-	implementing agency
IFC	-	International Finance Corporation
LGU	-	Local Government Unit
ME	-	Ministry of Energy *(created in Reorganization to consolidate the former Ministries of Oil & Gas and Ministry of Environment &*

[1] NB. On 8th August 2014, the Government of Kazakhstan was reorganized by Presidential Decree ("Reorganization"). This report has been updated to reflect new these names and hierarchies, but also retains references to former names for continuity.

		Water Resources)
MEBP	-	Ministry of Economy and Budget Planning *(post-Reorganization consolidated into the new Ministry of National Economy MNE, except for GOK budget functions which are transferred to Ministry of Finance MOF)*
MERW	-	Ministry of Environment and Water Resources *(formerly Ministry of Environmental Protection – post-Reorganization, consolidated with Ministry of Oil & Gas into the new Ministry of Energy)*
MINT	-	Ministry of Industry and New Technologies
MNE	-	Ministry of National Economy *(created in the Reorganization to consolidate the former Ministry of Economy & Budget Planning, the Ministry of Regional Development, CREM, the Committee for Consumer Protection)*
MOE	-	Ministry of Energy (*created in the Reorganization to consolidate the former Ministry of Environment & Water Resources and the Ministry of Oil & Gas*)
MOF	-	Ministry of Finance
MRD	-	Ministry of Regional Development (merged into Ministry of National Economy)
MSS	-	management support services
NBK	-	National Bank of Kazakhstan
NPL	-	Non-Performing Loans
NPPPC	-	National PPP Center
PF	-	project finance
PPF	-	project preparation facility
PPP	-	Public-Private Partnership
PPPAC	-	PPP Advisory Center (of Baiterek Holdings)
SARK	-	Kazakhstan SuArnasy (national water utilities industry association)
SFC		Special Finance Company *(an SPV established under the Project Finance Law framework)*
SK	-	Samruk-Kazyna National Welfare Fund (sovereign wealth fund & national holding company)
SOE	-	State-Owned Enterprise
TPF	-	Transaction Preparation Facility
TDT	-	Targeted Development Transfers
UN	-	United Nations
UNDP	-	United Nations Development Programme
USSR	-	Union of Soviet Socialist Republics (Soviet Union)
UUTSF	-	Urban Utilities Transition Support Program (proposed)
UUTSP	-	Urban Utilities Transition Support Fund (proposed)
ZhKH	-	JSC Kazakhstan Center for Communal Services Modernization and Reform (*formerly incorporated as a subsidiary of the Ministry of Regional Development, now post-Reorganization, under the new Ministry of National Economy)*

NOTE

In this report, “$” refers to US dollars.
182 KZT = $1 at time of writing

Key Words
ADB, Kazakhstan, urban, utilities, water, sanitation, district heating, infrastructure, financing, public finance, project finance, PPP, public-private partnership

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Taldykorgan City Akimat
TOO Karaganda Teplotranzit
TOO Karaganda Su
USAID, Almaty
UNDP, Astana
World Bank, Astana
ZhKH Palata

I. EXECUTIVE SUMMARY

1. This policy advisory technical assistance project, TA 8366-KAZ "Alternative Municipal Infrastructure Financing Modalities" (TA), was agreed between ADB and the Government of Kazakhstan (GOK) in early 2013. Conceived as a knowledge product, its goal has been to develop recommendations for the GOK to support the gradual transition of its municipal utilities from their current status of being funded and managed almost entirely by the state to being largely privately managed and possibly owned, with the overall objective of improving the quality of public services.

2. Steps envisaged included (a) a financial de-risking of utilities as investment opportunities for commercial partners, (b) a phased transfer of asset management responsibility to private firms incentivized to improve services, and, (c) ultimately, a transfer of ownership to private investors / operators while improving Government's capacity to regulate and incentivize private operators to deliver the highest possible quality of service to the public. In addition to identifying national-level issues affecting utilities, the TA also included short pilot studies of individual utility companies in two provincial capitals.

3. In August 2013, the TA team began by undertaking detailed comparative corporate financial analyses[2] of the past six years' (2008-2012) audited financial statements of 33 municipal water and heating companies[3] to compare and benchmark their financial strengths and weaknesses, and to compute national industry averages[4]. Heating distribution and water / sanitation companies were selected for the study as they are the only utilities which are generally operated as corporatized city-owned SOEs with finances separate from the city's general accounts. Based on the analyses, two cities were selected for the more detailed studies to be undertaken under the TA: Karaganda and Taldykorgan. The heating companies in these cities were ranked lowest against national averages; the water utility in Taldykorgan is relatively well-performing, and the Karaganda water utility below national averages.[5]. The selection of these cities and their utilities was confirmed by MEBP and MRD in January 2014.[6]

4. To benefit from a wide range of domestic and international perspectives, a GOK interagency working group was formed in October 2013 with representatives of various divisions of the Ministry of Regional Development (MRD)[7] the Ministry of Economy and Budget Planning (MEBP)[8], the Agency for Regulation of Natural Monopolies (AREM)[9], the Kazakhstan Center for Utilities Modernization and Reform (KazCenter ZhKH), the National PPP Center, Ministry of

[2] The utilities rating / ranking performed was based on financial data. Comparable service / operational data on Kazakhstan utilities is limited and not available for all utilities in the universe.
[3] Audited financial statements were obtained from the GOK "Depository of Financial Objects" www.dfo.kz
[4] These utility-level financial analyses, published in separate reports, were completed and made available to ADB and GOK in October 2013.
[5] Karaganda city is a relatively large and industrialized city and the capital of Karaganda oblast, immediately south of Astana. Taldykorgan is a smaller city in southeastern Kazakhstan, and is the capital of Almaty oblast.
[6] In addition to heating and water, the TA Team undertook to conduct a similar pilot study of the municipal solid waste entity in Taldykorgan, Taldykorgan Korkem, among the pilot studies. However, the entity, operating as a "State Communal Enterprise (Gosudarstvennoe Komunalnoe Predpriyatiye) – essentially a department of the city Akimat (LGU) – Korkem was unwilling or unable to provide the information requested for assessment, and so was dropped from the TA.
[7] Post-reorganization, MRD is now consolidated with MEBP into the new Ministry of National Economy (MNE).
[8] Post-reorganization, MEBP is now consolidated with MRD into the new Ministry of National Economy (MNE)
[9] Post-reorganization, AREM has been reconstituted as the Committee for Regulation of Natural Monopolies (CREM), under MNE

Environment & Water Resources (MEWR)[10], and other agencies. An international advisory panel was constituted with five senior persons with long experience in project finance, infrastructure finance, GOK banking and public finance, and development finance institutions (DFI) activities in the region - specifically World Bank and Kredietanstalt Für Wiederaufbau (KfW); the panel reviewed and commented on drafts of this study.

5. Over the course of the project, the TA Team visited Karaganda and Taldykorgan each twice for consultations with the respective Akims (heads of local government) and Akimat officials responsible for housing and utilities, and management of the respective utilities. Additionally, three missions to Astana, and four missions to Almaty were undertaken for meetings with financial institutions, GOK agencies, and officials of ZhKH Palata (the national communal services industry association), UNDP, World Bank, USAID, IFC, EBRD, Eurasian Development Bank, DBK, Deutsche Bank, Commerzbank, the German Chamber of Commerce in Kazakhstan, and other organizations. TA Team members based in Astana, Almaty and Aktobe maintained continuous engagement with working group members and other GOK officials, including municipal officials and members of parliament.

6. A first workshop to discuss issues identified in the TA study was held in Almaty on 6 June 2014 (attended by 28 representatives of GOK agencies (Appendix 2), followed by a second workshop in Astana on 4 July 2014 (attended by 47 representatives of GOK agencies and others (Appendix 3.) to discuss findings and recommendations of the TA. Underlining how seriously the issues addressed by the TA are taken by the GOK at the highest levels, both workshops featured addresses given by leading members of the Committee on Economic Reform and Regional Development of the Kazakhstan Majlis (national parliament)[11].

7. This paper reports observations and conclusions of the TA research, recommends specific reforms, and proposes a comprehensive and integrated financing and capacity-building program to address the problems identified. This program can support the GOK and its urban utilities in a multi-year transitional program from state ownership towards an eventual government graduation to a purely regulatory role, as seen in other countries.

8. The “Urban Utilities Transition Support Program” (UUTSP – v. Section XI below) proposed by this TA includes several components, each designed to address a specific systemic weakness identified by the TA. Some of these are at an overarching national level (e.g. lack of capital markets instruments to make long-term Kazakhstan Tenge (KZT) funding available to utilities for capital expenditures, short-term budgeting horizons and inefficiencies in tariff-setting), and some are local / microeconomic (such as corporate financial management of individual utility companies. The principal features of UUTSP include:

(a) a mechanism to provide international management advisory and support services[12] directly to eligible urban utilities in order to de-risk them and improve their creditworthiness, and to support local utilities by expanding existing local training programs[13];

[10] Post-reorganization, MEWR functions were divided between the new Ministry of Energy and the Ministry of Agriculture
[11] Mr. Serikbay Nurgissayev and Mme. Aigul Solovyeva attended the Almaty and Astana workshops, respectively.
[12] These services would be provided by contracted ‘twinned’ utility operator companies from countries with a successful history of utilities transitioning into PPP modalities, such as the Philippines, France, and the UK.
[13] e.g. those currently being successfully operated by the Kazakhstan National Chamber of Housing and Utilities (ZhKH Palata)

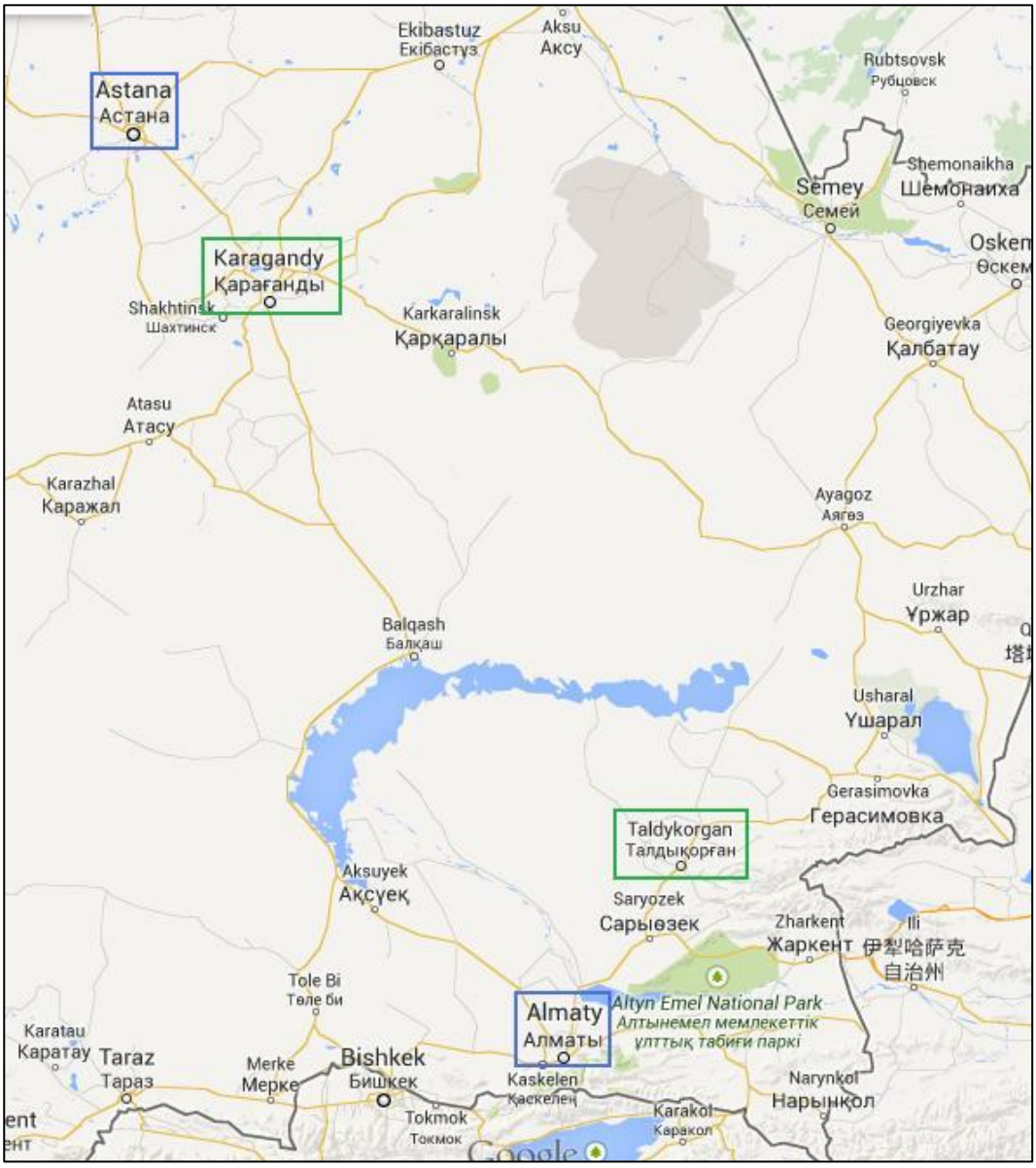
(b) a long-term infrastructure debt fund – the Urban Utilities Transition Support Fund (UUTSF) -- together with a new dedicated fund management entity under Baiterek Holdings[14], to raise long-term Tenge by issuing domestic bonds to GOK institutional investors and to on-lend the proceeds to eligible utilities through a series of structured project finance or corporate loans;
(c) technical assistance to build technical and management capacity within GOK entities potentially involved with UUTSF, including Development Bank of Kazakhstan (DBK), Kazyna Capital Management (KCM), and BH's own PPP Advisory center (PPPAC), together with a specialized PDF or Transaction Preparation Facility to structure debt financings by the UUTSF of eligible utilities and to monitor borrowers' financial performance vis-à-vis loan covenants and performance targets set together with their 'twinned' international management advisors;
(d) technical and financial capacity-building within local agencies such as oblast-level PPP Centers and the utilities regulatory departments of oblast and city Akimats;
(e) an availability payments or output fund to support utilities' ability to service debt from the UUTSF during a scheduled period of transition from low to adequate tariffs;
(f) technical assistance to GOK regarding expanding the market, at first domestically then internationally, for securities issued by UUTSF. It is anticipated that UUTSF securities would be placed directly at first with GOK institutions such as the Unified Pension fund and National Fund. Subsequently these securities could be listed on KASE to provide a bellwether quasi-sovereign issue which could later be investible by non-resident / offshore Kazakh investors then by international institutions.

9. An objective of the TA was to develop a strategy to allow GOK to exit its obligations to maintain and operate municipal utility assets. Therefore, individual utilities which have successfully participated in UUTSP would be 'graduated' to the market after completing a transition period of 5-8 years and establishing a good credit history by servicing their UUTSF loans. Depending on the state of the market by that time, this could be accomplished through some form of PPP transaction appropriate to the Kazakhstan market at that time (e.g. full management contracts, concessions, leases, affermage, outright share sales, etc.) with domestic, foreign, or joint-venture private operators.

[14] Baiterek Holdings (BH) is a national-level state holding entity responsible for ownership and management of GOK financial institutions including Development Bank of Kazakhstan, Kazyna Capital Management, and others. BH is thus a natural counterpart for ongoing work related to encouraging domestic institutional investment in utilities.

Figure 1 – Map of Kazakhstan

Figure 2 – Detailed regional map of Central – Eastern Kazakhstan showing the location of cities in which TA activities were conducted: Astana, Almaty, Karaganda, and Taldykorgan



II. SUMMARY OF CHALLENGES FACING KAZAKHSTAN UTILITIES

10. This study has identified the following challenges as the principal ones facing urban utilities in Kazakhstan. These challenges are discussed in detail in the sections following, and recommendations to address these challenges, based on the TA research, are laid out in Section XI of this report.

11. **Massive infrastructure investment needs.** Infrastructure investment requirements for Kazakhstan's energy, transport and municipal utilities through 2040 have been projected by ADB research to total at least $150 billion, and may even be up to $240 billion. Up to $40 billion is expected to be needed for investment in the water sector alone. To put these amounts in perspective, Kazakhstan's GDP in 2013 was equivalent to about $224 billion[15]. It is understood that GOK prefers to avoid sovereign borrowing, but GOK's own funding for infrastructure investment is less than $800 million per annum from both the Government's budget subsidies and investments. The Kazakhstan PPP program[16] is still far short of projected investment requirements.

12. **Low, unsustainable tariffs.** Since independence, the GOK has followed a national policy of maintaining such low tariffs for water and district heating services that revenues to utility companies do not cover operations and maintenance or the needed investment programs to renovate and replace fully-depreciated assets. The policy is implemented through the Agency (now Committee) for Regulation of Natural Monopolies. Low tariffs and uncertainty as to future tariff levels also preclude the long-term financial sustainability and development of utilities, their ability to keep pace with urban growth, and precludes any meaningful private investment.

13. **Reliance on *ad hoc* budget transfers.** As tariffs are inadequate to sustain utilities, *ad hoc* emergency funds are regularly transferred from the national government to oblast and city Akimats, and from them to utility companies. This practice is irregular and unpredictable, and cannot be depended upon by utilities. Public budget commitments in Kazakhstan can extend to a maximum of 3 years – not sufficient to underpin the long-range planning needed to build and operate complex infrastructure for urban services delivery.

14. **Municipalities cannot borrow from banks.** Although utility companies can borrow commercially, they lack creditworthiness, and their owners, city Akimats are not allowed by law to borrow[17]. Thus utilities and their owners need other sources of funding for utilities to reduce their dependence on national government transfers.

15. **Lack of a market in long-term Tenge.** Although there are major Tenge-based GOK institutional funds with long-term liabilities[18], there are no long-term Tenge securities in the Kazakhstan capital market nor long-term Tenge deposits in the banking system. Banks are, therefore, unable to fund the sort of long-term (25 year) loans required by utilities for major

[15] www.tradingeconomics.com/kazakhstan/gdp

[16] The Kazakh PPP Program is a GOK incentive to encourage public-private partnerships. The key entities involved are the Kazakhstan PPP Center, which has the responsibility for validating proposed project documentation, and the Baiterek Holdings PPP Advisory Center, which is mandated to develop and structure PPP projects. There have been no successful PPP transactions to date in Kazakhstan.

[17] Exception are the cities of Astana and Almaty, which are legally able to issue municipal bonds on the Kazakhstan Stock Exchange (KASE). However, TA research has only found one instance of this to date. In 2010, Almaty City Akimat issued 5-year bonds to mature in 2015, amounting to KZT 13 billion ($71.2m); at time of writing, priced to yield 6.2%

[18] Example, the Unified Pension Fund and the National Fund.

investments in infrastructure such as heating and water networks. There is also no existing local capital market mechanism, such as a municipal or utility bond market, as an alternative to banks.

16. **Banking system still recovering from the global financial crisis**. Kazakh commercial banks are widely still hampered by NPLs remaining from the global financial crisis. Even if they could lend, most likely would not do so without corporate credit enhancement for utility entities and/or capacity to put together project financings, which they have never done. Foreign banks remain focused on trade finance and export credits with political/commercial risk cover and are unlikely to consider lending to cities or their utilities in the foreseeable future.

17. **Lack of regulatory clarity at national government level.** Kazakhstan lacks a central utilities regulator, and responsibility for utilities' development is divided among different agencies, ministries and entities at national, regional and local levels. Frequent reorganizations of the government further complicate local utilities' ability to deal effectively with GOK. The latest reorganization, of 8 August 2014 (Reorganization), has again reshuffled institutions and people related to utilities. The effects of this on the institutions described herein, and on the fundamental issues of well-thought-out long-term investment to ensure dependable public services such as heat and water, are not yet clear.

18. **Soviet legacy**. The poor conditions of water and heating networks today can be attributed to two historical factors. First, these networks were designed on the basis of top-down central planning rather than careful projection of actual demand. These proved to be overestimated and led to accelerated deterioration in facilities as they were not under optimal usage load. Second, many urban networks were pegged to the then-large industrial entities which dominated each region's or city's economy, especially in the so-called "monocities"[19], each of which had a single dominant industrial facility. With the economic transitions following the breakup of the Soviet Union, the flows of financial support and technical assistance that came from 'hosted' industrial entities have decreased or stopped. This has caused a significant worsening in conditions of the utilities networks in the dependent municipalities.

19. **No history of Public-Private Partnerships (PPPs).** There is GOK and regional interest in the idea of PPPs as a possible alternative to continued GOK funding of local utilities, and relieve the public sector of operational responsibilities. However, the legal and regulatory framework is largely untested, and tariffs are inadequate in absolute amount and predictability to provide the returns that private investors would need to justify making the substantial investments needed. More work on the integrated legal / financial environment will be needed, together, perhaps, with new transitional financial mechanisms such as guarantee facilities, project development (or preparation) facilities, or viability gap funds as well as infrastructure-linked financial products to attract institutional investors. Some simple bellwether transactions need to be completed to demonstrate that PPPs are feasible in Kazakhstan.

20. **Frequent governmental reorganizations.** As mentioned above, Kazakhstan is known for regular and sometimes radical restructuring of its government agencies and ministries, and the current regulatory landscape may well, and almost certainly will, change in the coming months. The final draft of this paper reflects institutional arrangements as far as known following the Reorganization of 8 August 2014 including what was known at the time of writing regarding the "Unified Regional Development Program" announced 10 June 10 2014. This Program consolidated with(in?) MRD the responsibility for integration and implementation of five predecessor programs: (a) Affordable Housing 2020, (b) the Program on Modernization of

[19] Such as Zhezkazgan (uranium), Karaganda (coal), and Temirtau (iron & steel).

Housing and Utilities Infrastructure for 2011-2020, (c) the AkBulak water program, (d) the Monocities Development 2012-2020 program, and (e) the Regional Development Program, and adding new initiatives covering small towns and border regions.[20] MRD has now been subsumed into the new Ministry of National Economy which will presumably inherit MRD's responsibility for the above programs.

[20] "Kazakh Government Okayed draft Unified Program of Regional Development announcement by Kazakhstan Central Communications Service 10 June 2014 http://strategy2050.kz/en/news/9672

III. CURRENT STATE OF MUNICIPAL INFRASTRUCTURE IN KAZAKHSTAN

A. Utility Entity Types and Public Ownership

21. Kazakhstan has 14 oblasts and two major oblast-level cities, Astana and Almaty. As can be seen in Table 1 public ownership of utilities is still almost universal in oblast capitals. It is understood that a medium-term GOK objective is to exit from this near-universal public ownership of utility assets and from the responsibility for managing and operating them to deliver public services. As discussed in detail below, these local state-owned utilities will require a significant degree of technical support to management, together with access to new sources of dependable long-term financing, in order to make them suitable to move from public to private ownership.

22. Water and heating utilities in oblast capitals fall into the following categories according to their legal corporate / entity types and the degree of public ownership by the local Akimat:

(a) TOO (a limited liability partnership),
(b) AO (joint stock corporation), and
(c) GKP (unincorporated "State Communal Enterprises" – which function as Akimat departments).

In terms of evolution, GPKs are the most basic form, TOOs the next more advanced, while AOs are the most corporate. AOs are thus the most independent of their owner-Akimats, and GKPs the least, although all maintain entity-level accounts and file financial statements with AREM (now CREM).

Table 1 – Legal Entity Types of Utilities in Oblast Capitals

	Oblast	City	Heating Utility Type	*Public Ownership*	Water Utility Type	Public Ownership
1	Akmolinskaya	Kokshetau	GKP	*100%*	GKP	100%
2	Aktobe	Aktobe	AO	*100%*	AO	100%
3	Almatinskaya	Taldykorgan	GKP	*100%*	GKP	100%
4	Atyrauskaya	Atyrau	AO	*100%*	GKP	100%
5	East Kaz	Ust-Kamenogorsk	AO	*100%*	GKP	100%
6	Karagandinskaya	Karaganda	TOO	*100%*	TOO	51%
7	Kostanaysakaya	Kostanay	GKP	*100%*	GKP	100%
8	Kyzylordinskaya	Kyzyl-Orda	GKP	*100%*	GKP	100%
9	Mangistauskaya	Aktau	TOO	*100%*	TOO	100%
10	North Kaz	Petropavlovsk	TOO	*100%*	TOO	100%
11	Pavlodarskaya	Pavlodar	TOO	*100%*	TOO	100%
12	South Kaz	Shymkent	AO	*100%*	TOO	22%
13	West Kazakhstan	Uralsk	AO	*100%*	TOO	100%
14	Zhambylskaya	Taraz	GKP	*100%*	GKP	100%
15	-	Almaty	TOO	*100%*	GKP	100%
16	-	Astana	AO	*100%*	GKP	100%

23. It can be seen that all heating distribution networks are owned by local Akimats, as are 14 of the 16 water utilities. The exceptions are Shymkent, which is majority owned by a private business, and Karaganda, which is currently 51% Akimat-owned (and is also a pilot case study under this TA). Heating utilities are almost equally split among the three types, with five GPKs (31%), six AOs (38%), and five TOOs (31%). Nine of the water utilities remain as GPKs (56%), while six are TOOs (38%) and only one is an AO (6%).

24. As utilities transition gradually away from 100% public ownership, it can be expected that those which are still GPKs will evolve into TOOs and then to AOs, as AOs provide the most flexibility and autonomy to shareholders. In future, new combinations of entities will need to be tested in utilities finance such as the Special Financing Companies (SFCs) created under the new Project Finance Law (*q.v.* below)

25. It should be noted that, although all of the heat distribution utilities surveyed in this TA are 100% owned by Akimats, several municipal Combined Heating and Power plants (CHPs - the sources of the heat which is distributed by the network entities) have been privatized[21]. The dilapidation of these Akimat-owned heat distribution networks leads to high level of non-revenue heat. Networks transport heat to customers from CHPs and must compensate CHPs for lost revenues due to leakage. The resulting financial burden is a major obstacle to these entities functioning as sustainable businesses. The possible re-merger of profitable CHPs with unprofitable networks should be examined city by city to combine them into more financially self-sustaining entities.

B. Heating and Water Utilities – Current Situation in Kazakhstan

1. Heat Distribution – No Network Privatization Yet

26. According to ZhKH Palata, the national chamber of utility companies and construction companies, the total length of Kazakhstan's municipal heating networks is 11.7 thousand km. Of these, 3.8 thousand km (32.6%) are under local government ownership, while 7.9 thousand km (67.4%) are in the hands of private operators such as Kazakhstan Kommunal services (KKS). Of the total network, 63% needs to be replaced or is at least in need of serious repair. Due to high levels of wear of these heating networks, significant system heat losses occur. In 2009, according to SARK, losses amounted to 11.6 Million Kcal, or equivalent to 17.5% of the total heat released into the networks by the heat suppliers, combined heating and power plants or CHPs.

27. About 30% of the thermal energy distributed in heating networks is produced by small boilers with a capacity of around 100 Kcal/h. These heat sources are characterized by an efficiency of only about 60%. This inefficiency causes unnecessarily high energy consumption and emissions of carbon dioxide (CO_2) and other greenhouse gases (GHGs).

28. In addition to heat inefficiency and heat losses, the development of heating utilities is also being hampered by an extremely low level coverage of heat meters - only an estimated 23.3 thousand meters are installed nationwide. Due to the lack of metering, it is impossible to determine the actual heat flow rate and the real amount of heat consumption in buildings. This leads to imprecise billing and accounting in transactions between CHP operators, as providers of bulk heat, and distributors (piping network operators) and retail customers. The lack of

[21] Example. in Karaganda, where the heat-generating capacity is 100% owned by a private entity which is also 49% owner of Karaganda Su, the water utility.

metering and the resulting lack of accurate billing and charging for heat, means that price and demand do not figure into the business of creating and delivering heat to consumers, and tariffs have only a vague relation to the costs of the service being performed.

29. In mid-2014, a feasibility study for installation of building-level heat meters in apartment buildings in the larger cities was, under final review in MEBP[22]. It was planned that, once approved, the ZhKH Development Fund (*q.v.,* a subsidiary of the KazCenter ZhKH) would, as its first activity, provide two-year loans to heating companies (or their parent Akimats) for installation of such heat meters. The state of this program and of the ZhKH Development Fund itself is not clear following the government reorganization in August 2014. Presumably, it will continue now under the new Ministry of National Economy.

2. Water Supply and Sanitation – Some Privatization Successes, But Many Failures

30. The analysis of private participation in Kazakhstan's water sector shows rather mixed results. Water Resources Marketing LLP (in Shymkent) is a rare successful example of privatization. The company, an early privatization transaction which has received loans from EBRD in three tranches, has achieved relatively strong performance and financial results and reportedly provides good quality services and enjoys good relationships with customers. Unsatisfactory outcomes of privatization were largely based an adverse selection of target companies with weak financial position and high risks, inadequate tender procedures, and resulting selection of less-than optimal private partners.

31. According to KfW, shortly after independence, Kazakhstan was initially one of the most favored target markets among the former Soviet republics for European investment due to its size and relative wealth. Also, as Uzbekistan became less open to FDI in the mid-2000's, many international companies moved their local headquarters, productions and other business activities to Kazakhstan, which was regarded as being more liberal and an easier place in which to do business. However, this did not include public utilities in general and the water sector, in particular. A leading European commercial banker in Almaty mentioned that it would need a completely different public attitude towards water resource management in order to get the average foreign water company interested in Kazakhstan's water sector.

32. There have been attempts by foreign water companies to enter the Kazakh market, but these have failed and not provided the sort of model transaction which other international companies would consider a sign to invest in Kazakhstan. At the end of the 1990's, French water companies Veolia and Suez came to Kazakhstan. Though they have both have extensive experience and have thrived in many difficult markets[23], their investments in the Kazakh water sector were either ceased in 2000 (Suez/Tractebel) or quietly 'postponed' indefinitely since 2003 (Veolia)[24]. Also, the World Bank has attempted to attract international private investors into Kazakhstan through use of management contracts for utilities in Karaganda, Temirtau and

[22] Now MNE.
[23] Suez incurred a very large loss in Argentina when the Buenos Aires "Aguas Argentinas" water concession was terminated; this is a case study of a failed water concession. The key problem was the government's refusal to allow the concessionaire to raise tariffs following the Peso devaluation.
[24] ""French frustrations." Global Water Intelligence, September 2004l
http://www.globalwaterintel.com/archive/5/9/general/french-frustrations.html

Kokshetau[25]. Such attempts did not receive support from the GOK and Akimats in the implementation phase.

33. This TA has focused on oblast capitals, where private ownership is limited to two examples. However, it is understood that up to a significant proportion of water supply and sanitation systems of small cities are commercially owned and operated. Typical owners of small city utilities are local entrepreneurs, who were able to acquire cheaply priced assets of bankrupted utilities. In rural areas the predominant form of private sector participation in water supply and sanitation are private firms, which operate and maintain their own water systems. Further research could be done in this area to analyze the relative financial strengths of these small utilities, how the entities are structured, and how they contract with their local Akimats.

C. Recent Developments

34. One issue affecting water utilities in Kazakhstan is the need for a central, unified management structure for water resources with clearly-defined roles and responsibilities. Despite the announcement of many plans and programs[26], GOK's split system regulating on one hand water resources management and, on the other, water utilities management is fragmented. The lack of coordination between national governments and Akimats is also problematic. The shuttling of the Committee for Water Resources from the Ministry of Agriculture to the Ministry of Environment and Water Resources in 2013, and back in the Reorganization to the Ministry of Agriculture, seems to indicate a lack of a long-term integrated plan.

35. Beginning in early April 2014, public debate has emerged over the viability of a plan to consolidate all water utilities in Kazakhstan into a single national entity or into several oblast-level entities. At the time, AREM (now CREM) officials were quoted as saying that a plan to this effect would be presented in mid-2014, but none has, likely due to the Reorganization.

[25] Task Force for the Implementation of the Environmental Action Programme for Central and Eastern Europe, Caucasus and Central Asia -- Group of Senior Officials on Urban Water Sector Reform – Private Sector Participation in Water Supply and Sanitation in Eastern Europe, Caucasus and Central Asia: Status Paper; 14th meeting of EUWI EECCA Working Group, 27-28 October 2010, Brussels http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ENV/EPOC/EAP/WATER(2010)5&docLanguage=En

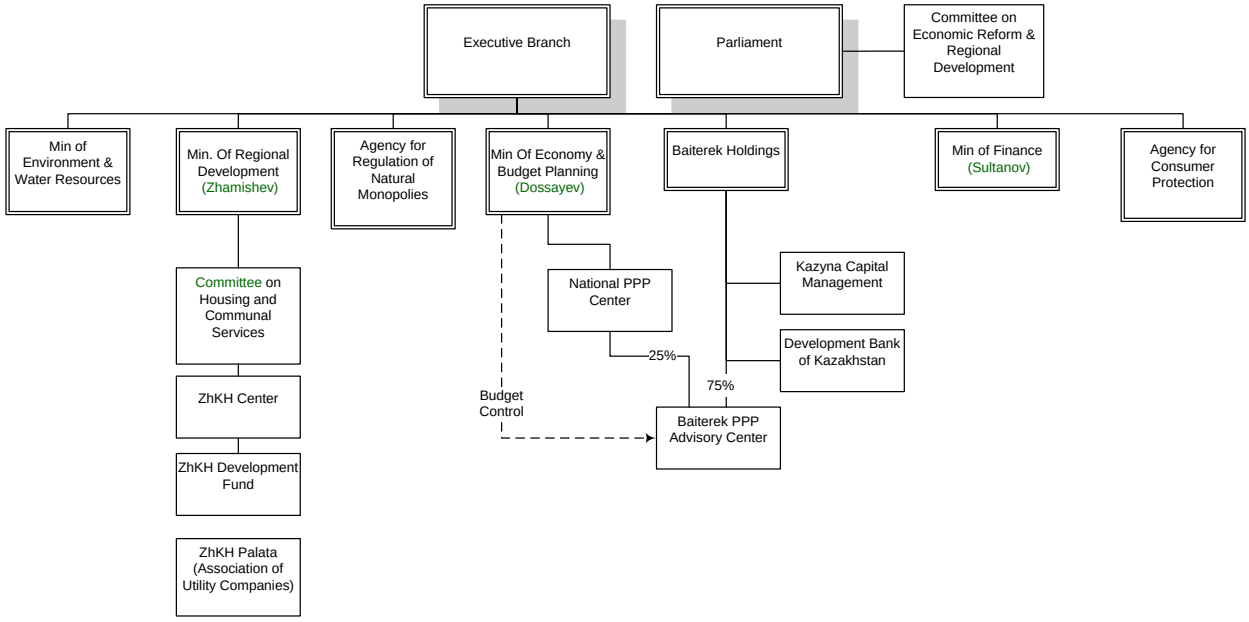
[26] Example, "Strategy 2030 - Conservation and Sustainable Use of Water Resources for the Health and Welfare of Citizens" and State Program "Ak Bulak" for 2011–2020.

IV. INSTITUTIONAL FRAMEWORK FOR MUNICIPAL UTILITIES

A. GOK Institutions and the Reorganization of 8 August 2014

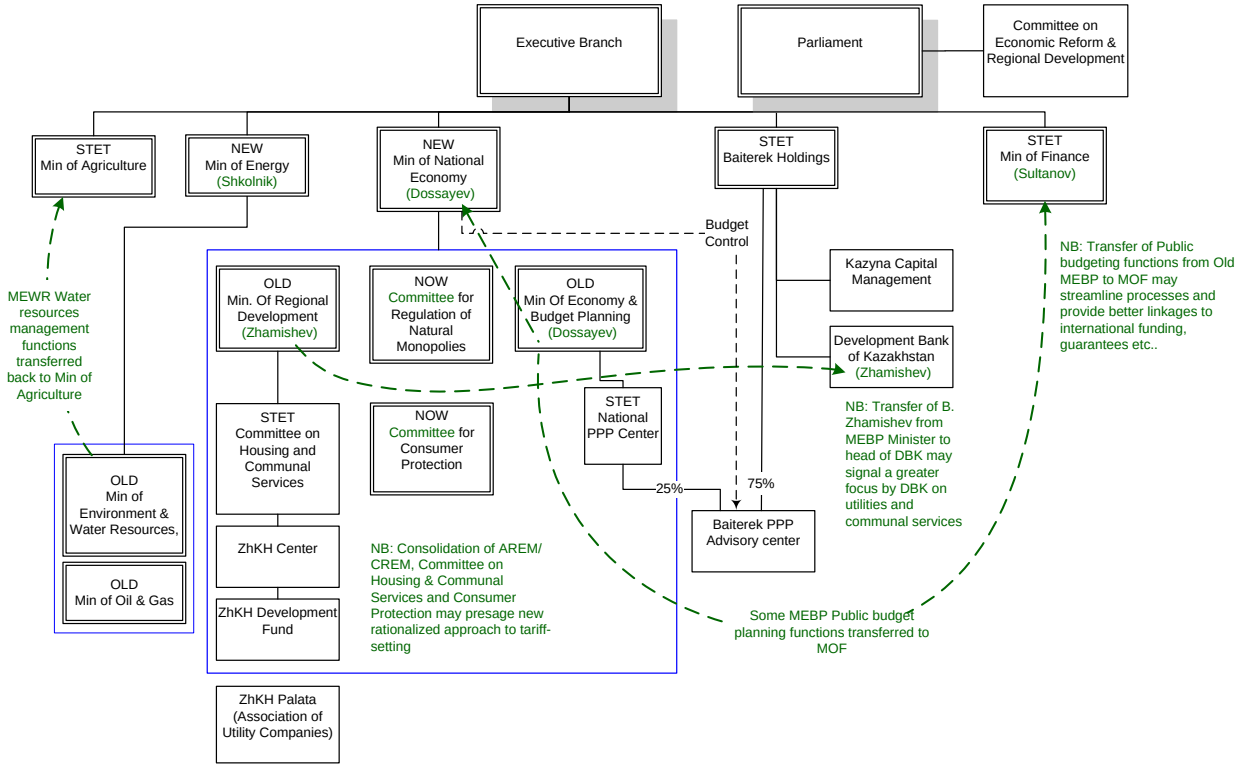
36. Kazakhstan's administration of municipal utilities, water and sanitation in particular, have been reformed and strengthened since 2000. However it is often commented that the reform is not complete. It has also been reported by various studies that there remains a lack of coherence and coordination between various administrative bodies. TA research was conducted from August 2013 through June 2014. On 8 August 2014, as this paper was in final editing, the GOK announced a sweeping reorganization which reshuffled many of the institutions described herein. Nothing is known yet about the extent of changes in functions of these entities, if any, which may result from the Reorganization. It is clear that AREM has lost some autonomy and potentially overlapping divisions under the former ministries of Regional Development and Economy and Budget Planning will have to rationalize their functions as they are now combined into the new Ministry of National Economy. This paper, therefore, describes their pre-reorganization functions and notes their new positions in the GOK hierarchy. Additionally, replacement of key Akims and Akimat officials e.g. in Karaganda has led to changes in management of local utility entities involved with the TA. The following are brief descriptions of the key government entities involved in the administration, regulation and supervision of municipal utilities.

Figure 3 – GOK Utilities-related Entities Prior to the Reorganization of 8 August 2014



Source: TA research

Figure 4: GOK Utilities-related Entities After the Reorganization of 8 August 2014



Source: TA research

B. Committee (formerly Agency) for Regulation of Natural Monopolies (CREM, formerly AREM)

37. Water and heating utilities are considered under Kazakh law to be “natural monopolies”, hence the tariffs for water supply and wastewater treatment are regulated by GOK through the Committee for Regulation of Natural Monopolies (CREM). Prior to the reorganization, CREM functioned as the independent cabinet-level Agency for Regulation of Natural Monopolies (AREM), and was responsible for approving any tariff adjustments which may be proposed by water or heating companies or their host Akimats. CREM is now part of the new Ministry of National Economy as a Committee, at par with the Committee for Construction

38. The process by which such requests are calculated, justified to AREM by applicant utilities or approved is not clear, but all tariff-related decisions at city level are referred to CREM in Astana. It is also understood that CREM maintained at least quarterly financial reports from CREM-regulated utilities, which are filed with CREM directly by the utility companies. The overriding concern of CREM has been reported to be affordability of water and sanitation services by the population. As mentioned elsewhere herein, this approach to tariffs has meant historically that utilities do not have sufficient revenue to cover maintenance and operation, not to mention the rehabilitation and/or replacement of worn-out equipment. Now that tariff-setting functions have been integrated into what were the MEBP and MRD, and together with the Committee for Consumer Protection, it remains to be seen whether CREM will continue the policies of AREM.

C. The Ministry of Regional Development (MRD) and its Agencies

39. In January 2013, the Ministry of Economic Development and Trade was reorganized into the Ministry of Economy and Budget Planning (MEBP) with the transfer of the budget planning functions from the Ministry of Finance (MOF) and responsibility for creation of a favorable investment climate transferred from the Ministry of Industry and New Technologies (MINT). This reorganization also resulted in the Agency for Construction, Housing and Utilities being reorganized into a Committee and transferred, together with the Sectoral Development Department, to the newly established Ministry of Regional Development (MRD). As a result of the Reorganization, MRD has been merged with the non-budgeting functions of the Ministry of Economy & Budget Planning into the new Ministry of National Economy, which also now contains CREM (formerly AREM), the tariff-setting entity (*q.v.)*.

D. Committee for Construction, Housing and Communal Services

40. The Committee for Construction, Housing and Communal services, under the former MRD, (previously the Agency for Construction Affairs when it was under the then Ministry of Construction), The Committee has substantial resources for the strengthening of urban infrastructure given its allocations from the state budget[27], and are expected to be at least sufficient for the repair of water supply systems and sewers. The Committee has administrative responsibility for the ecosystem of communal services-related entities clustered around and bel*ow th*e KazCenter ZhKH (see below and Figure 5). As a result of the Reorganization and merger of MRD and MEBP, the Committee is now under the Ministry of National Economy (MNE).

E. Kazakhstan Center for Communal Services Modernization and Reform (KazCenter ZhKH)

41. The Kazakhstan Center for Communal Services Modernization and Reform, or "KazCenter ZhKH" (ZhKH) is the focal point for utilities-related reform, under the Committee for Construction, Housing and Utilities. Incorporated in 2010, ZhKH is a joint stock company, 100% owned by MRD through the Committee. Presumably, after the reorganization, these shares will be owned by MNE.

42. ZhKH is the focal point for GOK initiatives for reform and upgrade of utilities nationwide, and is the implementing agency for a number of key investment and reform initiatives. Important among these is the GOK Resolution of April 30, 2011 № 473 "Modernization of housing and communal services of the Republic of Kazakhstan for 2011- 2020". The Resolution covers major investment and upgrades of both housing stock and municipal utilities, particularly heating networks, over the period 2011-2020. (See Appendix 3 for a list of projects).

43. In 2012, MRD authorized KazCenter ZhKH to establish a separately-incorporated subsidiary *ZhKH Development Fund* as a vehicle to manage GOK funds to be allocated to housing and utilities investments, to attract financing from DFIs and other donors, and serve as a single gateway to address both the housing and utility services sectors. Using initial seed capital from MRD, the Fund intends to launch pilot projects to test the effectiveness of various levels of grants, loans, and resident contributions as incentives to form single-building home owners' associations and to undertake energy efficiency measures and capital improvements. The first undertaking of the ZhKH Development Fund is understood to be financing of

[27] *v.p*aragraph 132.

installation of heating meters, but the scope and mechanics of the financing are not yet known to be operational. Although it is targeting over $100 million, it is anticipated that this Fund will not attain the $1 billion plus size needed to address the root causes of poor urban infrastructure and its locus as a subsidiary of KazCenter ZhKH may not give it visibility among GOK's top financial institutions or internationally.

44. KazCenter ZhKH has various subsidiaries and affiliates (see Figure 5) which include both municipal utility companies and private sector service and equipment providers in the municipal infrastructure ecosystem. It is also involved in efforts to improve the technology available to utility companies - e.g. metering, billing, and energy efficiency. These entities grouped under and around KazCenter ZhKH appear to be unaffected by the reorganization, and they report upwards to the Committee as before. The Committee and their ultimate parent, MRD, are now merged into MNE. These entities and their relationships are set out in Figure 5, below.

F. National Chamber of Housing, Communal Services and Construction of Kazakhstan (ZhKH Palata)

45. ZhKH Palata is the national apex organization or civil society organization representing both public-sector and private-sector housing, utilities and construction entities and companies in Kazakhstan. As such it is an important voice for public utilities and also private businesses involved in these industries. ZhKH Palata is itself an association of associations. Its members comprise:

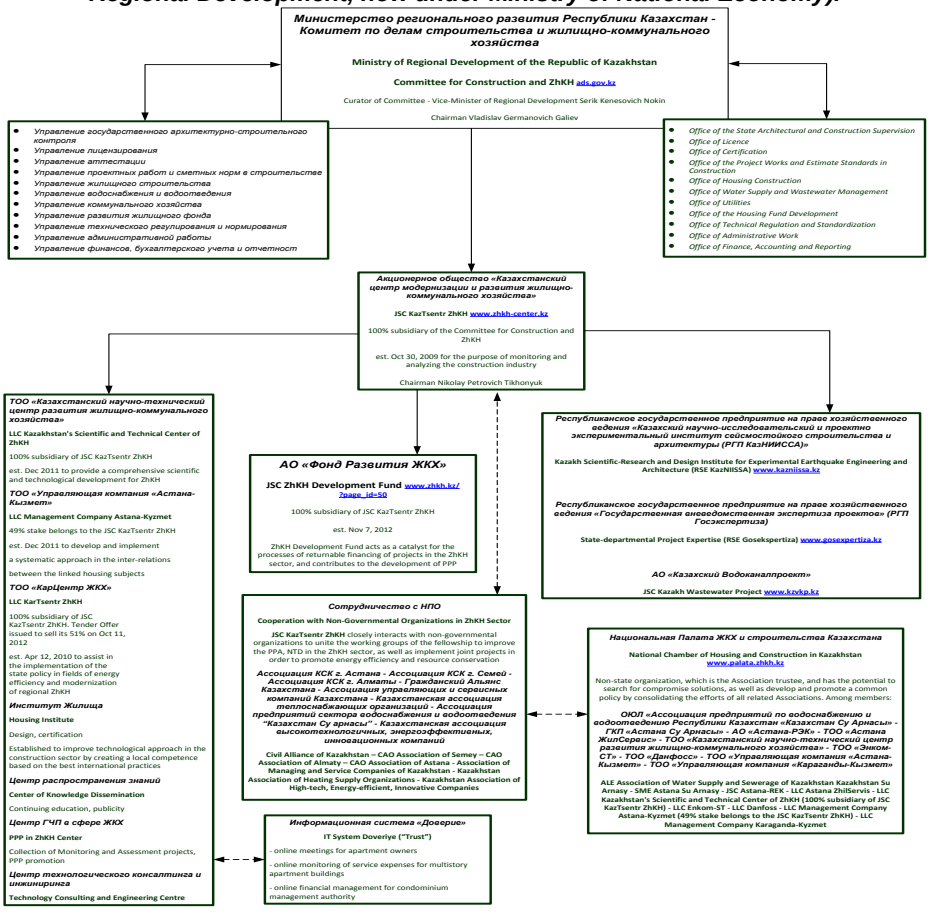
(a) Kazakhstan SuArnasy (*q.v. below)* -The Association of Enterprises on Water Supply and Sewerage Disposal of the Republic of Kazakhstan*;*
(b) KATO -the Kazakh Association of Heating Companies (itself an association of the 11 largest heating distribution companies in Kazakhstan);
(c) Sary-Arka -the Association of Organizations for Development of Housing and Communal Services; and
(d) AUSKK -the Association of Management and Service Companies of Kazakhstan.

46. As a Civil Society Organization (CSO), ZhKH Palata is a member of the Civil Alliance of Kazakhstan, the International Association of Property Management, Kazakhstan National chamber of Entrepreneurs, and the International Democratic Power Coalition. ZhKH Palata carries on an effective lobbying program at national levels of GOK on behalf of its members, undertakes pilot testing of new technology related to e.g. energy efficient construction methods, and offers a program of technical and management training programs for staff of its member utilities.

G. Kazakhstan SuArnasy (Water Industry Association)

47. Kazakhstan SuArnasy (SARK) is the association of water supply and sewerage utilities of Kazakhstan. It is a non-profit organization with the goal of improving the sector and acting as an umbrella organization for the water utilities. From 2002 to 2009, the water utilities were fully decentralized and did not have a state-authorized body that managed them and was responsible for their functioning. This resulted in each water utility developing its own guidelines and regulations. Since its founding in 2002, SARK has worked to set up a framework to regulate, unite and harmonize standards for the water utilities, despite the fact that it has not been appointed by the GOK and thus has no regulatory authority per se. SARK works closely with KazCenter ZhKH. It is understood that SARK is unaffected by the Reorganization.

Figure 5: Principal Agencies and Organizations Involved with Municipal Utilities (formerly under Ministry of Regional Development, now under Ministry of National Economy).



Source: TA research (NB – entities shown are pre-Reorganization, but it is understood at the time of writing that, with the exception of the merger of MRD with MEBP into MNE, all ZhKH-related entities will retain their respective structures but will now report to MNE.)

H. Ministry of Environment and Water Resources (MEWR)

48. The Ministry of Environmental Protection was reorganized as the Ministry of Environment and Water Resources by Presidential Decree on October 31, 2013. The Decree integrated into MEWR what had formerly been the Agriculture Ministry's Committee for Water Resources (CWR). CWR was then Kazakhstan's highest authority for water resources management including municipal water and sanitation, MEWR thus took over the responsibility, formerly given under the Water Code to CWR, for delivering approvals and permits for the use of surface and groundwater resources, for the management of water networks, and for the water supply to collective farms and rural communities. Previously, the Ministry of Environmental Protection (MEP) had been principally concerned with monitoring and enforcing water and wastewater quality standards.

49. In 2008, UNDP[28] pointed out that CWR lacked sufficient authority to co-ordinate all aspects of water management, and in general, water resources management in Kazakhstan were fragmented, underfunded and poorly governed. However, a National Integrated Water Resources Management and Water Efficiency Plan was developed by the UNDP to strengthen water governance in Kazakhstan.[29] UNDP informed the TA team that the Third Kazakhstan Environmental Performance Review is still in progress and will hopefully address issues identified in the 2008 Review, but the effect of the reorganization, again, cannot yet be calculated.

50. Prior to the reorganization, MEP was responsible for the management of solid waste at the national level, according to the division of functions between the different tiers of state governance. However, Ministry of Energy and Mineral Resources, Ministry of Industry and Trade, Ministry of Education and Science were also involved. Given MEP's budget constraints, very few local initiatives on municipal waste management were included in the national program[30].

51. As a result of the Reorganization, MERW and the Ministry of Oil & Gas have been merged into a new Ministry of Energy. However, MERW's water resources management functions have been transferred back to the Ministry of Agriculture, from which they were transferred in the October 2013 reorganization. The post-reorganization working relationship between the Ministry of Agriculture and the new Ministry of National Economy with regard to water utilities remains to be seen.

I. Kazakhstan Public-Private Partnership Center

52. In August 2008, the Kazakhstan Public-Private Partnership Center (PPP Center) was established in the Ministry of Economic Development and Trade (re-organized as the current MEBP) as its sole shareholder. The PPP Centre had the original mandate to develop recommendations on legal frameworks, provide methodological guidance, and conduct round tables and workshops for government units responsible for municipal infrastructure. However, the mandate of the PPP Centre was expanded in 2013 to also include structuring PPP projects,

[28] Kazakhstan Environmental Performance Reviews II, UNDP 2008
[29] Market survey Kazakhstan – Environment, Witteveen + Bos Kazakhstan for Netherlands Ministry of Economic Affairs, 2009
[30] Funds budgeted by the GOK for environmental protection, representing an estimated 0.05% of the annual national budget, are inadequate for the country.

developing bidding documents and draft contracts, conducting road shows, negotiating with potential concessionaires alongside the relevant sector or local government unit, and analyzing applications for funding and other financial support for PPPs from the state budget. According to current information, all these functions are carried out using PPP Center staff. To date, however, no projects are known to have been successfully brought to financial close**.** Its responsibilities are understood to include primarily the review and checking of PPP documents prepared by other entities related to projects being undertaken by subnational project proponents, rather than actually preparing projects for ultimate bidding-out to the private sector. Also, unlike central government PPP centers in other countries, the PPP Center does not have any project preparation facility (PPF) or other mechanism for procurement of outside expertise.[31]

53. In addition to the PPP Center, oblast-level PPP Centers have been established by the oblast Akimats of Karaganda, Ust-Kamenogorsk, and Taldykorgan, with others reportedly to follow. At time of writing, the exact reporting relationships between the National PPP Center and these oblast-level PPP centers, and between the oblast-level centers and the oblast-level Socio-Entrepreneurial Corporations (SECs), which previously held general oblast-level responsibility for all forms of private cooperation with government entities, has not yet been fully resolved / clarified. It is understood that the PPP Center is unaffected by the reorganization.

J. Baiterek Holdings' Public-Private Partnership Advisory Center (PPPAC)

54. PPPAC was established on March 19, 2014 by the Coordinating Council on PPP under GOK as a legal entity for advisory support of concession projects. Its shareholders are JSC Baiterek (75%) and PPP Center (25%). Baiterek Holdings is the national-level state holding company for GOK-owned financial institutions. According to PPPAC, its mission is to support infrastructure development in Kazakhstan by providing project preparation and then transaction advisory services to national-level (and, at the request of an Akimat, to oblast- or city-level) infrastructure projects which are to be implemented through PPP. An additional understood mandate of PPPAC is to develop transactions suitable for financing by companies within the Baiterek Holdings group, including Development Bank of Kazakhstan (DBK), funders managed by Kazyna capital Management, and others. It is understood that PPPAC is unaffected by the reorganization.

[31] E.g. India Infrastructure Project Development Facility (IIPDF), the Philippines PPP Center's Project development and Monitoring facility (PDMF), or the Pakistan Infrastructure Project Development Facility (IPDF).

V. LEGAL AND REGULATORY FRAMEWORK FOR WATER AND HEATING

A. Overview of the Legal System

55. Kazakhstan is a part of the Roman-Germanic legal system which is based on legislative acts (called “normative-legal acts”), including the Constitution, the codes, the laws and decrees of state authorities. The Parliament adopts codes and laws which become a part of Kazakhstan legislation once signed by the President. Unlike in the United Kingdom or the United States of America, but similar to other civil law countries such as the Russian Federation and former Soviet republics, court precedents do not have the force of law in Kazakhstan. The legislative acts have a hierarchy according to which, if there should be any discrepancies between them, the act made by a higher legislative body prevails.

56. All utilities in Kazakhstan are subject to regulation by the Constitution of the Republic of Kazakhstan and the Kazakhstan Civil Code. Additionally, sector-specific laws and regulations are in effect, as described below.

B. Laws affecting all Utilities

1. The Constitution

57. The Constitution adopted on 30 August 1995 by a national referendum, is the legislative act of the Kazakhstan having the highest legal force and direct effect on the entire territory of Kazakhstan.

58. The Constitution establishes key rights and obligations of individuals and entities and applies to local and foreign citizens on the territory of the Kazakhstan, as well as local and foreign legal entities operating in the Kazakhstan. Therefore, any foreign investors in Kazakhstan will benefit from the protections afforded by the Constitution, including the protection of property rights. In particular, the Constitution provides that no person (including a foreign investor) may be deprived of its property located in the Kazakhstan other than pursuant to a decision of the court. Forced expropriation for the state’s needs may only be made subject to adequate compensation.

2. The Civil Code

59. The General Part of the Civil Code was adopted on 27 December 1994 and the Special Part was adopted on 1 July 1999 (together, the "Civil Code"). The Civil Code is a major legislative act which expands the rights specified in the Constitution as well as establishes the basics of contract law.

60. Pursuant to the Civil Code, foreign individuals and entities are entitled to the same rights and have the same liabilities as Kazakhstan individuals and entities. There are certain very limited exceptions, for example, foreign individuals cannot own agricultural land.

61. Thus, both the Constitution and the Civil Code guarantee fair treatment and property protection to foreign investors and grant them other rights equal to those enjoyed by Kazakhstan citizens and legal entities. Foreign investors do not need to take any additional steps or require involvement of state authorities in order to establish these rights.

62. The Civil Code also contains a basic description of all types of legal entities which can be established in Kazakhstan e.g., limited liability partnerships and joint stock companies.

63. In addition to the above general legal acts, the following specific legal acts also impact municipal utilities in Kazakhstan:

(a) The Environmental Code;
(b) The Budget Code;
(c) The Law on Natural Monopolies and Regulated Markets;
(d) The Law on Local Public Administration and Self-Government;
(e) The State Property Law;
(f) The Competition Law; and
(g) Other laws and regulations that have been promulgated in accordance with the above.

3. The Environmental Code

64. In accordance with the Environmental Code dated 9 January 2007 No. 212-III ЗРК (the ‘‘Environmental Code’’) water consumers engaged in waste water disposal into the environment, in addition to the special water use permit, are required to obtain an environmental permit. This permit is an instrument limiting the volume of pollutants in the discharged waste waters. These emission permits are issued by the Committee of Environmental Regulation of the Ministry of Environment and Water Resources for a term not exceeding 5 years.

65. The fee for water use under the special water use regime is paid under the Tax Code of Kazakhstan. General water use is free of charge. The services related to water - delivery to water consumers, water supply, water disposal, repair works and other water related activities - are carried out on a fee basis. The procedure and conditions of making payments for water supply services are determined by agreements between parties.

4. The Budget Code

66. The Budget Code of the Republic of Kazakhstan No. 95-IV ЗРК dated 4 December 2008 (the ‘Budget Code’) regulates, *inter alia*, budget and inter-budget relations as well as functioning of the budget system and usage of state funds in Kazakhstan. For instance, according to Article 209.1 of the Budget Code, Akimats, generally, may borrow only from the Government of Kazakhstan, and lending by commercial banks to Akimats is prohibited.

67. Almaty and Astana cities have special status. Therefore, the Akimats of Astana and Almaty can borrow from the Government of Kazakhstan and are also authorized to issue bonds on local securities market (i.e. KASE) to finance budget deficits (per Article 209.1 of the Budget Code). As of 14 June 2014, Almaty City has outstanding municipal bonds in the amount of KZT 13 bn, issued in 2010.[32]

68. According to Article 210 of the Budget Code borrowings of Akimats shall not exceed statutory limits established by Government for each respective region/city annually. According to Article 210.3 of the Budget Code, the amount of commitment, service and repayment fees of such loans shall not exceed 10% of the income of such Akimat for the relevant financial year.

5. The Law on Natural Monopolies and Regulated Markets

69. In accordance with the Law of Kazakhstan ‘On Natural Monopolies and Regulated Markets’ No. 272-I, dated 9 June 1998 (the ‘NML’), the areas of so-called ‘natural monopolies’ in Kazakhstan include operation of water and (or) sewerage systems.

70. The NML has the following main objectives: (i) the state regulation and supervision of activity in the spheres of natural monopolies, as well as state regulation and control over pricing in regulated markets; and (ii) achieving a balance among the interests of consumers, natural monopolies and regulated market entities.

71. Under the NML an individual entrepreneur or legal entity engaged in the production of goods, works and/or rendering services to consumers under the natural monopoly conditions shall be deemed as an entity/subject of natural monopoly.

[32] see http://www.kase.kz/ru/gsecs/show/ALK060_002

72. As mentioned above, the body authorized to regulate tariff (prices, rates, fees) policy and other activities by natural monopolies is the Agency (now Committee) for Regulation of Natural Monopolies (AREM, now CREM). This is a state body that develops, approves and implements methods of calculating tariffs or limits thereof for the regulated services (goods, works) of natural monopolies including municipal utilities, and is authorized to conduct scheduled and unscheduled audits of entities which it regulates.

73. Pricing or tariff-setting procedures in natural monopolies or regulated markets are established by the Government of Kazakhstan. CREM examines and must approve proposed tariffs in accordance with its internal procedure, and monitors all tariffs nationwide. According to the results of the price monitoring, on the basis of complaints, and / or on the basis of information indicating unreasonable prices, CREM may review the price.

74. Tariffs or upper limits thereof[33] for the regulated services (goods) of a subject of natural monopoly approved by an authorized agency, shall be no less than the cost of the expenditure required for the provision of regulated services (production of goods, works) and shall consider the possibility of obtaining profits to ensure effective functioning of the subject of natural monopoly.

75. The procedure for setting tariffs or limits thereon for regulated services (goods) of natural monopolies acting under a concession agreement is determined by the Government.

76. The NML also provides for a number of limitations as to the activities of natural monopolies, including: (i) general prohibition to undertake non-core activities and own shares in other companies, (ii) sell or otherwise eliminate assets used in production without AREM approval; and (iii) discriminate customers.

77. According to the NML, all natural monopolies[34] in Kazakhstan, generally, must carry out open tenders when buying goods, works and services at expenses that are included in the prices (or maximum levels of prices) or tariff estimates for regulated services.

78. Natural monopolies are obligated to follow special procurement rules, except for those natural monopolies which are at least 50% owned, directly or indirectly, by Samruk-Kazyna, which are subject to specific Samruk-Kazyna procurement rules.

6. The Law on Local Public Administration and Self-Government

79. The Law on Local Public Administration and Self - Government No. 148-II dated 23 January 2001 (the 'Self-Government Law') regulates local public administration and self-government. It determines competence, the organization, the procedure for activities of local representative (i.e. Maslikhats or local parliaments) and local executive bodies (i.e., Akimats), and also the legal status of the deputies of Maslikhats.

[33] A regulated market player is entitled to increase or decrease prices for manufactured (sold) goods (works, services) by notifying AREM of the reasons of such decrease or increase not later than five business days after the increase or decrease if it is within the maximum price.

[34] There are certain exceptions. For instance, this rule is not applicable to natural monopolies that are at least 50% owned, directly or indirectly, by Samruk-Kazyna.

80. Article 27.1(7) of the Self-Government Law, in particular, provides that the Akimat of the respective oblast or Almaty or Astana has the authority to arrange construction and operation of water pipelines and waste treatment facilities in the respective oblast or city.

81. It is worth mentioning that the Self-Government Law is unclear on the powers of government authorities – both central government and Akimats -- to enter into any investment contract with private investors, unless it is a concession agreement under the Concession Law. Obviously, for any potential project to be bankable, respective lenders and investors need to be assured that a host government/project support/implementation agreement has been properly entered into by the relevant government parties[35]. Such undertakings are often beyond the scope of the authority of Akimats.

82. It also should be noted that Kazakh law does not contain sufficient guarantees regarding the enforcement of financial commitments of an Akimat. Only expenditure provided for in the budget of the relevant city or region can be enforced. The maximum term of public budgets in Kazakhstan is three years while the average term of an infrastructure project is about 25-30 years. This means that, in practice, for any investment agreement signed by an Akimat and a private investor which is not under the Concession Law framework to remain valid, it would need to be re-approved by the local parliament ('Maslihkat') every three years. This introduces significant level of political risk which effectively deters concessions for utilities.

83. At the time of writing (August 2014), there is no other clear option but to proceed under the Concession Law framework to be able to get contractual undertakings of the respective Akimat as needed for a project to be bankable.

7. The State Property Law

84. The Law of the Republic of Kazakhstan 'On state property' № 413-IV adopted on March 1, 2011 (the 'State Property Law') defines the legal status of state property and prescribes the legal framework for its management. This includes, property allocated to public corporations and state-owned shares and participating interest in legal entities. It also defines the legal grounds for acquisition and termination of rights to state property, aiming to enable the State to effectively exercise all of its relevant rights to state property.

8. The Competition Law

85. The Competition Law prohibits monopolistic[36] activities and unfair competition. The Competition Law, generally, prohibits an agreement or concerted practice that has or is likely to have a restrictive effect on competition, including fixing prices or non-price trading conditions, sharing market or sources of supply, unreasonable restriction on the production or supply of goods, imposing supplementary obligations and certain other actions.

C. Laws Governing Water and Water Utilities

1. The Water Code

[35] International investor expectations for infrastructure projects are that government investment contracts are not be subject to overturning, negation or other legal challenge.

[36] A dominant or monopoly position is a position of one or more undertakings in a relevant market that affords it or them the possibility to control the relevant market, including significantly affect trading conditions. Monopolistic activities are anti-competitive agreements and concerted practices or the abuse of a dominant or monopoly position.

86. The Water Code dated 9 July 2003 No. 481 (the ‘‘Water Code’’) aims at implementing governmental policy in relation to the utilization and protection of water resources. The Water Code sets out obligations for the use of water and discharge of certain materials into the water on the basis of so-called water use permits, but this function was taken over by MEWR when the Committee on Water Resources was moved from the Ministry of agriculture to MEWR in 2012.

87. The Water Code is intended, in particular, to settle issues related to:

(a) public policy and regulations regarding use and protection of the so-called 'Water Fund'[37]
(b) ensuring the legal framework to support the development of sustainable water use and protection, including from natural and man-caused pollution;
(c) definition of the basic principles and directions of the Water Fund use and protection;
(d) regulation of relations in area of investigation, exploration, rational and integrated use and protection of water resources and hydraulic structures; and
(e) responsibility of state agencies, physical and legal entities for implementation of measures to prevent and liquidate negative water effects from floods, water-logging, destruction of banks, protection dams and other structures that refer to emergencies of natural and anthropogenic nature.

88. Importantly, under the Water Code the so-called “Water Fund” [38], as defined above, is the exclusive property of the state. The GOK exercises the rights of possession, use and disposal of the Water Fund. The Water Code defines as a water user an individual or legal entity possessing the right to use water resources for their own needs and/or/commercial interests, in accordance with the laws of Kazakhstan.

89. The state administration structure in the use and protection of water resources is divided into the following levels:

(a) intergovernmental;
(b) governmental;
(c) basin wide; and
(d) territorial.

90. The GOK’s administration of water resources is carried out by the:

(a) Water Resources Committee of the Ministry of Environment and Water Recourses - the authorized body in the use and protection of water resources39;
(b) local representative bodies (Maslikhats) of oblasts and of the two principal cities of Astana and Almaty within their jurisdiction,; and
(c) local executive bodies (Akimats) of oblasts and of the two principal cities of Astana and Almaty.

91. The roles and responsibilities of the administrative bodies outlined above are ambiguous. The management of the Water Fund and implementation of the above laws is currently decentralized as a result of a series of reforms and privatization. There is no central body that coordinates activities affecting the Water Fund as a whole. This has led to confusion in the roles

[37] Article 4 of the Water Code defines the 'Water Fund of Kazakhstan’ as being all water resources in the country. The “Water Fund” is not a fund in the financial sense.
[38] See article 8 of the Water Code (http://online.zakon.kz/Document/?doc_id=1042116)
[39] Moved in the Reorganization back to the Ministry of agriculture

and responsibilities governing the management of water resources. Some water resources, especially in rural areas, have no regulatory oversight. In order to maximize the benefits of private sector participation in the water sector, it is necessary to clearly define the roles of each administrative body.

D. Laws Governing District Heating Utilities

1. Law of Kazakhstan "On Electricity Industry"

92. The key legal act relevant to district heating is the Law of Kazakhstan "On Electricity Industry" no. 588 dated 9 July 2004 (the "Electricity Industry Law"). The Law regulates relations related to generation, transmission and consumption of heat energy.

93. In addition to the above general legal act, the following specific legal acts govern heating utilities in various ways and provide for similar regulation for heating companies as discussed above for water companies:

(a) The Environmental Code;
(b) The Budget Code;
(c) The Competition Law;
(d) The Law on Natural Monopolies and Regulated Markets;
(e) The Law on Local Public Administration and Self - Government.
(f) The Rules on Usage of the Heat Energy as approved by the Decree of the Government of Kazakhstan No. 712 dated 10 July 2013 (the 'Rules for Heat Usage'), which provide regulation for usage of heat energy, in particular related to connection to existing heat systems and execution of heat service agreements
(g) Other laws and regulations that have been promulgated in accordance with the above.

E. Laws Governing Solid Waste Management

94. Solid waste management is not considered a subject of natural monopoly in Kazakhstan. The current legal framework governing the sector consists of the following key legal acts and provide for similar regulation for solid waste companies as discussed above for water companies:

(a) The Environmental Code;
(b) The Budget Code;
(c) The Competition Law;
(d) The Law on Local Public Administration and Self – Government; and
(e) Other laws and regulations that have been promulgated in accordance with the above.

F. Current Legal Framework for Project Finance and PPPs

95. An adequate legal framework is a major condition for attracting foreign and domestic private capital to develop utility projects. This framework should facilitate the creation of bankable projects based on project finance and PPPs. The current legal framework in Kazakhstan governing PPPs and project finance consists of the following:

(a) the Constitution of the Republic of Kazakhstan;

(b) the Civil Code;
(c) the Law of Kazakhstan 'On Concessions';
(d) the Law of Kazakhstan 'On Investments';
(e) the Law of Kazakhstan 'On State Property';
(f) the Tax Code of Kazakhstan;
(g) the Land Code of Kazakhstan;
(h) the Budget Code of Kazakhstan;
(i) the Law of Kazakhstan 'On Securities Market';
(j) the Law of Kazakhstan 'On Project Finance and Securitization';
(k) the Law of Kazakhstan 'On Special Economic Zones';
(l) the Law of Kazakhstan 'On Natural Monopolies';
(m) the Law of Kazakhstan 'On State Support of Industrial Innovative Activity'.
(n) and other laws and regulations that have been promulgated in accordance with the above

1. The Project Finance Law

96. Project finance, the practice of financing investment projects with debt service covered by project-generated cash flows, has not yet been tested in Kazakhstan, as the appropriate legal framework does not exist. The so-called project finance transactions that have taken place are either conventional bank loans from DFIs like the European Bank for Reconstruction and Development (EBRD), ADB, or the International Finance Corporation (IFC), or commercial loans secured by GOK guarantees and/or the project sponsor's collateral.

97. This situation began to change with the enactment of Law No. 539-IV, "The Introduction of Amendments to Certain Legislative Acts of Kazakhstan on Project Finance Issues", on 6 February 2012. This law introduced the concept of project finance and other important international concepts into law and is now referred to as the Project Finance Law.

98. The main developments under the Project Finance Law are described below:

(a) The Project Finance Law defines project finance as a "method of arranging the financing of a long-term project that is secured by way of assignment of receivables related to the creation and transfer of assets and also rendering service and/or manufacturing products and/or execution of work while using the created asset."
(b) Project finance transactions, under Kazakhstan laws, involve a client[40] that enters into a base agreement[41] with an Executor[42] with the optional involvement of a special finance company (SFC). [43]
(c) On the basis of the signed base agreement, the Executor raises debt finance for the project by concluding loan agreements with creditors and/or issuing bonds or attracting finance from the SFC, and assigns receivables to the creditors or SFC under the base

[40] A client can be an individual, a legal entity, or the state represented by the Government of Kazakhstan or by local executive authority (i.e., Akimat) and also by authorized state agencies.
[41] A base agreement is defined as a written agreement whereby one party creates and transfers to another party an asset or renders services and (or) manufactures products and (or) executes work while using the created asset.
[42] An executor is defined as a legal entity that, in accordance with the base agreement, creates and transfers an asset and also renders services and (or) manufactures some products and (or) executes work while using the created asset.
[43] This is a legal entity created only for the purposes of the project finance and securitization transactions which is a beneficiary of an assigned receivable (hereinafter - the "SFC").

agreement as security, or provides other collateral (i.e. pledges and/guarantees if available and if applicable).

(d) The Project Finance Law requires that the Executor of project finance projects with State involvement be selected on a tender basis in accordance with the Concession Law.

(e) International practice suggests that lender's step-in right would mean that in certain cases the lender (or a lender's designee) will be able to assume the project company's rights under project agreement(s) for a specified period of time, with a view to getting better control over the project cash flows and then have the opportunity to improve and/or complete the project. Project Finance Law says that base agreement shall provide for possibility for the client to replace the executor if it fails to meet its obligations under the base agreement. Importantly, if the client is the Republic of Kazakhstan (represented by GOK, relevant Akimat or authorized state body) the law allows to replace the Executor[44] at any time during the project if the Executor fails to meet its obligations under the base agreement, subject to at least 15 calendar days notification of the Executor and the creditors. No cure period is specifically provided in the Project Finance Law but, evidently, parties of the base agreement can contractually agree it in the base agreement.

(f) The Law explicitly states that any activities of the SFC outside the scope of project finance transactions are void ("*bankruptcy remoteness*" concept). SFC is in essence a special purpose vehicle (SPV), whose activities are strictly limited to project finance transactions.

(g) Segregated assets, which consist mainly of assigned rights (receivables) and money in the bank custody accounts received as part of the assigned receivables payments of the SFC, shall be used only for the purposes of protecting the interests of creditors. The levy of execution on segregated assets during SFC bankruptcy proceedings is prohibited.

(h) Incorporated legal entities or ones with affiliates incorporated in certain black-listed countries cannot directly or indirectly own and/or use or dispose of voting shares/participatory interest of the charter capital of the SFC.

(i) If one of the parties to the project finance transaction is the Republic of Kazakhstan (that can be represented by GOK, relevant Akimat or authorized state body), it is mandatory that the SFC be used. It is also required that such project shall be implemented under the framework of the Concession Law as discussed below. The project finance transactions shall also be implemented with the involvement of the SFC, if at least one of the creditors requires this.

99. Although gaps will only truly become apparent in practice, a significant weakness of the new law is already apparent: Article 6-7 states that the "title to the property created under the base agreement by the state order belongs to the state". This implies that projects involving the State might only be legally structured as build-transfer-operate (BTO) projects, but there has been no known clarification of this.

2. The Amendment Law

100. Another law, with implications for the utilities sector, came into force on 22 July 2013. This was the law "On Introducing Amendments to Certain Legislative Acts of Kazakhstan for the

[44] To choose a new executor the Client (i.e. Government or Akimat) would need to run another tender in accordance with the Concession Law procedures.

Introduction of New Forms of Public Private Partnership and Extending the Application Area" (No. 131-V, dated 4 July 2013) (the "Amendment Law").

101. The main purpose of the law was to introduce new PPP forms, including build-own-operate (BOO), build-operate-transfer (BOT), and design-build-finance-operate (DBFO) in and the concept of availability payment in Kazakhstan. Previously, under the Concession Law, only BTO contracts were allowed. The apparent conflicts between these new additional PPP contract types and the abovementioned Article 6-7 of the Project Finance Law have not been resolved or tested legally.

3. Effect of the Amendment Law on the Water Code

102. The Amendment Law drops the statutory restriction for transfer of strategically important water facilities from state property into lease or trust management of a private person. In particular, water intake structures, pumping stations, and water treatment facilities that provide water supply for cities and are owned by the state can now be transferred into lease and trust management.

103. The Amendment Law has not eliminated the statutory restriction for the transfer of the title of these strategic importance water facilities. In effect, these facilities still cannot be sold.

4. Effect of the Amendment Law on the Budget Code

104. The Amendment Law made it clear that a concession agreement is a private contract and that both parties, including relevant state authorities, have rights and obligations. A new definition of "*state concession obligations*" has been introduced into the Budget Code to distinguish the responsibilities of private and public parties.

105. The Amendment Law introduced statutory protection for concession obligations against sequestering. Unlike for any investment contract with the GOK or Akimat not under the Concession Law framework, any financial undertakings of the respective state authority under the concession agreement cannot be subject to unexpected spending reduction.

5. Effect of the Amendment Law on the Law On Natural Monopolies and Regulated Markets

106. By virtue of the Amendment Law, concessionaires that are subjects of natural monopolies will have their own special tariffs that can be determined on the basis of special calculation formulas, which will be stipulated in the concession agreements. They will also be exempted from general tariff regulation. This means that when AREM decreases the general tariffs applicable to other natural monopoly subjects, the concessionaire that is a natural monopoly will be protected against the risk of failing to comply with its debt service obligations due to a lack of revenues from the project as its special tariff would be affected.

107. It does not mean, however, that concessionaires that are also natural monopolies subjects will not be regulated. AREM has the right to participate in the approval of feasibility studies, tender documentation and draft concession agreements including any amendments related to tariff changes, and monitor the implementation of the concession agreement in terms of compliance with the tariff stipulated in the concession agreement.

6. Effect of the Amendment Law on the Law On Concessions

108. The Amendment Law established a new definition of *concessionaire* in order to allow private entrepreneurs to act as concessionaires. Formerly only a legal entity could act as a concessionaire. The law still prohibits a group of legal entities in a consortium to act as a concessionaire. The definition of *concession* has been amended to allow for PPPs in forms other than BTO , e.g., BOT, BOO, DBFO, under the concession agreement.

109. The Amendment Law introduced a concept of PPP that is defined as a form of cooperation between the state and private business that is directed toward financing, construction, reconstruction and/or exploitation of social infrastructure and critical infrastructure.

110. The Amendment Law states that upon completion of the construction or reconstruction phase, the title on the relevant concession facilities may be transferred to state ownership or remain the private property of the concessionaire, depending on the terms of the concession agreement. Under the current legislation a project can qualify as a concession only if it relates to property owned or to be owned by a public authority. The possibility of holding concession facilities as private property enables the creation of other forms of PPP - BOT, BOO, DBFO etc. - under the concession agreement.

111. It is important to note that if the concession project received any co-financing from the concessor and/or compensation of a certain amount of investment expenses, then such concession facilities must be transferred into state property.

112. The Amendment Law clarified that concession facilities cannot be pledged or sold while the relevant concession agreement is valid and while mutual obligations thereunder are outstanding.

113. The Amendment Law also introduced the concepts of *concession facility availability payment* and state subsidy as additional sources of income and reimbursement of expenses of the concessionaire as listed in Article 7 of the Law On Concessions. The *concession facility availability payment* includes payments from the state budget as (i) compensation of certain investment expenses of the concessionaire, (ii) compensations of certain operational expenses of the concessionaire and, if applicable, (iii) any service fees for trust management of the state property (i.e. concession facility) or lease payment paid by state for the use of a concession facility owned by the concessionaire. The latter would be paid on a regular basis during the period of the concession project, depending on the performance of the concessionaire. For each concession project, the sources of income and reimbursement of a concessionaire's expenses will be determined on the basis of the results of the concessionaire-selection tender.

114. The Amendment Law clarified that compensation of investment expenses is not a measure of state support under Article 14 of the Law On Concessions but rather a source of income and reimbursement of concessionaire expenses stipulated in Article 7 of the Law.

115. The Amendment Law introduced an additional statutory restriction: if the concession facility is to remain private property when completed, rather than being transferred to state ownership, the concessionaire cannot expect state support in the form of (i) state sureties for infrastructure bonds, (ii) state guarantees for loans, and (iii) co-financing by the state. Other measures of state support under Article 14 of the Law *On Concessions* are still applicable.

116. The Concession Law as revised by the Amendment Law now provides that the total amount of obligations of the concessor related to (i) the compensation of investment expenses of the concessionaire, (ii) state surety for infrastructure bonds, (iii) state guarantees for loans, (iv) transfer to the concessionaire of exclusive rights for intellectual property that belongs to the state, (v) provision of "in-kind" grants, and (vi) co-financing of the concession project, shall not exceed the concessionaire's total expenditures for construction and/or reconstruction of the concession facility, incurred under the relevant concession agreement.

117. Under the Concession Law as revised by the Amendment Law, tenders of potential concession projects that either (i) require the collection and analysis of innovative, creative, architecture-planning, or organizational-technological solutions or innovations or (ii) require running experiments or research studies, should be conducted in two stages[45] rather than the single stage specified by earlier legislation.

118. The Amendment Law simplifies the qualification requirements for concessionaires. In contrast to the previous statutory requirement that concessionaires possess capital of at least 20 per cent of the value of the concession facilities, the concessionaire is now obliged (i) to have capital of no less than 10 per cent of the value, or (ii) procure a banking guarantee of the same value.

119. The concessionaire now can transfer or pledge its rights under the concession agreement, but only with the concessor's prior approval.

120. Overall, the adoption of the Amendment Law greatly improved the legal framework for the implementation of infrastructure projects in Kazakhstan and for the attraction of private capital.

121. However, a preliminary analysis of the Amendment Law has demonstrated that certain problematic aspects of PPP regulation in Kazakhstan remain. In particular:

(j) the Concession Law as amended by the Amendment Law still only provides the possibility to obtain an *availability payment* for concession projects that have been classified as *socially important*, such as kindergartens, communal facilities and toll roads but not, for instance, a chemical plant.
(k) the Amendment Law has not introduced the concepts of *direct agreement* or *step in right* which is important for attracting international debt providers.
(l) special tariffs based on formulas, which can be formalized in concession agreements, as described above, are only applicable to *regulated services* of subjects of natural monopolies. In practice, this would mean that a waste recycling plant would not be eligible because disposition and recycling of garbage is not considered a natural monopoly in Kazakhstan.

Table 3 – Summary of Major Project Finance-related Regulatory Changes in Kazakhstan:

Major Events	**Time**	**Significance**
First Law on Concessions Enacted	1991 Dec - 1993 April	The First Law 'On concessions in the Republic of Kazakhstan' was adopted on 23 December 1991 and was aimed at foreign investors - this law was already deemed invalid by April 1993.

[45] Stage one is qualifications-based selected and stage two is evaluation of competitive bids with feasibility studies.

The Civil Code Enacted in 1994 Dec	1993-2006	Despite the absence of any specific law on concessions in the period of 1993-2006, several concession projects were attempted relying on general provisions of the Civil Code: (i) 6 July 2005 –the rail way 'Shar-Ust Kamenogors Station', the DTZh concession project that defaulted on its project bonds. (ii) 28 December 2005 –the inter-regional power line 'North Kazakhstan – Aktobe Region' concession.
New Concessions Law adopted	7 July 2006	New Law of the Republic of Kazakhstan 'On Concessions' enacted in 2006 (the Concession Law) - is not industry-specific and, generally, state assets from any sector of the economy can be transferred under concession, save for an exhaustive list of exceptions like strategic dams.
Concessions Law	2008 and 2010	In 2008 and 2010 several amendments were made regarding, inter alia, the expansion of state support and enhancement of the concession projects attractiveness, and the abolition of compulsory issuance of infrastructure bonds in the provision of certain measures of state support.
Kazakhstan PPP Centre	2008 Aug	Kazakhstan PPP Centre established to facilitate and promote PPP projects. The only shareholder of the Kazakhstan PPP Centre is the GOK represented by the MEBP. Later on, oblast-level PPP centers were set up in Karaganda etc.
PPP Program is promulgated	29 June 2011	In furtherance of the Industrialization Program the GOK approved the Program for Development of PPP in the Republic of Kazakhstan for 2011–2015 (the PPP Program), whereby the Ministry of Economy Development and Trade is supposed to push for the creation of appropriate legislative and regulatory framework for realization of infrastructure projects in Kazakhstan using PPP mechanisms.
Project Finance Law Enacted	2012 Feb	The Project Finance Law introduced the concept of project finance into Kazakh legislation, but remains untested.
PPP Law	2013 Jul	Relevant law came into force on 22 July 2013 (hereinafter - the “PPP Law”) that introduced changes in number of relevant legal acts, including the Concession Law. The main purpose of the law is to introduce new PPP forms, including build-own-operate (BOO), build-operate-transfer (BOT), and design-build-finance-operate (DBFO) in Kazakhstan and to introduce the concept of “availability payment” in

		Kazakhstan.

VI. PUBLIC FINANCING MECHANISMS FOR UTILITIES IN KAZAKHSTAN

A. Government Institutions Responsible for Utilities

122. The Republic of Kazakhstan has 14 *oblasts* (provinces) with Astana and Almaty as oblast-level cities directly under the jurisdiction of the central government. Under the oblasts, there are 175 *rayons* (districts) with 39 cities and townships under oblast administration. Rayons are divided into *selsky okrugs* (rural districts) and towns administered by the rayon.

123. Sub-sovereign levels of government (from Oblast down) are in charge of providing all public services. In addition to the supply of water and heating, which are the subjects of this study, public services under the aegis of local authorities include: gas supply, electricity distribution, education, health care, construction of oblast-level and & local roads (i.e. not national highways), and housing (including operations & maintenance).

B. Financing of Utilities

124. All personal income taxes plus the taxes on wages collected within the oblast can be used to pay for public expenditures arising within their area. Rayons and cities of the oblast receive property taxes and certain other taxes. However, budgeted subsidies can be granted from the next higher level in case of unforeseen income tax collection shortfalls (calculation base is income tax per capita). For example, if a rayon's planned capital expenditure is likely to be higher than what was originally calculated (and reported), thus exceeding the expected tax income, this rayon may then obtain subsidies to compensate for the shortfall from those oblasts and/or rayons where the tax income is higher than the projected capital expenditure.

125. As the tax income surplus from these oblasts or rayons always has to be handed over to the next higher level, this will then in theory be available for any necessary subsidy for those where the tax income has not reached the projected level, or the capital expenditure may be higher than projected. These 'equalization transfers' work on the level of oblasts as well as on the level of rayons and cities within the oblasts.

126. The Budget Code, Article 45, states that general transfers (referred to herein as Targeted Development Transfers or TDTs) shall aim at ensuring the budgetary security of oblasts. It is supposed to warrant that oblasts can have equal fiscal opportunity as they are equally obliged to run government-guaranteed' public services of an overall fixed level. The amounts of TDTs are determined by:

(a) the overall tax revenues in the area,
(b) the number of local users of the public utilities,
(c) guaranteed standards of the public utilities, and
other factors affecting the particular costs of providing services in each oblast.

127. Budget Code Article 54 stipulates that costs should be split and then independently considered and calculated for any public service. For each service, expenditure for an area should be calculated by dividing the spending of all administrative areas below the central level based on the cost of this service in the past year, by the number of service users in the area in question. The result is then harmonized with laws, regulations or decrees that could influence

the costs of that utility. There may also be so-called objective factors (e.g. Presidential decrees), that may overrule any of the above.

128. The degree to which this system is observed in practice is impossible to say. For example, “important” projects may be allocated additional income by the central level to the administrative level in question and then executed by the lower level. As such in 2010, KZT 804 billion (at the time, $5.4 billion) was transferred from the central level budget for TDTs. KZT 269 billion ($1.8 billion) of that was allocated to “targeted recurrent programs”. The difference of KZT 538 billion ($3.6 billion) was allocated to targeted development transfers. In the fiscal year of 2011 KZT 606.3 billion ($4.0 billion) were transferred for the same reason.

C. Project Preparation for TDT Funding – Local to National Processes

129. Targeted Development Transfers (TDT) constitute a significant share of the incomes of oblasts and lower levels of government. The 2010 revenues at the central level was KZT 2,407 billion ($16.3 billion). Approximately 22 percent of that was transferred through TDTs to lower levels of government, where it funded approximately 65% of their capital expenditure[46.] Some 30% of such TDTs went to sub-national levels of governments as grants by the then Agency for Construction, Housing & Communal Services to cover local government expenses related to public housing, water, gas, electricity & district heating[47], the balance of 70% being distributed among the Ministries of: Transport & Communications (15%), Industry and New Technologies (15%), Health (12%), and Education (10%), etc.

130. In 2011, approximately 49% (2010: 50%) of all TDTs went to the cities of Astana and Almaty. Excluding Almaty and Astana, TDT spending is more skewed towards housing and communal services (33% of total), followed by education (13%), agriculture (10%), industry (9%), transportation (5%), etc.

131. Articles 46, 153, and 154 of the Budget Code, together with Decrees 545 and 40, define procedures for the identification, preparation, appraisal, and funding of projects to be covered by TDTs. In particular, article 153 and Decree 545 describe the public sector investment proposal while decree 40 defines the relevant processing of TDTs. Documentation requirements are also prescribed at various stages and often in detail. These may differ from sector to sector and from area to area.

132. The formal application process, except in the case of projects originating at the level of the Oblast, starts in the sector department of the local rayon Akimat. Article 153 stipulates that the person in charge of budget programs should develop the investment. At oblast level, the Budget Code gives responsibility for investment programming for TDT funding to the Akims, or executive bodies authorized by them, as well as the Maslikhats (local parliaments/city councils). On the level below oblast, (cities and rayons), this should be the appropriate sector department.

133. Subsequently Decree 545 requires the following information be included in a proposal:

[46] Source: Ministry of Finance, 2010 figures.
[47] Now Committee.

(a) presentation of the envisaged project, relating to any of the sector development priorities as mentioned in the budgeted Government strategy, the status of overall preparation of the project, and potential issues that could delay the implementation;
(b) project cost estimates;
(c) terms of reference for the feasibility study;
(d) sector experts' opinion on the proposal including, assessment of problems in the sector, the political, social, economic, and other conditions in which the project is to be implemented; indicators on future demand for the utility or public service; any necessary institutional arrangements for implementing the project and then operating or maintaining it once completed; and
(e) availability of required infrastructure/utilities.

The proposal is then sent by the sector department in charge to the rayon or the city budget planning department, which evaluates it. Decree 545 stipulates the evaluation has to follow a specific format of justifying the investment plus a cost-benefit analysis, including items such as the project's expected costs, construction period, life span, compliance with overall strategic goals, provisions of sufficient institutional arrangements and monitoring indicators.

134. The request is then sent again by the sector department in charge (together with an economic evaluation considering the budget and in line with the respective planning department) to the budget planning department for review of the proposal's financial viability. Only at this point will a decision be taken as to how the project will be financed, by the rayon, the oblast, or by a TDT from central government. The budget planning agency in charge then finally submits the proposal, bundled with all other projects to the budget commission in charge.

135. At this stage all parties involved are allowed to participate. Competition is high as representatives of other sector departments may favor their own projects. Hence there are pre-meetings where project support may be "traded". When the budget commission enters the process it has to balance what is proposed to them with what is available in the central budget. In other words it will downsize projects to a level that is regarded as being in line with the complete future budget. After the budget commission has approved the projects order then goes to the rayon Maslikhats. Last step is then to submit those to the oblast budget planning department and its sector departments for a final verdict.

136. Each oblast planning department sends its approved projects to the Ministry of Economy & Budget Planning (MEBP now part of MNE)[48] and to the relevant ministries. MEBP has final word on every project that is to be financed under a TDT. MEBP prioritizes investments seeking central budget funding[49] and confirms that projects are in line with presidential decrees.

137. Relevant line ministries prepare their budget requests (including funding for TDTs) to the Ministry of Finance (MOF), which has the authority to veto projects at this stage, especially if it feels it may imbalance the overall budget. Finally, MOF brings the projects list with cost estimates cross-checked with the next budget for the attention of the Central Budget Committee (CBC), which prepares the annual national (Republican) budget. Budgets must be drafted by the CBC before July 30th, and debated by Parliament by September 1st to go into effect on the following January 1st. After having passed the CBC the projects are put under the responsibility of the relevant ministry in charge.

D. Legal Criteria for TDTs

138. The approval criteria for TDTs are provided in the national legislation. Decree 545 states the sector and economic justifications, while Decree 40 deals with grouping the projects so that they can be measured in order to get finance by TDT. Examples are:

(a) high pressure gas pipelines and off-takes from main pipelines;
(b) design, construction and/or purchase of rental municipal housing and the reconstruction of power, heating, water and water disposal systems;
(c) all roads on oblast and rayon level plus the streets in Astana and Almaty;
(d) remote rural water supply systems;
(e) sewage systems in cities and rural areas;
(f) overall urban development; and
(g) housing and utility facilities of oblast and national significance, and in Almaty and Astana.

[48] Formerly, the Ministry of Economic Development & Trade (MEDT)
[49] This legislation required the MEBP to oversee the preparation of public investment feasibility studies, and to render economic opinions on public investments, including those financed through concessions and guarantees. Because MEBP's budgeting responsibilities have been transferred to the Ministry of Finance and MEBP itself merged into the new Ministry of National Economy in the Reorganization, it is unclear how these procedures will work in future.

139. In accordance with Decree 40, altogether 18 issues must be analyzed by the oblasts when assessing projects for which TDT financing is requested before applications are submitted to central government. These issues include in particular strategic national concerns. In that regard water supply is of national concern as water is scarce in Kazakhstan. Hence one important criterion is that the water supply and efficient use and reuse of water must be examined as part of the project approval process. Unfortunately the decree does not go into detail. While the intent is clear the process invites circumvention.

140. **Norms and standards.** These are applied to determine if a proposed project is viable. For example, projects which have already been started receive priority over new ones (per Decree 40 'objective reasons'). These are established by the sector ministry in charge. Additionally, projects for which feasibility studies have been completed are more likely to be approved. Other factors, like availability of land and local funds will also make a proposed project more attractive. Finally if a local Akimat's record in executing projects in previous years is good, it will also be preferred. Another aspect that can play a role in funding consideration is a project's consistency with the local development plan. Currently, Akimats can prepare and submit development plans which give costs only in total, with no breakdown of the costs of specific project components or subprojects.

141. **Results agreements.** It is worthwhile noting that Decree 40 states that all applications for TDT have to be presented together with a Results Agreement setting out clear goals and objectives of the intended TDT, its direct and indirect impacts, progress reports, and other conditions agreed upon by both the envisaged recipient at the local level and the applicant Akimat.[50] The decree also stipulates that TDTs shall be given only if the recipient Akimat has complied with previous Results Agreements.

E. Summary

142. The process by which a local project may apply for and receive TDT funding is lengthy and complex, with no certainty of success for local project proponents or supporting levels of government from Akimats up to MOF. Much time is usually spent in advocating projects with local budget planning departments, Maslikhats and budget commissions before even getting anywhere near to a reply from the central level. The entire process, on average, takes two to three years, after which a local administration may finally be informed that its proposal has been rejected only for incomplete documentation. As a result of this lengthy process, many local leaders refrain from developing project proposals and applying for TDT in the first place.

143. Given the urgency of needed repairs and investment in municipal utility assets, and the cumbersome and slow existing processes for municipal project preparation and TDT funding approval, new sector-specific procedures for funding capital and operating expenditures need to be developed.

[50] The results agreements should state the purpose of the transfer and its expected results. It ought to be signed by the recipient Akimat. Recipients must submit progress reports every six months. The budget code states that subnational Akimats and the relevant managers of budgetary programs at the subnational level are responsible for ensuring that the transfers are used to achieve the results defined in the agreements. According to Decree 40, failure to achieve the agreed results in the current years disqualifies the recipient from receiving TDT in the next year. Any results evaluation is performed by the relevant central government body or by the oblast Akimat.

VII. KAZAKHSTAN'S OVERALL INFRASTRUCTURE FINANCING IN THE INTERNATIONAL CONTEXT

144. This section discusses (i) the capital financing challenges facing Kazakhstan's current and future infrastructure development needs, (ii) the basic requirements for infrastructure project finance as practiced in other countries, (iii) the international investment and financing environment, (iv) the utility of PPPs for funding municipal utilities, and (v) the infrastructure financing experience of selected countries.

A. Kazakhstan's Infrastructure Capital Requirements and Investment Environment

145. The recently announced Strategy 2050 outlines Kazakhstan's aspiration to become one of the world's 30 most developed economies by 2050[51]. Developing Kazakhstan's municipal utilities infrastructure can be expected to be a key part of the work that needs to be done to achieve the objective of this strategy. It has recently been estimated that only 69% of municipal housing units have piped water supply, less than 50% have sewerage connections, and only 39% are connected to central heating networks.[52]

146. Infrastructure investment requirements for Kazakhstan's energy, transport and municipal utilities through 2040 are expected to total at least $$150 billion, of which municipal utilities will require at least $ 20 billion.[53] To put these amounts in perspective, Kazakhstan's GDP in 2012 was KZT30.3 trillion, equivalent to about $195 billion. In RK's water sector alone, the Minister of Environment and Water Resources reported at the 47th ADB Annual Meeting that GOK plans to invest $15-20 billion until 2020, and up to $40 billion by 2040.

147. Since the global financial crisis, Kazakhstan's domestic financial institutions have been saddled with substantial non-performing loans (NPLs) with several banks being radically restructured in GOK bail-outs. Reducing the banks' NPLs is one of the priorities of GOK and the World Bank is reported to be assisting through one of its Joint Economic Research Programs focusing on the bankruptcy and insolvency regime. According to Fitch Ratings, the level of NPLs stood at 33% in 2014 February - more than 10% of Kazakhstan's GDP in 2012. The GOK is still working on reducing the NPLs to 15% by 2015 and further to 10% by 2016. Before that is realized, the NPL overhang is expected to remain a drag on banks' ability to finance Kazakhstan's infrastructure or industrial development in the near future. *"The level of non-performing loans is among the highest in the world. The government has yet to formulate a comprehensive plan to manage toxic loans. Fresh foreign lending will remain depressed by the large losses sustained by foreign creditors from four Kazakh banks since 2009."*[54]

148. Challenges to Kazakhstan's management of its macro-economic situation also persist, as witnessed from the National Bank of Kazakhstan's decision to devalue the Tenge by nearly 20% on 11 February 2014. As the rationale and timing behind this latest NBK policy decision continues to be debated, the immediate take-away for the investor market at large is that Kazakhstan's macro-economic management still seems prone to unpredictability and the environment is not conducive for investing in long-term projects in the country.

[51] IMF Country Report Republic of Kazakhstan 2013
[52] Kazakhstan in Figures 2013
[53] An Infrastructure Road Map for Kazakhstan, ADB, 2012
[54] Economist Intelligence Unit Risk Overview of Kazakhstan, 2013

149. The reasons outlined by NBK for the devaluation, include the need to help restore Kazakhstan's competitiveness, devaluation of other emerging market currencies and to tackle the weakening of its external accounts. However, the move has taken the market by surprise, perhaps also due to the fact that the last devaluation, of almost 20%, was just a few years ago in 2009. In light of this development, Halyk Finance wrote, "*the main loss for the economy and the financial sector is that periodic devaluations have now become pretty much institutionalized as part of the normal conduct of the monetary policy. But of course this is an instrument that can be used once, and at most twice. The credibility of the monetary policy suffered because of the largely unwarranted devaluation."*[55]

B. Enabling Environment to Attract Private Infrastructure Finance and Investment

150. GOK is concerned about accelerating the pace of Kazakhstan's municipal infrastructure development, so attracting the participation of foreign investors and financiers seems to be unavoidable and perhaps even crucial. Based on TA research, it appears that there has been no significant foreign private investment in Kazakhstan's infrastructure development, except for investments focused on natural resources and energy sectors.

151. For any developing country seeking long-term infrastructure investments, several basic conditions are generally deemed necessary to encourage the private sector to invest. These are:

(a) a sound and stable macro-economic environment;
(b) projects with sufficient size of investments to achieve economies of scale;
(c) a transparent and dependable legal and regulatory framework; and
(d) sufficient Government support and commitment towards the success of each project.

152. In addition to the foregoing, for municipal utilities in Kazakhstan to become successful and effective operations, the following basic enabling conditions are key:

(a) ensure accountability of the service provider for pre-agreed results through measurable, clear and transparent targets, including related to operating efficiency and adequate customer service;
(b) GOK demonstrate commitment to the utility's financial viability and sustainability through (i) sufficient tariffs; (ii) tax/budget transfers or a combination of both tariffs and transfers, if affordability issues prevent imposition of the required level of tariffs;
(c) educate the population to help understand that (i) tax transfer is an implicit cost; and, (ii) sufficient tariffs is a price for good utility service – in order to increase social acceptance;
(d) GOK institute mechanisms to provide to government and to the public a choice of introducing private operators (or similar alternatives) if public or existing utilities do not perform. Conversely, GOK should seek mechanisms to financially penalize under-performance and, in the extreme case of gross contractual failure, to ultimately cancel PPP contracts.

153. It was noted by the management of utilities interviewed that, rather than being rewarded for being efficient and profitable, they faced criticism when the actual expenditures of a given year were lower than approved budgets for that year. The profits resulting from efficiency improvements were taken by the Akimat to be used towards other purposes rather than being re-invested in the utility. All these transpired without the requisite consideration by the authorities of the ability of the utility to save costs while meeting service quality norms. Such

[55] "The Morning After", Halyk Finance, Feb 12, 2014

budget and approval oriented mindset does not encourage the utilities to focus on achieving operational efficiency.

154. A potential impediment to foreign investors is that there is still no systematic analysis by CREM of the affordability of (or willingness of consumers to pay) higher water tariffs – even if differentiated for users of different income levels as part of its institutional water tariff review process.[56] The UN review in 2008 went on to conclude, *inter alia*, that, *"the level of environmental expenditures at local level is insufficient to ensure good environmental services. Central government transfers are too limited and local governments are not allowed to engage in direct transactions with either domestic or foreign banks or multilateral financial institutions. This constitutes a serious constraint vis-à-vis financing of much needed improvements of the environmental infrastructure. Attracting more funds from the central government, local capital markets and multilateral financial institutions requires adequate local institutional capacity for developing environmental projects with clear targets and time frames, supported by a sound assessment of financial costs (investment, operational and maintenance costs) and sustainable financing strategies; all these capacities are as yet lacking at the local level."*[57]

155. In its 2010 study of private sector participation in water supply and sanitation in Central Asia, the OECD's Environment Policy Committee reported that, in Kazakhstan, "the rural population having considerably lower incomes on average pays for water consumption twice as much as urban residents".[58] The study went on to conclude, inter alia, that, "*where revenues from user charges are not sufficient to fully cover operation and maintenance costs borne by water utilities, it is unreasonable to discuss lease contracts, let alone concessions. Before moving to more advanced forms of PPPs, it is advisable to start with operation (management, service) contracts which mitigate the financial risks borne by a private operator.*"

156. Kazakhstan is still evolving from being a part of the centrally-planned Soviet economy to being an independent market-driven economy with substantial foreign and domestic private sector investment. Lack of comprehensive laws regulating foreign private investment in infrastructure, and uneven application of existing laws may delay the uptake of PPP as a viable mode of developing municipal infrastructure. The U.S. State Department's 2012 Investment Climate Statement on Kazakhstan[59] comments, *"By law and in practice, foreign investors can participate in privatization projects, which should protect investors against discrimination".*

157. Many foreign companies, however, cite the need to defend their investments from the constant barrage of decrees and legislative changes, most of which do not grandfather existing investments. Foreign investors also complain about arbitrary tax inspections, as well as problems in finalizing contracts, delays and irregular practices in licensing, and land fees. Some foreign firms have expressed concern about the failure of government organizations to fulfill their contractual obligations, particularly regarding payments.

158. The promotion of various PPP modalities for procurement of public services, poses challenges in what is a still highly-centralized, top-down system. "*The package of legislative changes currently under discussion in the (Kazakhstan) Parliament…at improving the legal*

[56] Kazakhstan Environmental Performance Reviews II, UNDP 2008
[57] UNDP Astana advised that the Third Kazakhstan Environmental Performance Review is still in progress and will hopefully address issues identified in the 2008 Review.
[58] Private Sector Participation in Water Supply and Sanitation in Eastern Europe, Caucasus, and Central Asia: Status Paper, OECD 2010
[59] http://www.state.gov/e/eb/rls/othr/ics/2012/191174.htm

environment for PPP, requires thorough discussions among investors and financiers. However, only the implementation of a "pilot" project with the use of new and improved state support mechanisms will allow their sufficiency to be tested."[60]

159. With the promulgation of the Project Finance and PPP Laws in Kazakhstan, there is progress in the legal and regulatory framework governing infrastructure financing. However the proof of the efficacy of these laws lies in their application to actual project development. In this respect, the market will be eyeing how the financing arrangements of two major projects currently being structured, viz., the Almaty Ring Road PPP project ("BAKAD") and the Balkhash Power project, will eventually be closed. BAKAD has been cited in March 2014 by the CEO of EBRD, being one of the two co-advisors on said project, as the pilot project for Kazakhstan's PPP program.

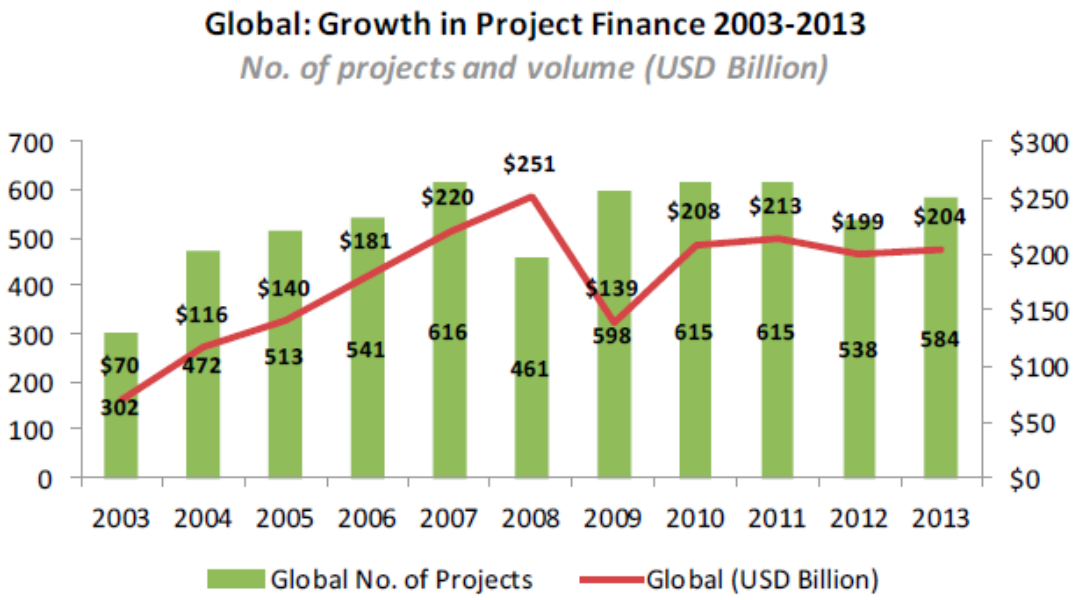
160. Based on the World Bank's assessment, Kazakhstan's past attempt to attract foreign investments in its power sector set many unsatisfactory precedents that may still deter international power developers from investing in the country." *The (Kazakhstan) government adopted non-transparent methods and… did not appear to have: (a) a clear picture of the ultimate desired sector structure; (b) a clear idea of the stages, time frame, legislation or strategy needed to reach the final goal; and (c) a competent and autonomous and accountable regulatory body underpinned by an appropriate law and needed regulations.*"[61]

C. Current International Infrastructure Investment and Financing Environment

161. The global investment climate may prove less sanguine as major international commercial banks are still battling the after-effects of the global financial crisis and have chosen to focus more on defending their home markets while exercising great selectivity for international business. International infrastructure developers have to contend with financial market realities and have also become more selective with their offshore developmental targets. As can be seen in the following chart from the World Bank, the global volume of project finance till 2013 is still quite far from its pre-global financial crisis peak. International banks are lending less than before due to heavier regulatory and compliance burdens.

[60] Roundtable on some aspects of public-private partnership development in Kazakhstan, Ernst & Young, 2013
[61] Private Sector Participation in the Power Sector in Europe and Central Asia: Lessons from the Last Decade, World Bank 2003

Figure 6 – Growth in Project Finance



Source: World Bank 2014

162. A TA Team interview with one of the leading international water and environmental development groups in the world, based in France, revealed that it was itself battling with pre-global financial crisis incurred leverage. The leverage now seems a heavy weight bearing on their business growth ambitions to such an extent that they are no longer able to invest in water concessions and PPPs as before, including in Central Asia. Industry insiders are of the view that infrastructure investment funds, managed by financial investors rather than industry developers, will be the main source of private equity capital for infrastructure assets for the foreseeable years.

163. However, it was acknowledged that this multi-national utilities operator group, like others in the sector, has extensive experience and resources to offer the market, albeit through less capital-intensive engagements such as technical advisories, management contracts, peer performance services, and other services which build on their global experience in utilities. Prima facie, it seems that GOK could consider seeking out win-win methods of engaging such technically-endowed but capitally-restrained players as potential partners who can help them achieve developmental goals in the challenging sectors of water and heating.

164. Under such market conditions, merely labeling a project as “PPP” will not mean that it will attract private investment – either foreign or domestic. Investible or bankable projects need to be carefully structured. They need to have the participation of counter-parties with measurable and strong credit quality, either directly or through third-party risk enhancement mechanisms such as DFI partial risk guarantees, political/commercial risk insurance, credit risk insurance and equity investment insurance. Thus, even if Kazakhstan is able to achieve the basic conditions needed, attracting foreign investment into sectors other than mining, oil and gas in a substantial and incremental manner will be a formidable task, and one that needs to be carried out with a realistic plan and strategy drawn up in better cognizance of international investment markets and investor preferences.

165. China's experience with seeking international funding for its municipal utilities and infrastructure can be instructive for Kazakhstan's current stage of development. Since the 1990's when China's municipal utilities were in dire need of re-investment and construction, the Chinese government recognized the then limitations of the international investment and financing markets. It decided to nurture some of its more able state-owned enterprises to invest in or to incubate municipal utilities (e.g. Beijing Capital, Shanghai Chengtou, China Everbright), with a view to attract strategic investors later when the time is ripe. State-owned domestic financial institutions were directed to support these SOE's in their financing plans for the utilities, and DFI sovereign loans were often judiciously directed to such projects with replication or demonstration potential.

166. The Shanghai example is worth elaborating here. After having nurtured and then successfully privatized the Pudong District's water utility in 2002 through international public tender, Shanghai Chengtou held back on completing the tender for one of its other water utilities in Shibei District in 2006. This was done to keep options open and to retain flexibility to the then changing market conditions. One take-away from the Shanghai example is that by biting the bullet first, the Chinese government was able to not only nurture its SOE's to invest and incubate municipal utilities, it was also able to create jobs in supplementary sectors through the local sourcing of pipes, pumps, meters, treatment facilities, construction material and equipment, etc. Where foreign technology was necessary, the foreign parties were encouraged to bring their technology and manufacture in China through domestic joint ventures in special economic zones with investment incentives. As a result, investments in municipal infrastructure also benefited China's domestic manufacturing industries and the development of economic zones. Many of these manufacturers have since exported their products around the world.

167. The GOK has stated its goal to diversify its economy away from oil and gas and mining. The foregoing example from China demonstrates that investing in municipal infrastructure in a considered and strategic manner can actually achieve part of that diversification - by fostering the creation of secondary manufacturing and industrial activities that initially support the infrastructure developments but may later become competitive exporters. However, for such strategies to succeed, the GOK has to ensure that:

(a) the industries being supported do not just prolong dependence upon outdated technologies (e.g. replacing old Soviet-era pumps with modern ones with no greater energy efficiency); and
(b) implementation process is effective and that agencies tasked with implementation are empowered sufficiently to ensure objectives can be met despite the existing hurdles of bureaucracy.

Customary oversights and checks and balances must remain in place to ensure that corruption does not become an issue e.g. with procurement, and that the planned development is really carried out as planned.

168. The experience of the AkBulak program is instructive here.62. It is well noted that among the objectives of the AkBulak Program 2011-2020 is to develop domestic content (up to 60%) during the implementation of water supply projects. With respect to the municipal solid waste sector, one can also think of the potential to further grow the country's automobile manufacturing industry if, for example, the upgrading of waste collection trucks and related street cleaning equipment could be efficiently sourced locally as well.

D. PPPs as a Potential Alternative for Delivering Municipal Services

169. In 2009-11, the World Bank undertook a study of 65 water PPPs globally[63] to assess whether and how PPPs can help reform water utilities in developing countries. Five conclusions are:[64]

(a) PPP is one viable option among others to reform water utilities in developing countries. However, PPP does not always work, and PPP approaches that have been successful for transport and power sectors could not be replicated directly for water;
(b) the development of water PPPs in developing countries has changed with the rise of local private operators as in Russia, China, Brazil, and Malaysia – developing country water PPPs are no longer dominated by concessions to multinationals but now also include treatment plant BOTs, management contracts, service contracts and even IPOs of public utilities;
(c) the focus on attracting private money to fund the huge backlog of water investments in developing countries proved to be a mistake as "water PPP is not about private money", and many successful water PPPs are largely based on public or hybrid financing combined with efficient private operation, as in France and Spain;
(d) the main contribution of private operators is improved service quality and operational efficiency - these are the most consistent improvements seen across the projects reviewed; and,
(e) social considerations need to be incorporated explicitly in the design of PPP reforms - successful PPPs recognize the cost of social goals (e.g. low tariffs, pre-emptive extension of networks), and that financing them is the responsibility of government, not private operators.

[62] Akbulak was launched in 2011 by GOK to develop the water sector till 2020 with facilities modernization, formation of adequate tariffs, and rationalization of groundwater use. Among the aims is to provide 100% of cities and 80% of rural villages with 24-hour water access through metered networks. It has been observed that, perhaps due to its top-down planning, execution of the program in oblasts and cities faced issues such as the lack of local capacity, lack of sufficient oversight to prevent corruption, and mis-management of program funds.
[63] The survey sample was deemed representative of global water PPPs, being 80% of the target sample and half of the total universe of twenty years of water PPPs from around the developing world.
[64] Public-Private partnerships for Urban Water Utilities: a Review of Experiences in Developing Countries, World Bank 2009.

170. Keeping these important lessons in mind, and giving credence to the prevailing conditions and financial market challenges, GOK may wish to consider kick-starting the development and financing of the country's municipal infrastructure rehabilitation and development with simple and conventional projects backed by feasible financing plans. The authorities will need to slowly and steadily build a track record of successful smaller projects before launching major projects.

171. An important goal of this TA is to provide structuring input on several pilot projects that could be financed with strong domestic financial institutions, either with or without the support of multi-lateral financing and GOK sovereign guarantees.

172. Rather than focusing on creating a big bang pilot project in water or heating, it may be worthwhile considering simpler projects such as BOTs for treatment plants or CHPs as a start. From past experience, these are usually highly replicable when the pilot project is well-structured. Another alternative to review is that DFIs have recently demonstrated their interest to finance water utilities that are managed by private operators through long-term management contracts or leases without the trappings of a full-blown PPP concession (e.g. EBRD in Armenia. These approaches could be an effective precursor for privatization of said utilities, if desired, further down the road after their business model has been improved and operations have become more economically sustainable and thus more attractive to private capital. More importantly, the successful implementation of such management contract-based PPPs will provide the GOK (and industry regulator) with a tangible alternative to relying on de-centralized vodokanals that may have clearly failed to deliver on their mandates.

173. The recent Tenge devaluation could prove troublesome for DFI financings. DFIs lend in hard currencies and managing Tenge cross-currency fluctuation risks has likely become more costly and challenging than it already was. DFIs may have additional requirements to address cross-currency risks directly with NBK and/or MOF. Seeking funding sources domestically may eventually be more expedient, particularly in the current circumstances.

E. Infrastructure Financing Experience from Other Countries

174. The UK PPP experience has often been seen as the benchmark PPP program to be emulated by other countries, while China's experience with PPP has often been said to be un-systematic even though China has produced infrastructure that supported its economic growth. This section compares and contrasts these two apparently different strategic approaches to a country's infrastructure development using PPPs in order to learn from the strengths and weaknesses of each approach. Kazakhstan's situation is unique given its Soviet legacy, relative youth as an independent nation, and the burgeoning wealth of the country. This probably calls for the formulation of a tailored approach for Kazakhstan's PPP strategy for supporting urban infrastructure development.

175. China's rapid infrastructure development has been a lynchpin for the country's strong economic performance in the past nearly two decades. Despite the lack of what international investors define as a strong legal and regulatory framework for infrastructure development, it has not impeded the country's development of its infrastructure to support its economic growth. One of the key success factors was the Government's recognition of the critical role infrastructure plays in supporting economic growth and its strong commitment towards making their pilot BOT projects successful models for further replication.

176. UK's infrastructure PFI or PPP program has been touted globally as one of the most prolific, if not successful, in producing privately financed infrastructure. However, its success also attracted controversy and criticism because of the highly visible nature of many projects and evolving politics. Surveys did, however, show that PFI projects in the UK have generally achieved lower debt financing costs than comparable international project finance debt[65]. More than 700 PFI projects have been financed and developed through UK's PFI program. The program has greatly decelerated since the global financial crisis, and is now being reformed into a new PF2 program. [66].

177. The following table is a simplified comparison of how China and UK executed their infrastructure development agendas during similar time periods but with unique differences in their market circumstances, methods and priorities. This comparison seeks to demonstrate that each country's success was achieved because it was able to mitigate weaknesses with effective tools to meet goals. For example, in the 1990s, China's macro-economic environment was not deemed conducive for infrastructure investments. However, as the Government resolved to make the pilot BOTs successful, it provided sufficient support to attract international investors and banks. It was subsequently able to convince Chinese banks to finance other infrastructure projects and thus sustain its continued development, as local banks were more able to manage China's macro-economic risks than foreign banks.

Table 2 - China and UK - Infrastructure Financing Comparison:

Factors	China	United Kingdom
Macro-economic environment	Rising inflation and domestic interest rates a concern, high hedging costs, lack transparency	Not a concern due to macro-economic transparency and liquidity of hedging instruments
Legal and regulatory framework	BOT Circular promulgated in 1995; Project Finance Circular in 1997; PPP Law in draft and yet to be legislated	EU procurement rules, UK Treasury and Office of Government Commerce Guidance; track record of contracts respected; No PPP Law
Sufficient Government support	Limited to pilot national BOTs only; subsequent support via selective equity investments and clear sector development plans (e.g., 7918 Highway Development Plan)	Government established track record of reliable off-taker and contractual counter-party; increased support necessary post-global financial crisis
Government's priority	Achieve infrastructure development within planning targets, support economic growth	Decrease public investment in infrastructure, achieve political aims
Domestic bank market	From nil to increasing capacities and liquidity; currently dominant	Post-global financial crisis primary funding source but less liquid
Domestic equity market	Private markets more liquid than public	Less liquid post-global financial crisis
Domestic bond market	Formative	In retreat post-global financial crisis
Foreign bank market	Decreasing participation since pilot BOTs, largely replaced by domestic banks	Less liquid post-global financial crisis
Foreign equity market	Increasing liberalization post-global financial crisis	Less liquid post-global financial crisis but increased participation from Asian investors
Foreign bond market	Formative	In retreat post-global financial crisis

[65] Financing PFI projects in the credit crisis and the Treasury's response, UK National Audit Office 2010
[66] HM Treasury UK, December 2013

178. The TA team has been advised that certain DFIs may have limitations in additional lending to Kazakhstan because of recent negative experience investing in the local banks. KfW has been cited as one such example of a DFI which most likely will not lend to Kazakhstan for some time due to the losses that KfW suffered in a deal with a local bank and their perceived lack of support from the GOK to solve the problems[67].

179. A final observation from a DFI that is active in working with municipal utilities indicated the need for GOK to be involved at the national level in the execution of municipal projects that are considered high priority rather than the norm of leaving it in the hands of the Akimats. The Akimats typically lack the capacity to carry out these endeavors and are also often more keen to settle with solutions from federal budget funds even if those funds have a typically annual or no more than 3-year horizon, because they are familiar with the mechanisms.

[67] TA team meeting with representative of German business community in Almaty.

VIII. POTENTIAL FOR INFRASTRUCTURE PROJECT FINANCE IN KAZAKHSTAN

A. No True Infrastructure Project Finance To Date in Kazakhstan

180. Note that the term Project Finance is used here to refer to limited/non-recourse financing transactions where the financing is not primarily dependent on the value of the assets involved or on the credit support/guarantee of the project's shareholders.

181. Infrastructure market participants in Kazakhstan have expressed opinions that limited/non-recourse infrastructure project finance has not yet developed nor been tested to any extent in Kazakhstan. Research of available global infrastructure and project finance online databases (viz., Project Finance International, IJOnline, and PPIAF) show that real non-recourse project finance transactions have not been successfully executed in Kazakhstan. Projects which completed their financing were all either in mining or energy sectors – there has not been any project financing of environmental utilities such as water, sewage or district heating infrastructure in the country. Appendix 1 contains a list of Kazakhstan's known completed project finance transactions to date.

182. Kazakhstan has yet to see public-private cooperation result in the implementation of socially important projects in municipal utilities, transport and social infrastructure –sectors that the government is traditionally responsible for. It is reported that currently 20 transportation and social infrastructure projects are in the government's pipeline with total investment volume estimated at KT660 billion. However, commentators also point out that local banks, due to the NPLs overhang, the nature of their funding sources and high interest rates, are unlikely to provide local currency financing in the required volumes and tenors in the near future.

183. For foreign currency project financing to become available, it is important to alleviate lingering risks such as foreign exchange hedging, for which competitive and economic market solutions are still lacking tenors over 3 years. The lack of depth in the KZT cross-currency risk management market is illustrated by the estimated more than three-quarter share of this market by just two international commercial banks. The market anticipates that the new PPP Law will effectively address existing obstacles standing in the way of private investment, and demonstrate its efficacy [68] and that of the new Project Finance Law through successful implementation of pilot projects applying these Laws.

184. Market observers have pointed out that key obstacles to application of these laws include limitations to provision of state support, indexation of long-term tariffs, and inability to use international arbitration. A recent industry round table discussion concluded that it is necessary to either continue refining the proposed draft legislation during the parliamentary debates, or make necessary revisions after it has been enacted.[69]

185. An interview with one of the leading project finance advisory boutiques in Kazakhstan indicated that three major infrastructure projects may be in the midst of testing the applicability and bankability of the new Project Finance and PPP Laws, viz.

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[68] "*Generally speaking, the 2012 Project Finance Law is well drafted and constitutes a solid basis for the development of project finance in the country. It is only very recent, so the way it will be applied in practice remains to be seen*". GRATA Law Firm, Almaty, Project finance and PPP Laws in Kazakhstan *2013.*

[69] Roundtable on some aspects of public-private partnership development in Kazakhstan, Ernst & Young, 2013

(a) Almaty Ring Road PPP ("BAKAD"): this road transportation project is led by the IFC, with EBRD in the financing consortium. The project has been delayed due partly to discussions on the security arrangements.
(b) Kazakhstan Petrochemical Industries (KPI): this is a state-supported petrochemical complex project with China's Sinopec as the off-taker. A financing structure involving a China EXIM loan funded through DBK is said to have been agreed and will be secured with Sinopec's trade receivables and corporate guarantee. This will thus conclude as a corporate financing rather than PPP or project finance.
(c) Balkhash Power: this is a green-field thermal power generation project sponsored by Samruk Energy and South Korea's Samsung and Kepco. KZT 300-400 billion of debt financing will be required for its construction. The project has been delayed due partly to discussions on the security arrangements.

IX. POTENTIAL SOURCES FOR FINANCING MUNICIPAL UTILITIES IN KAZAKHSTAN

A. Summary of Existing Funding Sources

186. Municipal utilities generally rely on government funding and grants to remain financially viable, since, for many utilities, their own operational cash flows are not even sufficient for operations and maintenance costs. However, we have observed that the latter seems largely a consequence of existing flaws in the regulatory and supervisory structure of the utility sectors rather than a general lack of operational capacity in the utilities. Should these flaws not be resolved, the applicability of alternative funding sources for Kazakhstan's municipal utilities will unlikely be high. The following table summarizes existing sources of funds for municipal utilities in Kazakhstan and seeks to put into perspective the funding alternatives that will be discussed herein.

Table 4 - Possible Funding Sources for Municipal Utilities

Sources	Observations
Domestic Capital Market & Institutional Funds	
Kazyna Capital Management	Proven capacity in private equity funds and dealing with international fund managers, known interest in infrastructure equity fund
Domestic capital markets	Shallow; reluctant after failures (e.g. Temir Zholy railway bonds); lacking in investment products to support infrastructure
Domestic Bank & Non-bank Financing	
Development Bank of Kazakhstan (DBK)	Focused on industry, energy, transport, communications and tourism. No known capacity in project finance
Domestic commercial banks	Not significant and still weakened by NPLs
Domestic non-bank financial institutions	Insurance sector too small; Unified Pension Fund and National Fund are possibilities due to long-term liabilities and investment horizons
DFIs, ECAs and Other	
Operating tariffs	Generally cannot cover operations and maintenance costs
Government budget	Primary funding source for capital expenses and investments of municipal utilities, but 3-year budgeting horizon is too short for infrastructure planning & development
DFIs (ADB, WB EBRD, EDB etc.)	Primary source of loans and grants; mostly in foreign currencies, NB only some have capacity to lend in local currency (KZT)
Export credit agencies	Tied to capital equipment imports; primarily in foreign currencies
International banks	Insignificant/none; focus on trade and treasury

B. Domestic Capital Market and Institutional Funds

187. Due to the generally under-developed commercial capital market for long-term investments, it is imperative to study the resources of public institutions that manage capital/wealth within the country. These are potentially important sources or catalysts for the creation of new funding conduits into municipal utilities as Kazakhstan has substantial wealth accumulated through the National Fund (currently $73 billion, adding more than $10 billion/year) and the Unified Pension Fund (currently $21 billion, adding $3 billion/year). By any standards,

these funds are currently under-invested in the country's infrastructure sector. The entities we have reviewed are the following:

1. JSC National Holding Baiterek (Baiterek)

188. Baiterek Holdings (BH) was launched in 2013 as the national-level holding entity for GOK-owned financial institutions. It is currently examining strategies for entering the infrastructure investment market, including formation of a dedicated infrastructure equity fund. BH's sister organization, Samruk Kazyna – the national holding company for operating assets – currently has no capacity or interest in infrastructure finance.[70]

189. GOK Financial entities now under control of Baiterek include the following:

(a) Development Bank of Kazakhstan JSC,
(b) Damu Entrepreneurship Development Fund JSC (mandated with the development of Kazakh SMEs and microfinance institutions),
(c) Investment Fund of Kazakhstan JSC,
(d) Baiterek PPP Advisory Center (PPPAC),
(e) Kazyna Capital Management JSC (fund of funds and investor in third-party international private equity funds), and
(f) Kazakhstan Export Credit Insurance Corporation JSC

190. In March 2014, Baiterek established the PPP Advisory Center (PPPAC) of which it owns 75%, the balance being held by the National PPP Center (under MEBP). It is understood that PPPAC wished to build project development capacity and can function as a project preparation entity to develop an investment pipeline for Baiterek entities and funds. For these reasons, PPPAC can play a significant role in the next phases of developing Kazakhstan's domestic utilities financing mechanisms and is featured in the TA recommendations in Section XII below.

2. Investment Fund of Kazakhstan JSC (IFK)

191. Samruk-Kazyna established IFK in 2003 as a direct equity investor to "assist in realization of the Industrial and Innovation Strategy of Kazakhstan by equity investments". At one time EBRD was reported to be interested in investing in this Fund and join its management. It is the understanding of the TA Team that IFK's original investments were not successful (to some extent due to the global financial crisis) and that the organization had been put into caretaker administration sometime in 2010- 2011.[71]It currently has no active investments or operations.

3. Kazyna Capital Management JSC (KCM)

192. Operating as a combined fund of funds and technology transfer / capacity-building venture, KCM owns stakes in 3rd-party international funds, some of which invest in transport and energy infrastructure e.g., Macquarie Russia and CIS Infrastructure Fund and CITIC-Kazyna Investment Fund (both further discussed in the following paragraphs). With its international visibility and exposure to international fund management, KCM can play a significant role in the

[70] October 2013. J Lufkin meeting with Aset Abdygapparov, Chief Investment Officer, Samruk Kazyna. Astana,
[71] TA Team/ O. Fedosseyev meeting in Almaty, June 2011 with Timur Djankobaev, then Deputy Chairman, IFK;, J. Lim meeting in Almaty, April 2014 with Timur Djankobayev; J. Lufkin / J. Lim meeting in Almaty, June 2014.

next phases of developing Kazakhstan's domestic utilities financing mechanisms, and is featured in the TA recommendations, below.

193. The domestic bond market is still under-developed and lacks a market clearing bond yield mechanism. Kazakhstan's insurance sector is still very small (total industry assets stood at only $3.2 billion equivalent in May 2014[72]). It is not expected to be in a meaningful position to contribute to extending long-term KZT funding capacity or bond investment for some time. Lessons would be drawn from the experiences of the pension funds affected by the 2008 default of the $$250 million project bonds issued to finance the Doszhan Temir Zholy (DTZh) rail project in 2005. Sovereign-level funds such as the Unified Pension Fund and the National Fund could be important catalysts to build up this funding capacity domestically.

194. When infrastructure projects are operating stably, their cash flows become predictable and therefore are very amenable to support long-term bond issuance. However, municipal utilities in Kazakhstan are not yet in the stable operating environment to enable such issuance individually. On the other hand, the issuance of KZT bonds by the government and its entities is important not only to increase the depth and liquidity of this market but also to set benchmarks for the risk-free rate within the country. The UUTSP proposal (v. Section XI) addresses this by creating a new bond-issuing entity (the Urban Utilities Transition Support Fund, or UUTSF) to intermediate between domestic holders of long-term ZKT and a pool of individual utility companies.

195. As municipal utilities have predominantly localized revenues and costs, domestic currency financing benefits from the matching of project cash flows with liabilities. It also encourages domestic sourcing of equipment, and provides a natural hedge against residual foreign exchange risk.

196. Most banks in Kazakhstan struggle to lend more than 3 years in KZT, with the exception perhaps of DBK. NBK's statistics in May 2014 indicated that the total Kazakhstan market for non-retail long-term KZT loans stood at just KZT3.38 trillion (equivalent to $18.2 billion)[73]. And such long-term loans come at a cost that is close to or even higher than the rate of return utilities typically generate. To illustrate this situation, the DBK launched a program at the end of 2013 to improve domestic SME's access to long term loans at relatively cheap cost by allocating KZT45 billion to 6 domestic banks which will make loans to SME's. DBK lends to these banks at 7.9% per annum, while the SME borrowers' cost could be up to 11.5% per annum.

197. This bottleneck in long-term funding within the Kazakhstan financial industry will have to be resolved in order for infrastructure project finance to efficiently and properly develop in the country. The proportion of long-term deposits of the National Oil Fund and the National Pension Fund into the stronger domestic banks in Kazakhstan might be increased, thus allowing the latter more capacity to make longer term loans. It may also be necessary to review whether the DBK's cost of long-term funding could be further improved through less reliance on the more costly foreign currency funding instruments and more access to domestic funding instruments (para. 235 for details). As the nation's development bank, DBK's long-term lending rates will inevitably become a key benchmark for infrastructure financing in Kazakhstan.

198. In December 2013, Baiterek announced the creation of a $$100 million fund called the Central Asia Renewal Energy Fund LP to invest in renewable and alternative energy

[72] Total industry assets stood at only $3.2 billion equivalent in May 2014 http://www.nationalbank.kz/?docid=679
[73] Ref: http://www.nationalbank.kz/?docid=543

infrastructure in Kazakhstan. This fund was established by Baiterek's subsidiary National Agency for Technological Development in partnership with the Islamic Corporation for the Development of the Private Sector (IsDB subsidiary), with a commitment by the government to invest up to one third of the total fund capital. Such a fund, if run on commercial profit-seeking principles, could be an instrument to attract foreign and private capital into a strategically chosen sector, thus effectively leveraging the government's initial seed capital to kick-start further direct investments into the sector. A similar fund could be envisioned and structured for municipal utilities with the assistance of DFIs.

199. President Nazarbayev has indicated that "We will have to borrow loans from the National Fund for the implementation of the projects.... We will rather invest in our own economy than to keep money in foreign banks."[74] Indeed, proposals have been made (e.g. early May 2014, including announcements at ADB's annual meeting in Astana) regarding taking capital from the National Fund for an investment program to be co-financed with and by ADB and other DFIs. The UUTSP proposal (v. Section XI) incorporates this.

C. Domestic Bank Financing

1. Development Bank of Kazakhstan JSC (DBK)

200. DBK was originally an offshoot of Samruk Kazyna, and is now under the Baiterek Holdings umbrella. DBK is the country's apex development finance institution and has primarily financed large investment projects particularly those in transportation and communication industries. In its 2012 Annual Report, DBK's stated industry priorities in infrastructure were in production, energy, transport, communications and tourism only. DBK is still restricted by its statutes from raising long-term funds in the domestic market, thus having to rely on offshore funding sources. Currently, DBK does not have a specialized department for infrastructure or for project finance, and might well seek to develop capacity and expertise in project finance, for municipal utilities in particular. ADB's experience with DBK may create openings to explore a co-financing role for DBK in project finance and municipal infrastructure investment.

201. There is a potentially critical role for DBK, being the country's sole development bank, to act as the market pioneer and trailblazer in forging a pool of infrastructure project finance expertise within Kazakhstan. DBK could perhaps first set up its own specialized department for infrastructure project finance, and expand the capacity of its credit risk management, internal audits, and loan approval committees to appreciate such risks. As we have witnessed from the experience of other developing nations, the development of Kazakhstan's infrastructure and municipal utilities project financing market can be considered a success only if a liquid, skilled and healthy pool of domestic financial institutions able to lead the charge of this industry has been realized. The NBK is seeking to help domestic banks resolve their NPL overhang in a timely manner but in the interim, the role of government-backed domestic banks such as DBK in the financing of municipal utilities becomes even more pertinent and critical.

202. Additionally, DBK plays a management role with regard to the National fund and Unified Pension Fund. As these funds could play a major role in providing long-term KZT for lending to municipal utilities, The UUTSP proposal (v. Section XI) incorporates a central role for DBK.

2. Domestic Commercial Banks

[74] Address to the People of Kazakhstan "Socio-Economic Modernization as Main Vector of Development of Kazakhstan", January 27, 2012

203. It would be necessary to increase the capacity of domestic banks to structure and arrange debt financing to infrastructure and municipal utilities through training and also the recruitment of experienced personnel. Other than a few transactions arranged by DBK, domestic banks have not completed any project finance loans of any significance. Domestic banks in general have neither the capacity nor appetite to extend loans of such long-term durations that are generally required for project financing – they are still not be equipped with the expertise to arrange such transactions, and more importantly, are battling with crippling NPL bad debts on their balance sheets (see para 179). In addition to the existing capacity limitations on long-term loans discussed above, other impediments to the sourcing of domestic bank financing include the challenging KZT interest rate environment and lingering legal and regulatory constraints from the global financial crisis. However, Kazakhstan needs to develop the capacity of its banks to provide long-term project financing if the GOK wants the escalating burden of funding infrastructure development to be shared progressively by the domestic financial markets. The following paragraphs discuss how DFIs are in the position to help setup the country's project financing pilot efforts and assist in capacity building of domestic banks to do the same.

204. In 2014, GOK announced the program to channel up to KZT 1,000 billion from the National Oil Fund into the domestic economy, partly through the Damu Entrepreneurship Development Fund (DAMU) and partly through commercial banks. Both will be coordinated by Baiterek. Although neither municipal utilities nor infrastructure financing have been explicitly targeted for this lending program, one envisages that, with the requisite policy resolve and a well-considered execution plan, such a program could be extended to these purposes.

205. In addition, GOK has implemented interest rate subsidy programs for loans to strategic industries and agriculture (spear-headed by the MOF and Ministry of Innovation and New Technology). Therefore, it would not seem unreasonable to expect that the same interest rate subsidies could be made available to the financing of municipal utilities that desperately need the funds for repair, rehabilitation and replacement. These would go some way to mitigate some of the impediments mentioned above.

D. Domestic Equity Market

206. The Kazakhstan Stock Exchange (KASE) is untested as a source for raising equity for municipal utilities, and is unlikely to play any relevant role in the foreseeable future with regard to infrastructure financing, potential listing of privatized utility companies, etc. However, in other emerging markets, such as Malaysia, the public equity markets are a useful alternative funding platform for infrastructure and utility businesses with demonstrable track record and critical mass. The availability of such listed infrastructure utilities on the equity markets also assist with the diversification of domestic funds seeking lower risk investment targets that utilities usually represent.

E. Development Finance Institutions (DFIs)

207. So far international Development Financing Institutions (DFIs) have been the principal source of financing of infrastructure projects in Kazakhstan. Most such interventions have been via sovereign loan and very little has been done at the sub-sovereign or municipal level. In addition to ADB, EBRD, IFC, World Bank, Islamic Development Bank (IsDB) and Eurasian

Development Bank are active in Kazakhstan .[75] EIB began lending operations in Kazakhstan in early 2013[76].

208. Certain regional financial institutions like China Development Bank, Bank of China, Korean Development Bank, Japan Bank for International Co-operation and Japan International Co-operation Agency are becoming more and more active lately in the region. This is to support the export of their capital goods and services into Kazakhstan and the import of energy and related resources from Kazakhstan into their countries. [77]

209. TA research has revealed that, with the exception of EBRD, DFIs currently seem to have very limited appetite or ability to lend to municipal utilities in Kazakhstan but there is still hope that this will change following resolution of the nagging regulatory, legal and financial sector reform processes Kazakhstan has to contend with. In order for project financing to become one of the mainstream sources of funding for municipal utilities in Kazakhstan, the outcome of the current attempts to structure project financing for the 2 or 3 potential pilot projects outlined in paragraph 217 above could be highly instructional to the rest of the market.

210. Given the lack of experience and capacity within domestic financial institutions to structure project finance, DFIs have an opening to act as trail blazers in applying internationally accepted good practices to the legal framework of Kazakhstan in structuring demonstrable infrastructure projects. There is also a strong rationale for the DFIs to engage domestic banks and financial institutions in such project financings so as to enhance the latter's capacity and also to better match a project's domestic cash flows with local currency debt obligations.

211. To provide local currency solutions, EBRD has an in-house treasury based in Kazakhstan that manages its KZT funding through the interbank market and bilateral loans with NBK and other domestic banks. As of 2014 May, EBRD's portfolio stood at about KZT 92 billion, including infrastructure loans outstanding of about KZT 5.5 billion. Although modest at present, this can be expected to continue growing in size as EBRD continues to expand its activity in Kazakhstan. This localized funding arrangement supplements EBRD's occasional issuance of KZT-denominated Eurobonds. GOK can support EBRD's efforts to increase its KZT lending capacity via favorable bilateral arrangements with NBK as the EBRD will, inter alia, be able to more effectively assist the GOK to extend the maturity of KZT loans in the country.[78] Only after the foregoing process has transpired satisfactorily will long-term project financing to municipal utilities in Kazakhstan become a practicable funding option, in addition to the necessity to carry out institutional and regulatory reforms of these utilities that were discussed earlier. The development of Kazakhstan's long-term project financing market will require the assistance of experienced DFIs such as ADB, EBRD and IFC.

F. Export Credit Agencies

212. Export credit agencies (ECAs) and export-import banks, such as Sinosure, China EXIM, US EXIM, JBIC, Korea EXIM, Coface, etc. provide long-term financing which has to be tied to

[75] Eurasian Development Bank is an international financial institution initially founded by Russia and Kazakhstan in 2006. Members now also include Armenia, Belarus, Kyrgyz Republic, Tajikistan.
[76] This was done under its External Lending Mandate, with SME and climate change-oriented loans to Development Bank of Kazakhstan (EUR 120M) and Sberbank Kazakhstan (EUR100M)
[77] GRATA, Project finance and PPP Laws in Kazakhstan 2013
[78] See NBK KZT-USD $1bn swap agreement with EBRD in May 2014
http://www.ebrd.com/pages/news/press/2014/140521.shtml

imports of capital goods from their national suppliers into Kazakhstan. The financing is usually foreign currency denominated[79],

213. The cross-currency risk imposed by these foreign currency denominated ECA loans is not always a welcome complication to the risk profile of municipal utilities whose revenues are primarily local currency-based. In this respect, it is notable that one DFI has taken the pro-active and pragmatic step of creating a capacity to lend in KZT, viz. EBRD, as discussed earlier. In addition, Kazakhstan featured among the top ten countries in 2013 in terms of claim recoveries under medium/long term export credit insurance and lending[80].

G. International Commercial Banks

214. International banks present in Kazakhstan typically focus on trade finance and export credit insured lending, driven largely by their relationships with multinational exporters rather than a strategy to build any long-term loan exposure, and foreign exchange treasury business. Locally incorporated foreign banks have very limited local currency capacities and do not focus on any long-term lending activity. Others are in retreat, as evidenced by the sale of HSBC Kazakhstan to Halyk Bank for $176 million announced on February 26th, 2014 and the exit of UniCredit Bank reportedly for compliance reasons.

215. The experience of foreign banks in the field of international project finance could be tapped through branches, affiliates and subsidiaries of foreign banks that are active in Kazakhstan such as Sberbank (Russia) and Bank CentreCredit (Korea's Kookmin Bank and IFC as shareholders). This could become more plausible if GOK can enhance these banks' access to long-term KZT funding at market competitive costs. The latter can help to benchmark domestic project financing transactions to international standards.

H. Other Sources

216. Institutional infrastructure funds have become the key source of equity investments in place of industry developers in global infrastructure. However, they are not yet developed in Kazakhstan, although a few funds may be looking for investment opportunities e.g. Macquarie Russia & CIS Infrastructure Fund (MRIF). At its first closing in 2009, 20% of the $630 million funds raised were reportedly targeted for Kazakhstan – but it has reportedly not invested in Kazakhstan and is now focused on transport and energy. An indirect investee of Baiterek Holdings through Kazyna Capital Management's $30 million investment; has invested in a freight railcar operator, a CHP operator, and a telecom tower operator, all in Russia[81]). The Islamic Infrastructure Fund (an ADB fund investee) has invested in the experience in Kazakhstan power sector.

217. Capital equipment lease financing structures could be contemplated for smaller scale financing solutions. For example, financing municipal solid waste operators for the upgrading of

[79] For instance, the recently concluded French Coface export credit financing for Kazakhstan Temir Zholy's purchase of rolling stock from Alstom of France, in addition to rumored ECA financings from China and US.

[80] According to the statistics of the Berne Union, Kazakhstan was in 2013 the number one country in the world for investment insurance ($8.7 billion). The need for political/commercial risk cover to mitigate country risk is the consequence of Kazakhstan's mediocre OECD risk classification under the "Arrangement on Officially Supported Export Credits" - rated 5 on a 1-7 scale. In view of demand for such cover, HSBC closed in May 2014 a €500m credit line with DBK, with political/commercial risk insurance from various export credit agencies, which is to be used to fund, inter alia, various (undisclosed) infrastructure projects.

[81] Ref: http://kcm-kazyna.kz/ru/pages/macquarie_russia_and_cIs_Infrastructure_fund

collection trucks. In early 2014, the EBRD extended a $ 9 million loan to finance operating leases of liquefied petroleum gas and oil freight wagons for JSC Olzha in Kazakhstan. The latter is an investee company of the CITIC Kazyna Investment Fund (a $200 million fund setup by Kazyna Capital Management and CITIC China in 2009 to invest in non-oil sectors of Kazakhstan and China).[82] This loan is reportedly related to a $25 million loan facility extended by EBRD in 2013 to JSC Olzha[83].

[82] Ref: http://olzha.com/about-company/

[83] Although these do not extend to infrastructure or utilities, they do illustrate that KCM is active in establishing and managing funds, and thus has been included in the entities proposed to participate in the UUTSP (see Section XI).

X. CONCLUSIONS

218. TA research into the primarily challenges set out in Section II above, has confirmed the existence, roots, and extent of those challenges, with the following conclusions. Recommendations based on these conclusions are set out in Section XI.

219. **Institutional reform is still a work in progress.** Kazakhstan's approach to national administration of local utilities has been evolving continually since independence, with the stated goal of achieving more and better quality private investment and management. However, GOK has never had a single utilities sector regulator or supervisory body for the water, district heating and waste management sectors and key regulatory functions have historically been overlapping between national institutions and local governments. The recent government reorganization of 8 August 2014, with its consolidation of AREM, MRD and MEBP into MNE, could be a step in the direction of greater national-level involvement in local utilities. GOK could use the Reorganization to continue on the road of reform and to identify projects to test the robustness of the current legal framework and demonstrate how it works. This could kick-start the process for participation by private investors. Consolidation of municipal utilities under a new national-level SOE would likely necessitate creation of a single-window regulator.

220. **Good reform and development plans have not been implemented well.** This has been attested by allegations of corruption and fraud with the implementation of the Akbulak Clean Water Program. GOK needs to ensure that implementation of its national infrastructure development programs is effective and that the agencies tasked with implementation are empowered sufficiently to ensure the program objectives can be met in the face of existing bureaucracy and conflicting interests. The country's existing methods of implementing its infrastructure development plans have to be reformed to improve its effectiveness. There appears to be the need to consider the assistance of DFIs in improving the implementation capacity within Kazakhstan at both national and local levels.

221. **Municipal utilities need financial and operational de-risking to attract private investment.** Utilities' revenues from tariffs are not sufficient to cover operation and maintenance costs and their equity bases are generally weak, so their creditworthiness and attractiveness to private investors as going concerns is low. It is also premature for GOK to consider asset leases, concessions or other forms of PPP. Reform at the utility company level should start with operations and maintenance support contracts which would reduce risks and pave the way for future engagements with private sector operators and investors.

222. **Banking system is shallow, but domestic wealth exists.** Since the global financial crisis, Kazakhstan's domestic financial institutions have been saddled by substantial NPLs. The NPLs overhang is expected to remain a drag on these banks' ability to finance Kazakhstan's infrastructure development in the near future. Even if their balance sheets were stronger, domestic banks do not have the expertise to identify and manage the risks in long-term infrastructure project financing.

223. **Capital market has potential depth but needs new instruments to channel savings to infrastructure.** Kazakhstan has substantial wealth accumulated in its National Fund (currently at $73 billion in assets and growing at more than $10 billion/year) and the Unified Pension Fund (currently $21 billion in assets and growing at more than $3 billion/year). These funds both have long-term inflation-linked liabilities and thus should be seeking long-term inflation-linked assets to fund them, but such instruments do not yet exist. The UUTSP proposal

(v. Section XI) addresses this by creating the UUTSF to issue this sort of instrument initially directly placed, but in future to be listed on KASE.

224. **Insurance sector plays no role as yet.** The insurance sector – which provides capital to infrastructure funds in countries such as Australia, Canada, the US UK, Germany and France, is still small in Kazakhstan and plays no role in infrastructure finance. Total industry assets stood at only $3.2 billion equivalent in May 2014.

225. **Progress in legal reforms still needs to be tested in practice.** The passing of the new Project Finance Law in 2012 and revised PPP Law in 2013 are encouraging signs of legal reform. However, these new laws lack a track record of application in infrastructure development and project finance. This, and the uneven application of existing laws for foreign investments in the past, may delay the uptake of PPP as a viable mode of financing municipal infrastructure. Legal gaps such as the missing “step-in” rights of lenders and the allowance of tariff formulae only for projects that are natural monopolies will need to be further rationalized and improved. Current laws will need amendment to provide for greater state support to investors and help in setting tariff high enough for utilities to become sustainable enterprises.

226. **Unpredictable macro-economic management.** Kazakhstan’s macro-economic management policies are still prone to unpredictability, as was seen in the February 2014 devaluation of the KZT. This type of unannounced unilateral financial markets action is a red flag to international investors seeking stable investment destinations and makes Kazakhstan unattractive compared to the many other countries with which it competes for investment.

XI. RECOMMENDATIONS – THE URBAN UTILITY TRANSITION SUPPORT PROGRAM (UUTSP)

A. Overall Strategy, Program Concept and Components

227. Based upon the TA's conclusions regarding the situation of municipal utilities in Kazakhstan at national, Akimat and utility company levels, the TA proposes a comprehensive Urban Utilities Transition Support Program (UUTSP) to address, in an integrated and coordinated manner, the many interlinked challenges and opportunities in Kazakhstan's utilities sector, including:

(a) utilities' lack of creditworthiness,
(b) lack of national benchmarking and financial / operational performance targets for utilities,
(c) wariness of foreign utilities operators to invest or enter into full management contracts in Kazakhstan, based on experience with earlier programs,
(d) need for improved financial and operational management in utilities in order to de-risk them and make them ultimately more attractive to investors,
(e) GOK desire to create domestic capital markets instruments to intermediate between long-term KZT institutional savings and long-term investment needs of utilities,
(f) need to develop project finance and PPP transactional capabilities in national institutions, and
(g) GOK desire to attract private investors and operators to eventually take over and provide GOK with a means to exit from asset ownership into a purely regulatory role.

228. The principal components of the proposed UUTSP are the following funds and facilities:

- **A specialized utilities sector-specific phase-specific facility, the Transaction Preparation Facility (TPF).** This facility, potentially funded and managed under the supervision of GOK and one or more DFIs, would act as a project preparation facility to fund procurement of (a) international utilities operator company/ies to provide Management support services to utilities, and (b) international experts and advisors to provide technical assistance to PPPAC for structuring of loan transactions between UUTSF and qualifying utilities (i.e. those also receiving MSS).
- **A long-term Revolving Debt Fund (Urban Utilities Transition Support Fund).** UUTSF would simultaneously (a) create investible long-dated debt securities attractive to long-term liability holders such as the Unified Pension Fund and National Fund, and potentially the growing Kazakhstan insurance industry, (b) add volume and depth to the Kazakh capital market and KASE, and (c) function as a performance-based long-term lender to utilities receiving management support services as described above.
- **An Availability Payments / Output Fund**. The fund could be funded by GOK and /or development partners. It would make performance-based payments to eligible UUTSF borrowers in order to make up for low tariffs during the transition period to higher tariffs.
- **An Urban Utilities Equity Investment Fund (UUEIF).** UUEIF would be structured on a commercial basis. It would make equity investments in qualifying UUTSF borrowers to strengthen their equity structures in the context of UUTSF debt financing and as a transition to private ownership.

229. In addition to the financing mechanisms listed above, the UUTSP would also include a number of coordinated and highly-targeted technical assistance activities. These would be used to build sustainable professional capacity in key GOK institutions to support them in performing their functions related to the UUTSP. All relevant organizations at national level would be

covered, together with Akimat-level entities in oblasts and cities whose utilities were selected to participate in UUTSP[84]:

B. Implementation Phases

230. To address the above issues in sequence, the UUTSP would be implemented in three broad phases over the remaining years to 2020.

1. Phase 1 (2014-15)

231. **Setting up contracting mechanisms for, hands-on management support to participating water and heating utility companies:** Management support services (MSS) to help improve the (a) ability of the utility companies to set and meet financial and operational targets, and (b) creditworthiness and financial soundness of these companies. This is an important/critical phase I intervention because TA analysis has shown that these improvements and general de-risking are needed to make the utilities eligible to borrow from UUTSF. The MSS would be provided by one or more highly experienced international utility operator companies, working under a technical assistance contract which would be supervised by a DFI and paid through the TPF. MSS would be enhanced through ZhKH Palata training programs, currently delivered to many utility companies. ZhKH Palata training programs could be expanded to include UUTSP-related training and knowledge products to shape the local utilities industry as a whole, both directly through ZhKH Palata as well as through its industry association members.

232. **Technical assistance to support design and establishment of the proposed financing entities as well as existing PPP-related entities**: Technical assistance to help design and establish the (i) UUTSF and its management entity, (ii) UUEIF and its management entity, (iii) TDF, (iv) the Availability Payments / Output Fund and its management entity, as well as TA for all PPP Centers at national and oblast level, with PPPAC as focal point due to its mandate for project preparation and relationship to other Baiterek entities, ; (v) UUTSP-related functions for KCM, DBK and NBK; and (vi) negotiating mechanics of the placement of UUTSF-issued securities to UPF and NF.

233. **Reforming business processes, tariff-setting reform by CREM, and creation of a utilities regulator:** Parallel technical assistance work during Phase I would provide support (i) to MNE for streamlining its business processes post the August 2014 government reorganization; (ii) to CREM for tariff-setting reform; and (iii) for the creation of a 'single-window' utilities regulator to perform national benchmarking and monitoring (with the support of the MSS provider(s)) to support GOK's gradual exit from utilities ownership and operations, and evolution into a purely regulatory role.

2. Phase 2 (2016-18)

234. All UUTSP funds and facilities would be operational, with UUTSF issuing its first tranche of bonds to United Pension Fund and National Fund, and proceeds being on-lent through project finance and corporate loan transactions to eligible utilities (also receiving MSS). At the same time, UUEIF and the Availability Payments / Output Fund would be funded and operational, providing funding to the pilot utilities according to their special modalities.

[84] Utilities would be selected to participate in UUTSP and to borrow from UUTSF on the basis of the quality of existing financial management and their willingness to accept management support services.

235. PPP centers would become increasingly involved in the program in anticipation of the more successful UUTSP utilities 'graduating' to the next stages of private involvement – e.g. going through actual PPP transactions. By then, it is hoped that participating utilities which had received MSS, received long-term debt from UUTSF, equity investments from UUEIF and perhaps benefitted from Availability payment / Output Fund support in their transitional tariff phase, would be ready to be marketed to private sector operators initially, and later investors.

3. Phase 3 (2019-20)

236. Successful 'graduate' utilities, with support from national and oblast-level PPP centers, would be marketed to the private sector so that their respective Akimats could exit, turning their monitoring and contract-management responsibilities over largely to the national regulator. Depending on the condition of utilities after 3-5 years spent receiving MMS and utilizing loans from UUTSF, Phase 3 activities could extend well beyond 2020 as late entrants were "graduated" to private ownership or management.

Table 5 – UUTSP Proposed Beneficiaries and Participants (in alphabetical order)

(Dark gray in a phase indicates heavy involvement, pale gray lighter involvement.)

	Entity Name	Proposed Role	Engagement Mode	Phase Dark gray = heavy involvement, pale gray = lighter involvement		
1	Baiterek Holdings	UUTSP Steering Committee (SC) member[85]	Coordination	1	2	3
2	Baiterek PPPAC	Transaction Preparation manager, co-coordinator of de-risking and PPP exit preparation	TA recipient			
4	City Akimats	Owners / shareholders of participating utilities, ultimate sellers	Coordination			
5	Committee for Regulation of Natural Monopolies (CREM), earlier AREM?	Tariff-setting; development of overlay tariff regime for UUTSF borrower utilities	TA recipient			
6	Committee (formerly Agency) on Housing, Communal Services & Construction (in MNE)	UUTSP Steering Committee member	TA recipient			
7	Oblast- or city-level Design Institutes	Reviewer of utility project documentation	TA recipient re revision of GOK rules for feasibility studies and other project documentation			

[85] A Steering group would be formed to coordinate the overall UUTSP and to provide liaison with participating GOK agencies, DFIs etc.

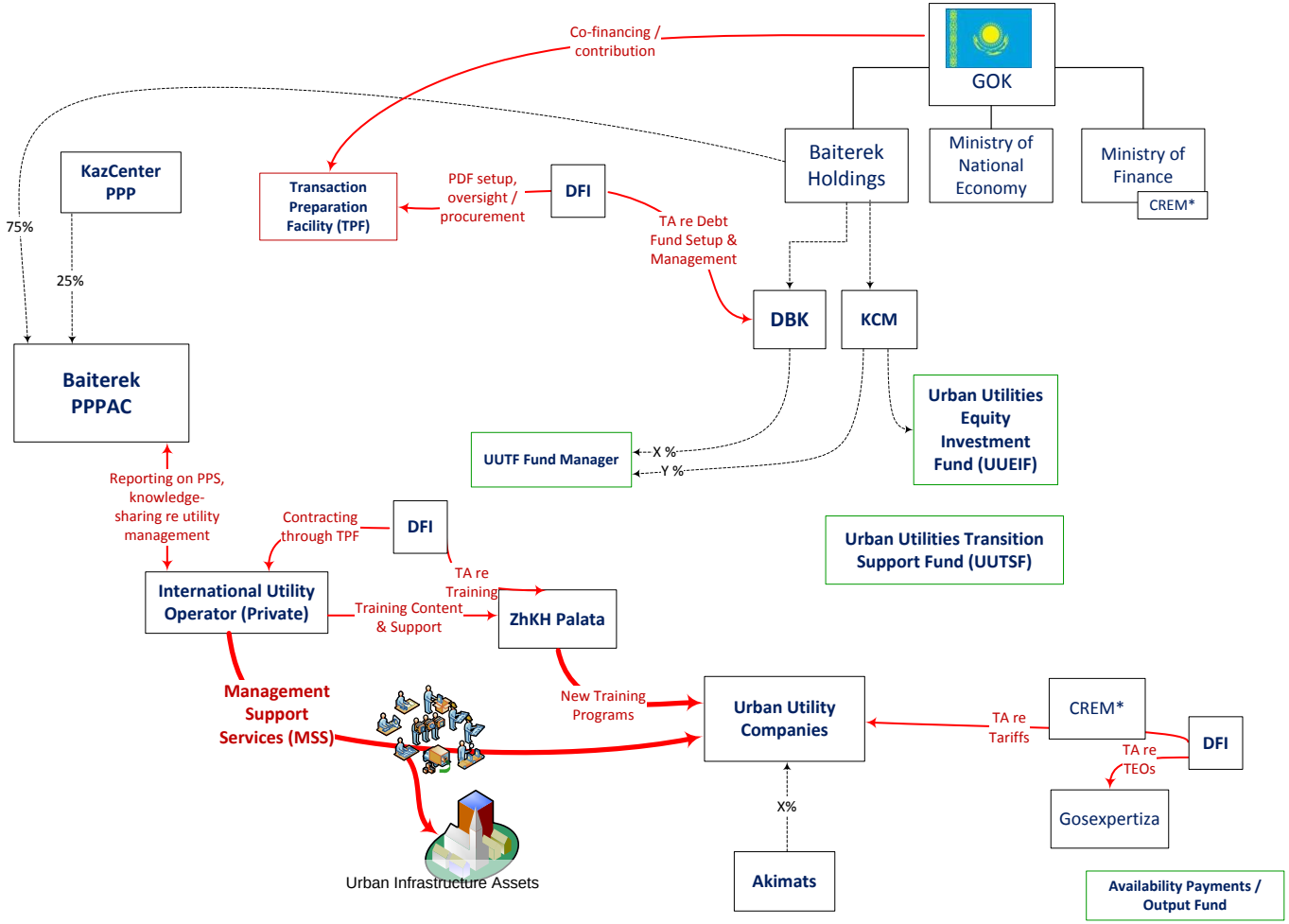
8	Development Bank of Kazakhstan (DBK)	Co-owner of new entity to be created to manage UUTSF, co-financier of utilities together with UUTSF?	recipient of TA regarding management of project finance and cash flow-based lending business, debt fund setup and management, co-parent (with Kazyna Capital Management KCM) of UUTSF manager (new entity to be created to manage UUTSF).			
9	Gosexpertiza JSC	Reviewer of utility project documentation	TA recipient re revision of GOK rules for feasibility studies and other project documentation			
10	Domestic Urban utility companies	Borrowers from UUTSF, investees of UUEIF	TA recipients of management support services			
11	International utilities operator companies	Provider of Management Support Services to local utilities, under 3-5 year contracts with TPF	Contractor / service provider to domestic utility companies			
12	Kazakhstan Stock Exchange (KASE)	Listing venue for UUTSF Bonds	Coordination			
13	KazCenter PPP	Reviewers of PPP transaction documentation	Coordination and encouragement to streamline overall proliferation of document reviewers in GOK			
14	KazCenter ZhKH & ZhKH Development Fund	UUTSP Steering Committee member	Coordination through Steering Committee			
15	Kazyna Capital Management (KCM) – manager and co-manager of existing investment funds	UUEIF manager, co-owner with DBK of UUTSF manager co.	TA recipient for debt fund setup and management, co-parent (with DBK) of UUTSF manager			
16	Majlis Committee on Economic Reform & Regional Development	UUTSP Steering Committee member	Coordination through SC			
17	Ministry of Agriculture (Committee on Water Resources)	UUTSP Steering Committee member	Coordination through Steering Committee			
18	Ministry of Finance	UUTSP Steering Committee member	Coordination through Steering Committee, possible TA for developing regulations to permit some relief from existing 3-year budgeting cycle for utilities in general and with regard to their UUTSF obligations.			
19	Ministry of National Economy	GOK counterpart for UUTSP	TA recipient for creation of new regulatory functions including national benchmarking of utilities financial condition and performance standards			

20	National Bank of Kazakhstan (NBK)	Manager of Unified Pension Fund and National Fund assets	TA recipient for investments in UUTSF by Unified Pension Fund and National Fund, long-term KZT deposit program (with domestic commercial banks)			
21	National Fund (NF)	Initial purchaser of UUTSF Bonds	Coordination through Steering Committee			
22	Oblast Akimats	Observers	Coordination through MNE / Steering Committee			
23	Oblast PPP Centers	Provide local support to PPPAC	TA recipient, work with PPPAC on ultimate GOK exits from utilities			
24	Output / Availability Fund	To be established DFIs & GOK to make availability or output-based payments to local utility companies who are borrowers from UUTSF	To be established by DFIs & GOK, co-funded, managed by UUTSF manager?			
25	Transaction Preparation Facility (TPF)	A specialized phase-specific sector-specific Facility to fund expert support to PPPAC, to the international operator company for Management Support Services (MMS), and to the UUTSF fund manager	To be established by DFIs & GOK, co-funded, managed by DFIs & PPPAC			
26	Unified Pension Fund (UPF)	Initial purchaser of UUTSF Bonds	Coordination through Steering Committee			
27	Urban Utilities Equity Investment Fund (UUEIF)	New financing vehicle to make equity investments in selected eligible UUTSF borrowers	To be established by DFIs & GOK, possibly to be co-funded and managed by KCM			
28	Urban Utilities Transition Support Fund (UUTSF)	New financing vehicle to issue 25-yeat KZT bonds to UPF and NF, and on-lend the proceeds at preferential rates to eligible local utility companies				
29	UUTSF Manager	Management entity for UUTSF, to be co-established and owned by DBK and KCM				
30	ZhKH Palata	Provider of enhanced training programs to utility company staff	TA recipient for training, work together with international utilities operator companies			

C. UUTSP Diagram - Phase 1 (2014-2015)

KAZ Urban Utilities Transition Support Program (UUTSP) Concept developed under PATA 8366-KAZ "Alternative Urban Infrastructure Financing Modalities"

Phase 1 – Strengthen creditworthiness & operations of municipal utility companies, establishment of financing and support entities

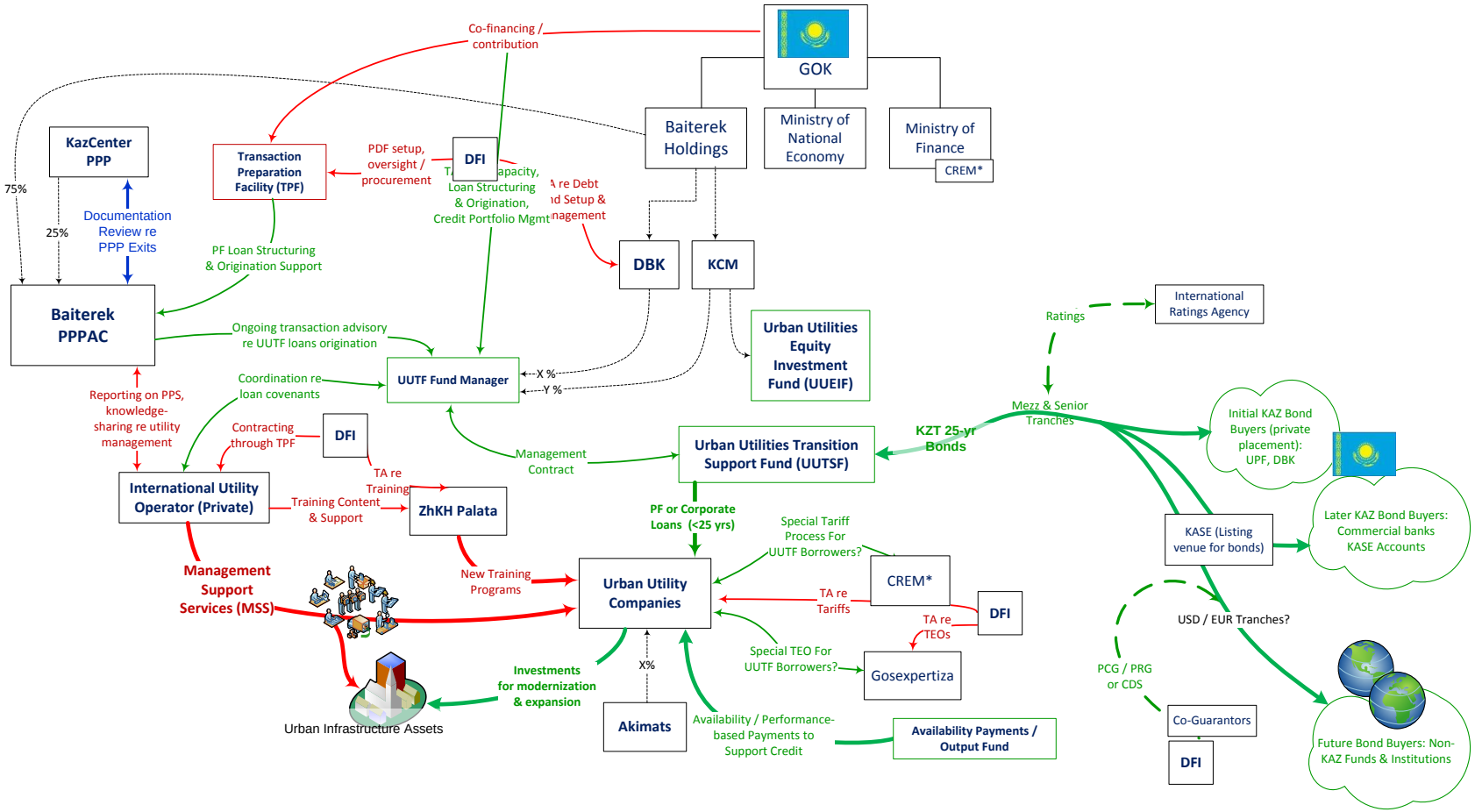


D. UUTSP Diagram - Phase 2 (2016-2018)

KAZ Urban Utilities Transition Support Program (UUTSP) Concept developed under PATA 8366-KAZ "Alternative Urban Infrastructure Financing Modalities"

Phase 1 – Strengthen creditworthiness & operations of municipal utility companies, Urban Utilities Transition Fund & Transaction Preparation Facility setup

Phase 2 – Urban Utilities Transition Fund (UUTF) & Transaction Preparation Facility (TPF) funded & operational



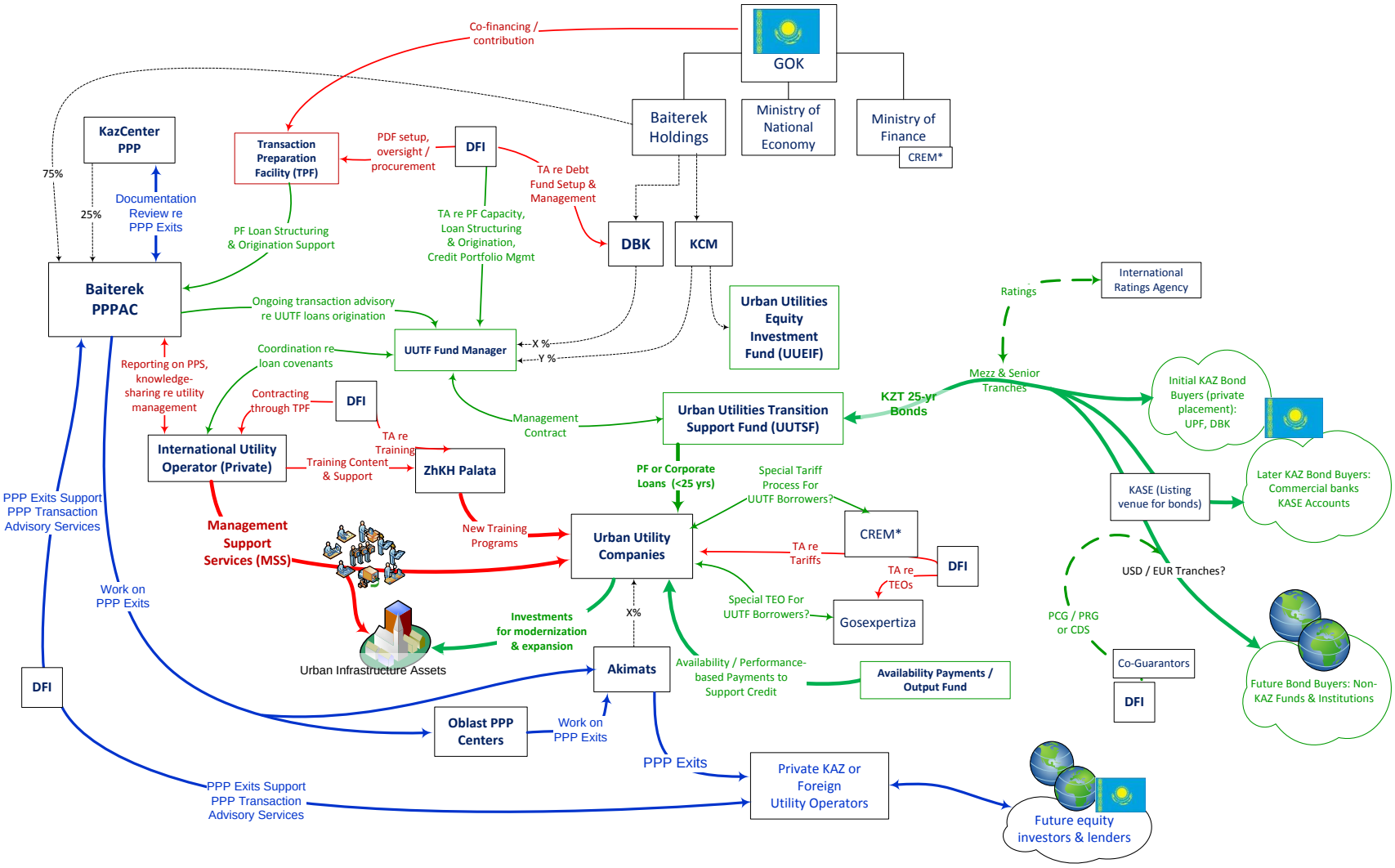
E. UUTSP Diagram – Phase 3 (2019-2020)

KAZ Urban Utilities Transition Support Program (UUTSP) Concept developed under PATA 8366-KAZ "Alternative Urban Infrastructure Financing Modalities"

Phase 1 – Strengthen creditworthiness & operations of municipal utility companies, Urban Utilities Transition Fund & Transaction Preparation Facility setup

Phase 2 – Urban Utilities Transition Fund (UUTF) & Transaction Preparation Facility (TPF) funded & operational

Phase 3 – Government (Akimat) ownership exit through sale or PPPs



APPENDIX 1: KAZAKHSTAN - COMPLETED PROJECT FINANCE TRANSACTIONS TO DATE[86]

(NB: All transactions are in energy/mining infrastructure)

Date	Project Name	Sector	Developer	Size (Sum)
30-Apr-13	Central Asia Gas Pipeline (Line C) Project	Oil & Gas	CHINA NATIONAL PETROLEUM CORP	12,500
19-Oct-11	Kuku Field	Oil & Gas	Turgid Petroleum	500
27-May-11	Ossakarovka Transmission	Power	KEGOC	156
28-Jan-11	Zhambyl Block Oil Exploration Project	Oil & Gas	Aju Corp, HYUNDAI HYSCO, KNOC, LG INTERNATIONAL CORPORATION	168
25-Apr-08	Arawak Refinancing Project	Oil & Gas	ARAWAK ENERGY CORP.	80
1-Apr-08	Turgai Refinancing and Extension Project	Oil & Gas	LUKoil Holdings, OIL COMPANY LUKOIL (JSC), PETRKAZAKHSTAN INCORPORATED	250
1-Mar-08	Chinarevskoye Oil Refinancing and Extension Project	Oil & Gas		550
30-Apr-07	Baiken Uranium Project	Industrials, Mining	KazAtomProm(Kazakhstan)	184
16-Dec-06	Voskhod Chrome Project	Industrials, Mining	Oriel Resources	120
14-Dec-05	Varvarinskoye Gold and Copper Mine Project	Mining	Polimetall	158
1-Apr-05	North Buzachi Oil Field Project	Oil & Gas	CHEVRON CORPORATION, ChevronTexaco Corp, CNPC International Ltd, NELSON RESOURCES LIMITED	40
30-Jan-03	Karachaganak Oil and Gas Field Development	Oil & Gas	Agip International BV(Agip), BG Group PLC-North Sea Assets, CHEVRONTEXACO CAPITAL CO, LUKoil Holdings, OIL COMPANY LUKOIL (JSC)	10,000
8-Mar-00	Karakuduk Oil Field Development Project	Oil & Gas	Karakuduk-Munay {KKM}	100
15-Dec-98	Karaganda Power Project	Power	NATIONAL POWER PLC- ADR, ORMAT INDUSTRIES	62
15-Apr-98	Ispat Karmet Metallurgical Plant Renovation	Industrials	Ispat Karmet JSC	450

[86] Source: www.pfie.com

APPENDIX 2: ATTENDEES – TA 8366-KAZ ALMATY WORKSHOP 6 JUN 2014

	Name	Organization
1	Akhymbekov, Manarkhan	Taldykorgan TeploServis
2	Alma Ussein	Taldykorgan Su: Zhetysuvodokanal
3	Ayasbayev, Nurym	MEBP DIP
4	Batyrbekova, Aimgul	Karaganda Regional Public Private Partnership Center
5	Berdenov, Almat	ADB (TA consultant)
6	Chikanayev, Shaimerden	ADB (TA consultant)
7	Djankobayev, Timur	IFC consultant, ex-IFK
8	Fedosseyev, Oleg	ADB (TA consultant)
9	Gaissin, Rashid	Managing Partner, GRATA
10	Galiyev, Vladislav	MRD, Committee on Construction and ZhKH
11	Imashev, Valeri	Karaganda Regional Public Private Partnership Center
12	Kaliyev, Maldybay	Akimat Taldykorgan City department of housing and communal services
13	Kenzheakmetova, Assel	World Bank
14	Khachatryan, Gagik	Speaker - Deputy Chair, Armenian State Committee of Water System
15	Kidirbekov, Rinat	Akimat Karaganda Oblast - Energy Division and Housing and Communal Services
16	Koshagulov, Becket	Karaganda City Akimat Life-support Dep't
17	Kunusbekov, Aldanish	Karaganda TeploTranzit
18	Lim, Joseph	ADB (TA consultant)
19	Lufkin, Joseph	ADB (TA consultant)

20	Nurgisaev, Serikbay	Keynote Speaker - Member of Parliament RK, member, Committee on Regional Revelopment
21	Ofarinov, Abbas	Panellist - EBRD Almaty
22	Ongarbekova, Aliya	Almaty Oblast PPP Center
23	Pimonenko, Nina	Taldykorgan Su: Zhetysuvodokanal
24	Ryatov, Kadirbay	Speaker - CEO Supremum Management Consulting and former Almaty Gas executive
25	Samokeish, Oksana	Speaker - National PPP Center
26	Sarsembekova, Manshuk	Kazakhstan SuArnasy
27	Shkarupa, Anatoliy	Speaker - Chairman, ZhKH Center
28	Shungazieva, Makka	MRD, Committee on Construction and ZhKH / Gosexpertise
29	Smagulov, Askar	RGP "Gosexpertise"
30	Sood, Priyanka	ADB
31	Taimanova, Zhanar	National PPP Center
32	von Waldersee, Christoph	ADB (TA consultant)
33	Zhumabekova, Aiman	Karaganda Su

APPENDIX 3: ATTENDEES – TA 8366-KAZ ASTANA WORKSHOP 4 JUL 2014

	Name	**Organization**
1	Abdullayeva, Zhanara	MEBP, DIP
2	Abylkairova, Bayan	ADB
3	Aldashov, Mars	DBK
4	Ausharipov, Erlan	MEBP, DRD
5	Baimagambetov, Olzhas Seilovich	JSC "ZhKH Development Fund"
6	Belyi, Alexander	UNDP Astana
7	Berdenov, Almat	ADB
8	Bezhekenova, Amir	Baiterek Holdings
9	Bolatovich, Aslan	PPP Center
10	Chikanayev, Shaimerden	ADB
11	Danayev, Arman Narbotayevich	GKP "Astana Su Arnasy"
12	Dussaliyev, Zhaskairat	PPP Advisory Center
13	Fedosseyev, Oleg	ADB
14	Gabbassov, Mars Bekkaliyevich	"Factor" Systems Research Co. (AREM)
15	Gordeeva, Elizaveta	Karaganda Su
16	Idrissov, Askar	MINT, ZhKH Innovation Development Group
17	Issembayev, Sergazy	KAF

18	Issembayev, Yergazy	MEF Engineering
19	Kidirbekov	Karaganda Energy Dep
20	Kim, Stanislav	UNDP Astana
21	Kulov, Ruslan	AO "ZhKH Center"
22	Kydyrbekov, Rinat	Karaganda Regional Energy Department
23	Lim, Joseph	ADB
24	Lufkin, Joseph	ADB
25	Manapov, Azamat	PPP Center (Astana)
26	Musirepova, Anar	PPP Center
27	Opachko, Miroslav	
28	Orlova, T.N.	Karaganda Energy Dep
29	Rakhimbekov, Toleutay	ZhKH Palata
30	Rakhimov, Rassul	UNDP Astana
31	Sarsembekova, Manshuk	Kazakhstan SuArnasy
32	Sartbayev, Medet Maksutovich	
33	Shaihina, Zaure	GU "Energy Division Astana city"
34	Shungazieva, Makka	MRD, Committee on Construction and ZhKH / Gosexpertise
35	Solovyeva, Aigul	Parliament of the Republic of Kazakhstan
36	Syundykov, Valeriy	Kazakhstan SuArnasy
37	Tashenov, Ardak	Eurasian Development Bank

38	Toreibaro, Valeri	Kazakhstan SuArnasy
39	Uralova, Dana	MF, Budget Department, National Fund and Financial Sector
40	Ussein, Amla	Taldykorgan Su: Zhetysuvodokanal
41	von Waldersee, Christoph	ADB
42	Wokurka, Ulf	Deutsche Bank
43	Yechshanov, Almas	EBRD
44	Zheinaubayev, Yerulan	MEBP
45	Zkaskybaeva, Gulfara	Akbulak (Aktobe)
46	Ruslan, Kulov Maratovich	ZhKH Center
47	Abdykarimova, Dinara Zhaksybergenovna	GKP "Astana Su Arnasy"
48	Akhymbekov, Manarkhan	Taldykorgan TeploServis