#### Annexe 1

# The Kashagan Field:

# A Test Case for Kazakhstan's Governance of Its Oil and Gas Sector<sup>1</sup>

Depuis le début des années 1990, les richesses en hydrocarbures de la région Caspienne suscitent la convoitise des grandes puissances et des sociétés pétro-gazières. Mais ces richesses doivent être transportées sur plusieurs milliers de kilomètres et transiter par plusieurs pays avant d'atteindre les principaux centres de consommation. Dans ce jeu énergétique, où les gains financiers et géostratégiques sont considérables, les Etats de la région sont au centre d'une compétition entre les grandes puissances pour l'accès et le contrôle de voies d'exportation. L'étude ci-dessous analyse le cas du Kazakhstan et montre quels sont les facteurs qui permettent d'expliquer la décision gouvernement kazakh de renégocier l'Accord de Partenariat et de coopération en vue du développement du gisement stratégique de Kashagan.

This study focuses on the factors behind Kazakhstan's decision to re-negotiate the terms of the existing Production Sharing Agreements (PSAs) with International Oil Companies (IOCs), in the context of the development of the huge Kashagan oil field. The development of Kashagan, one of the largest and most recently discovered oil fields in Kazakhstan, is crucial for Kazakhstan's ambitions of becoming a global oil producer. Kazakhstan, which has the largest oil reserves in the Caspian Sea region, is the second largest regional producer after Russia in the former Soviet Union. The country's potential for oil exports is also strategically significant as a future source of non-OPEC supplies.

Amongst the CIS states, Kazakhstan is considered one of the most open countries for foreign investments. International projects in the form of Joint Ventures, Production Sharing Agreements (PSAs) or exploration/field concessions have brought foreign investments into the country's natural resources sector, particularly in the oil and gas industry. However, new developments have recently taken place, which have marked a shift in the Kazakh government's approach towards foreign investment in its energy sector. This study will therefore examine the following issues:

- Kazakhstan's plans to abandon the practice of attracting foreign investments in its energy sector through new PSAs.
- The recent entry of state-controlled KazMunaiGaz into the consortium operating over the Kashagan field and its impact on IOCs.
- The impact of high oil prices on the negotiating power of producer states in the context of Kazakhstan's new stance on PSAs.

Specifically, this study will focus on the following key factors, which will seek to further explain the changes in Kazakhstan's attitude toward the Kashagan PSA:

• *Operational factors* — management of the project, development strategy, cost estimates, levels of production and export markets.

<sup>&</sup>lt;sup>1</sup> Etude réalisée avec Shamil Yenikeyeff.

- Consortium factors the relative strength of the investment consortium and companies participating in the PSA; the extent of KazMunaiGaz participation in the project.
- *Domestic industrial factors* relationship between IOCs and the state-owned energy company, KazMunaiGaz, including its impact on the project.
- *Technological factors* the utilization of advanced technology in the project and prospects for transfer of technology; Kazakhstan's reliance on the technology held by IOCs.
- Legal factors the duration, structure and implications of the PSA itself; legal perspectives of the new government energy policy and its impact on the investment climate
- Domino effect and environmental grounds for PSA renegotiation the impact of the Russian government's policies towards PSAs on Kazakh government's behaviour.
- Regional factors the project's regional impacts and the Kazakh government's interest in these regions; the export options of these landlocked resources will also be analysed.
- *Geopolitical factors* the importance of the project within the context of the Kazakh government's geostrategy and foreign policy.

This study is therefore arranged into four main sections:

- 1. Kashagan overview: key facts and figures
- 2. Kazakhstan's evolving energy strategy
- 3. Kazakhstan's energy sector: politics and society
- 4. Geopolitics of Kashagan

The first section presents the main characteristics of the giant Kashagan oil field and the consortium that has been developing it since 1997. Kashagan is crucial for the future oil and gas output of Kazakhstan, but represents one of the most complicated oil field developments to date.

The second section examines the specifics of the existing Production Sharing Agreements and the key domestic legislative changes affecting Kazakhstan's oil and gas sector. This section will also assess the growing influence of the state in the domestic energy sector and the expanding power of the state-owned national oil and gas company, KazMunaiGaz. The main allegations of the Kazakh government made against the ENI-led consortium will be examined in detail.

Inter-elite interaction in Kazakhstan heavily influences the country's economic and political discourse, including the domestic energy complex. Thus, the third section offers an in-depth analysis of the current competition between the top elite groups for access to key resources.

The fourth section outlines the main options for Kashagan oil and gas exports. The competition between different pipeline projects and their geopolitical implications are discussed.

The conclusion summarizes the main implications of the latest legislative, political and geopolitical developments in Kazakhstan's energy industry on IOCs.

# 1. Kashagan: key facts and figures

# Kashagan and Kazakhstan's oil and gas potential

Kashagan is Kazakhstan's largest offshore hydrocarbon field with a potential of 38 billion barrels of oil. It is located near the city of Atyrau, in the shallow and ice-prone waters of the North Caspian, which houses unique habitats of migratory birds and sturgeon. Kashagan stretches over a vast territory of more than 3,000 square kilometres. At present, the North Caspian PSA covers five massive geological structures, the first of which, Kashagan East-1, was discovered in September 1999 (the discovery was made official in July 2000) and was declared commercially viable in June 2002. The second structure, Kalamkas, was discovered in October 2002, followed by the discovery of Kashagan South West, Aktote and Kairan. It is yet to be determined whether these recently discovered structures can source hydrocarbons on a commercial basis.

Reserves estimates may vary widely, due to the inherent difficulties of reserve evaluations as well as diverse economic and political interests: generally, host governments tend to push projections higher in order to attract foreign investments. Shortly after the first drilling, the government of Kazakhstan placed estimates at 50 billion barrels<sup>2</sup>. However, the subsequent appraisal phase resulted in scaled down reports due to complications with the field's geology. As a result, some members of the initially formed international consortium opted to withdraw from the project.<sup>3</sup>

Today, Kashagan's recoverable hydrocarbon resources are estimated at 7-9 billion barrels of oil (13 billion barrels with gas reinjection) and 489.5 billion cubic meters (bcm) of gas. The operator of the field, Agip KCO, estimates that Kashagan contains up to 38 billion barrels of oil, of which 13 billion are potentially recoverable.<sup>4</sup>

According to the national oil and gas company KazMunaiGaz, Kashagan reserves amount to 34.7 billion barrels, 14.47 of which are recoverable. Kashagan itself could be responsible for as much as one quarter of Kazakhstan's proven reserves. Kashagan and Tengiz (another super-giant field located in the western part of the country) together account for almost half of the country's proven oil reserves. BP estimates put Kazakhstan's liquid hydrocarbons at 5.5 billion tonnes (39.8 billion barrels), which makes up a 3.3% share in the total global oil reserves.<sup>6</sup> The country's gas potential is estimated at 3.3-3.7 trillion cubic meters (tcm), of which 2.5 tcm are proven. Kazakhstan's key oil and gas fields are located within the Caspian region in the northwest part of the country.

Since the collapse of the Soviet Union, Kazakhstan's oil and gas industry has gone through several stages of development, from the stagnation and uncertainties of the early days of independence to the contemporary period marked by accelerated growth. Over the past ten years, Kazakhstan's petroleum sector has experienced considerable growth in its production

<sup>&</sup>lt;sup>2</sup> CNN, 25 July 2000, http://archives.cnn.com/2000/ASIANOW/central/07/24/kazakhstan.energy.reut/

<sup>&</sup>lt;sup>3</sup> By 2003, Statoil, BP, and BG had all cut back investments and operations.

<sup>&</sup>lt;sup>4</sup> http://www.agipkco.com/wps/wcm/connect/AgipKCO+EN/Home, visited on 20 May 2008.

<sup>&</sup>lt;sup>5</sup> http://www.kmg.kz/index.cfm?tid=24, visited on 20 May 2008.

<sup>&</sup>lt;sup>6</sup> BP Statistical Review of World Energy 2007, p. 22.

<sup>&</sup>lt;sup>7</sup> Ministry of Energy and Mineral Resources of the Republic of Kazakhstan.

of oil, which increased from 25.9 metric tonnes (MT) in 1998 to 67.2 MT in 2007 (see Chart 1). Decree N°1095 "On the state program for development of the Kazakhstan sector of the Caspian Sea," signed by Kazakh President Nursultan Nazarbayev, projects the oil output to reach 150 MT by 2015. According to the Ministry of Energy and Mineral Resources, by 2020 Kazakhstan should be producing around 200 MT per annum (more than 3 billion b/d (barrels a day). In fact, much of the increase in oil production is expected to come from the "four giants", Tengiz, Karachaganak, Kurmangazy and Kashagan. By 2020 around 1/3 of crude production is expected to come from Kashagan, reaching 1.2 million b/d. Kazakhstan is also seeking to increase gas production from 29.63 bcm in 2007 to 114 bcm in 2020. According to official figures, commercial gas output may rise from 12.9 bcm in 2007 to 30 bcm in 2020.

A key feature of Kazakhstan's gas is its close association with domestic oil production. Gas volumes from Kazakhstan mainly come from oil, oil-gas, and gas condensate fields. At the moment, associated gas constitutes over 45% of the gas produced in Kazakhstan. Future gas volumes are also expected to come mainly from the Caspian oil fields. Oil and gas statistics are presented in Figures 1-2.

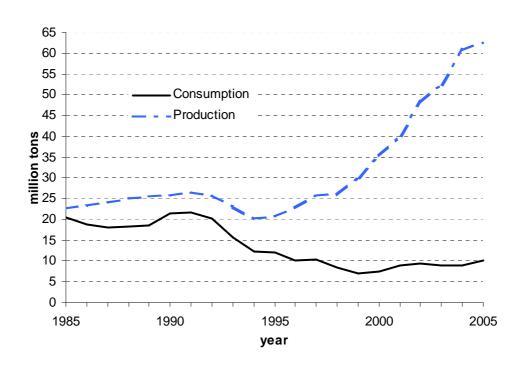
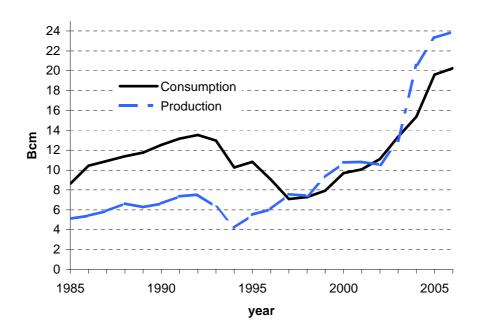


Figure 1. Kazakhstan oil statistics

Data Source: BP Statistical Review of World Energy 2007

Figure 2. Kazakhstan natural gas statistics



Data Source: BP Statistical Review of World Energy 2007

## Consortium arrangements

On 18 November 1997, Kazakhstan signed the North Caspian Production Sharing Agreement (PSA) with Offshore Kazakhstan International Operating Co. (OKIOC), licensing an area of over 5,500 square km. In 1998, OKIOC included nine consortium partners: ENI's subsidiary Agip (Italy), BG (UK), BP Amoco (UK), ExxonMobil (USA), Shell (UK), Total FinaElf (France), Phillips Petroleum Co. (USA), Statoil (Norway), and Inpex Masela Ltd. (Japan). In 2001, Agip, a subsidiary of the multinational petroleum company Eni, was chosen as the project operator by the consortium partners, followed by the renaming of OKIOC to Agip Kazakhstan North Operating Company B.V. (Agip KCO). At the same time, BP and Statoil chose to sell their shares. In 2003, BG reached a deal with the Chinese national oil companies CNOOC and Sinopec to sell its 16.33% share in the consortium. However, the deal fell through when the other Agip KCO partners exercised their pre-emption rights and acquired half of BG's shares while the other half went to Kazakhstan. Until recently the consortium included seven partners, including the national oil and gas company KazMunaiGaz, officially representing Kazakhstan's government in Agip KCO. In early 2008, consortium members had the following stakes in the project:

Table 1. Agip Kazakhstan North Operating Company B.V. before the PSA renegotiation

Kashagan Partners	Country	(%)
Eni	Italy	18.52
ExxonMobil	USA	18.52
Shell	UK-Netherlands	18.52
Total	France	18.52
Conoco	USA	9.26

<sup>&</sup>lt;sup>8</sup> Pre-emption rights relate to a situation in which a shareholder intending to sell its shares has to first offer them to existing shareholders before being able to sell them to outsiders.

KazMunaiGaz	Kazakhstan	8.33	
Inpex	Japan	8.33	

According to the initial plans of Agip KCO, Kashagan was scheduled to be developed over three phases:

- 2002-2010 the initial stage of development of the eastern segment of the field with production levels reaching 21 million tonnes of oil per annum (450,000 barrels per day).
- 2010-2014 the second stage envisages the enlargement of production to a larger geographic area in order to double the annual oil output to 42 million tonnes (900,000 barrels per day).
- 2014-2041 at the third stage, production levels will reach 56 million tonnes per annum (1.2 million barrels a day).

Production at Kashagan was originally scheduled to begin in 2005 but had to be postponed a number of times. In comparison to the neighbouring Tengiz field, the Kashagan project is more challenging in terms of logistics, technology and environment. Unlike Kashagan, Tengiz was discovered by Soviet geologists in 1979 but the formidable technological challenges associated with its development postponed commercial production. At the time, Soviet oilmen preferred to develop Western Siberian hydrocarbons rather than the Kazakh fields.

Not only does the Northern Caspian Sea freeze during the winter making offshore production difficult, but it is also located at the centre of a unique natural habitat. Due to the specific chemical composition of Kashagan crude (with its high levels of poisonous H<sub>2</sub>S (hydrogen sulphide) and the high oil pressure, the field's development could have a serious impact on the ecosystem of the region. This includes a potential danger to bird and marine wildlife and human health.<sup>9</sup>

From a logistical standpoint, the lack of pipeline capacity for oil and gas exports is yet another key challenge for the project. The existing export infrastructure (including the older Atyrau-Samara pipeline, and the Caspian Pipeline Consortium pipeline) does not have adequate spare capacity for the transportation of Kashagan hydrocarbons to external markets.

To help remedy this, the planned 3,000 km Atyrau-Alashankou (Kazakhstan-China) oil pipeline may become a potential oil export route for Kashagan oil, as discussed further in Section 4.

When it comes to gas production, Agip KCO appears to have opted for a similar strategy to that of Tengizchevroil (abbreviated to TCO) in the Tengiz and Koroloveskoye fields. Namely, the Kashagan consortium plans to construct a gas processing plant and storage facilities for sulphur and gas reinjection units. Liquefied Petroleum Gas (LPG) production for domestic and external markets could also be an option. Part of Kashagan gas could also be linked to existing and potential gas pipelines going to China, Russia, and Europe. In addition to these plans, Kazakhstan intends to build a gas processing complex in Atyrau oblast which

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<sup>&</sup>lt;sup>9</sup> Kashagan oil field development in Kazakhstan, Preliminary NGO fact finding mission report, 4-13 September 2007.

could receive about 6 bcm of gas from TCO and about 3 bcm from Agip KCO per annum. The complex may also get gas supplies from the Aktotty, Kairan, and Kalamkas fields.

A key difference between the Tengiz and Kashagan projects are the total estimated costs—standing at \$23 billion and \$136 billion respectively. In summer 2007, facing cost escalation Agip KCO increased the Kashagan budget from \$57 billion to \$136 billion. Production was postponed from 2008 to 2010. Naturally this was not well received in Kazakhstan, which sought to benefit from current high oil prices. Kazakh authorities suspended the Kashagan project for three months due to breaches of environmental regulations and threatened to annul ENI's licence as the project operator. At the same time, Kazakhstan's law enforcement agencies initiated criminal proceedings against Agip KCO's executives for alleged tax evasion regarding imported equipment.

A possible solution to the conflict is the potential replacement of the project operator, ENI, with KazMunaiGaz or to make KazMunaiGaz a joint operator with ENI, probably for the second phase. This could ensure stable revenues for Kazakhstan through the duration of the project. Agip KCO's partners have offered to increase KazMunaiGaz stake from the current 8.33% to 16.81%, with other consortium members cutting their shares on a pro-rata-basis within a newly established consortium (See Table 2). 10

Kashagan Partners	Country	(%)	
Kazmunaigaz	Kazakhstan	16.81	
ExxonMobil	USA	16.81	
Shell	UK-Netherlands	16.81	
Total	France	16.81	
Eni	Italy	16.81	
Conoco	USA	8.39	
Inpex	Japan	7.56	

Table 2. A New Kashagan consortium of 2008?

# Technical challenges

Technical and geological challenges account for the significant costs of the project as well as for the delays with its implementation and its associated environmental problems. The most serious technical issues and their implications include:

- The reservoir fluid contains a high concentration of H<sub>2</sub>S (hydrogen sulphide). As a result, under certain conditions, this substance becomes extremely corrosive potentially leading to deterioration and even complete destruction of oil and gas equipment. Therefore, the equipment involved in the Kashagan project must be specially designed to withstand potential damage and to comply with a set of strict safety requirements as set by the American National Association of Corrosion Engineers. Naturally, this leads to much higher equipment costs. Moreover, the associated Caspian gas with its high H<sub>2</sub>S content presents further technological challenges in terms of its utilisation and commercial viability.<sup>11</sup> The high levels of

<sup>&</sup>lt;sup>10</sup> Oil and Gas Eurasia, No. 9, 2007.

The Caspian oil and gas production where giant hydrocarbon fields have particular high levels of poisonous hydrogen sulphide (H<sub>2</sub>S) and other sulphates: 15-17% in Tengiz, 16-20% in Kashagan, and 20% in Imashevskoe, a large North Caspian gas condensate field under joint Russian-Kazakh control. Karachaganak,

impurities (like sulphur) must be extracted to "sweeten" the gas and then stored in a protected area, implying the construction of sulphur processing plants and storage facilities. The extracted sulphur, however, is used in fertilisers and could therefore be sold (depending of course on sulphur price and demand in external markets).

- Since Kazakh law prohibits the flaring of associated gas, one solution is to re-inject the gas back into the reservoir. This technique also permits the maximization of economically recoverable reserves. Gas injection, however, requires an extremely sophisticated compressor system which adds to the costs of the project.
- The North Caspian is extremely shallow (3-4 meters deep on average). The winters are harsh and temperatures may drop to -40°C, which results in the freezing of the shallow waters. Moving ice blocs represents a threat to offshore platforms. No traditional drilling rigs can be effectively employed. As a result, artificial islands need to be constructed to facilitate successful drilling.
- The field's reservoir is located at the subsea depth of 4,500 metres with pressures reaching extremely high levels of about 700-800 atmospheres. Combined with the high content of toxic gases at high temperatures, the safe handling of crude production becomes extremely difficult. "Drilling in such reservoirs is almost the same as breaking the powder keg", affirms Professor Diarov of the Atyrau Institute of Oil and Gas.<sup>12</sup>

The levels of gas reinjection at the Caspian fields (aimed at boosting oil output) will determine how much spare Kazakh gas will be available for external markets. The future of gas development in Kashagan depends on the successful implementation of various technological approaches to gas processing/reinjection at Tengiz. In the fall of 2007, Tengizchevroil carried out a trial launch of "Second Generation Project" (SGP) and "Sour Gas Injection" (SGI). 13 The full launch of the SGI unit has been postponed due to gas escaping during re-injection. In the summer of 2007, TCO completed the drilling of the first injection well. However, after the problems with the SGI launch, the planned drilling of the second and third wells has been postponed. TCO now intends to start the second well drilling by 2010 and plans to spend about \$800 million on it. TCO expects full SGP/SGI operation by the end of 2008. Once fully operational, TCO assumes that about one-third of the sour gas produced will be re-injected back into the reservoir. The remaining volumes will be used to produce commercial gas, LPG and sulphur. Some Kazakh experts are highly sceptical of whether TCO will ever be able to successfully implement gas reinjection at Tengiz. 14 Gasreinjection success is also measured by the number of pores it fills in the reservoir and whether the injected gas displaces oil successfully. 15 Traditionally, the success rate of gas reinjection can only be established two-three years after the initial injection. As mentioned before, gas-reinjection is vital for oil production at Karchaganak and the Caspian offshore

Kazakhstan's main hydrocarbon field of in terms of gas potential, contains only 3.5% of this poisonous gas, whereas another sizable field, Zhanazhol contains about 2-6% of H<sub>2</sub>S.

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<sup>&</sup>lt;sup>12</sup> Alexander's gas and oil connections, Vol. 6, Issue 10, 01 June 2006.

<sup>&</sup>lt;sup>13</sup> "SGI reinjects produced sour gas into the reservoir at very high pressures to boost production. SGP was brought up to about one-third of its full capacity and is currently separating the natural gas for injection while also stabilizing and sweetening the crude oil. Once fully operational, SGP is designed to also process sour gas into gas products and elemental sulfur." Chevron, Press Release, 29 January 2008.

<sup>&</sup>quot;Milliardy See: Martyniuk, plast", Gazeta.kz, http://www.gazeta.kz/art.asp?aid=98546; "Gas reinjection at Tengiz stopped", Oil and Gas of Kazakhstan, No. 6, 2007. <sup>15</sup> Ibid.

fields. Otherwise, unsuccessful gas re-injection could mean more gas volumes becoming available for export.

Table 3. Chronology of Kashagan

1993	Creation of the KazakhstanCaspiishelf (KCS) to carry out the seismic survey of the Caspian with Eni, BG Group, BP/Statoil, Mobil, Shell, Total and a Kazakh state company.
1997	KCS becomes the Offshore Kazakhstan International Operating Company (OKIOC), governed by a Production Sharing Contract.
1998	KazakhstanCaspiiShelf, the state-owned company, sells its stake in OKIOC to Phillips Petroleum (US) and Inpex (Japan) for \$500 million.
2000	Discovery of Kashagan is officially announced in July.
2001	Eni becomes the operator and the project is re-named Agip Kazakhstan North Caspian Operating Company (Agip KCO). BP and Statoil sell their stake in the project with the remaining partners buying their share.
2003	BG Group (British Gas International) attempts to sell its stake to two Chinese companies CNOOC and Sinopec. Other partners block the sale by exercising their pre-emption privileges.
2004	Legislation granting the government to claim pre-emptive purchase rights in any energy project.
2005	KazMunaiGaz purchases 50% of BG shares (8,33%) while other IOC participants share the rest.
2007	In August, the government of Kazakhstan suspends work at Kashagan for three months due to environmental violations.  In September, the Parliament approves the law enabling the government to alter
	or cancel contracts with foreign oil companies if their actions threaten nations interests.
2008	On January 14 the consortium and the Kazakh authorities sign a Memorandum of Understanding, which established that the Kashagan partners will pay a \$2.5-4.5 billion compensation to Kazakhstan for the project's continuous delays. At the same time, the stake of KazMunaiGaz in the consortium is to be doubled to 16.8% for \$1.78 billion.

# 2. Kazakhstan's evolving energy strategy

The break-up of the unified Soviet energy industry in 1991 resulted in serious financial, transit, management and political problems for the former constituent parts of the Soviet Union. The fact that the Soviet oil and gas industry was highly centralised meant that the fledgling states often lacked the administrative capacity or necessary financial resources to manage the infrastructure inherited from the USSR. Besides, the emerging relationships between its former constituent Republics were initially shaped by unrealistic commercial expectations of the newly independent governments hungry for extra budget revenues at a time of political and economic turmoil. <sup>16</sup>

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<sup>&</sup>lt;sup>16</sup> See: Jonathan P. Stern, "The Future of Russian Gas and Gazprom", pp. 66-67.

So far, Kazakhstan has been the most successful country in the region in terms of attracting foreign investors. Newly independent Kazakhstan managed to secure investment from American, British, Chinese, Russian, French, Italian, Indonesian, and Dutch companies, predominately for the production and refining of its oil. Since Kazakhstan lacked the technology and finance, IOCs played an essential role in developing the country's vast resources. In 1993 Kazakhstan signed its first agreement with a foreign company, establishing a joint venture between Chevron and the Kazakh oil company for the development of the Tengiz oil field.<sup>17</sup> As a result, Kazakhstan became the former Soviet Republic with the largest share of foreign investments in relation to its GDP.

## The PSA regime

In its relations with foreign investors, Kazakhstan employs three contractual mechanisms: Concessionary, Contractual (Production Sharing Agreement) and Participation agreements (see annex 2 for selected oil and gas projects). Kashagan and Karachaganak have been developed under the PSA regime whereas production at Tengiz is governed by a joint venture between Kazakhstan and Chevron. This following section examines the PSA regime that governs the Kashagan project.

The PSA regime was introduced in some parts of the former USSR, such as Azerbaijan, Russia, and Kazakhstan, during the period of low oil prices when the newly independent countries did not have the administrative, financial nor technological capacities to manage and develop their energy industries. PSAs sought to guarantee stable profits for international consortia in times of economic, legal or political instability. For the host government, the PSA became a vehicle for attracting substantial investments, while allowing the state to remain in ownership of natural resources.

Under a PSA regime, the host government entrusts the international oil company (the contractor) to conduct prospecting, exploration and extraction of natural resources. Exploration risks are borne by the contractor while the revenues have traditionally been divided into two segments: "cost oil" is used to compensate the contractor for the costs of exploration and development and "profit oil" is the post-cost revenue divided between the contractor and the host government (or its national company). The specific provisions of the PSA regime enable the national government to forecast future production volumes and the related budgetary revenues.

With the institutional development of a strong Kazakh government and the sustained growth of oil prices, Kazakhstan began to seek a greater state role in its hydrocarbon sector. As a result, since 2002, the government has been criticizing the previously signed PSA contracts.

<sup>&</sup>lt;sup>17</sup> The major partners in the Tengizchevroil (TCO) joint venture are Chevron (50% ownership), ExxonMobil (25% ownership), the Kazakhstani government through KazMunaiGaz (20% ownership) and Russian LukArco (5%)

<sup>&</sup>lt;sup>18</sup> See M. Kaiser and A. Pulsipher, "A review of the oil and gas sector in Kazakhstan", *Energy Policy*, 35(2007), pp.1300-1313.

The dispute over Tengiz in November 2002 was the first clear sign of the changing Kazakh policy towards IOCs. 19

At the same time, Kazakhstan was also making further legislative changes with the intention of boosting the role of the state in the energy industry. In December 2004, President Nazarbaev signed Law N°2-III which enabled the government to claim a pre-emptive purchase right in any energy project offered for sale. This clause was adopted after BG group attempted to sell its share in Kashagan to Chinese companies but was blocked by other consortium partners exercising their pre-emption rights (as explained in section 1). In 2004-2005, a new PSA law was introduced which required KazMunaiGaz to have a minimum fifty percent share in new PSAs. Although this legislative change exempted previously signed PSAs, Kazakhstan nevertheless has subsequently taken steps to ensure its active role in the energy sector. Some of the more significant steps include: legislation on the utilisation of hydrocarbon resources (including associated gas flaring), changes in the tax system, changes in the recovery cost limit in PSAs, and Kazakhstan's newly established right to review previously signed PSAs to assess whether they contradict its economic and national security interests.

## Kashagan and Sakhalin-II

The recent legislative changes and the modification of PSA terms in Russia and Kazakhstan show a continuation of the global trend to challenge previously signed agreements in order to favour domestic interests in times of high oil prices. Some observers compare Kazakhstan's actions in Kashagan to those of the Russian government in relation to the Sakhalin-II project (see box 1).

However, there are several important differences between the Sakhalin and Kashagan cases. Sakhalin II reserves were discovered in the 1980s by Soviet geologists with further investments of around \$160 million in their geological exploration, making them more-orless ready for exploitation. Kashagan was discovered in post-independence Kazakhstan and required considerable investments for further exploration and development. At the time of the Kashagan discovery, post-Soviet Kazakhstan did not have a well-developed domestic oil industry. In addition, Sakhalin–II is not a good comparison to Kashagan, neither in terms of the overall cost of the two projects (\$22 billion and \$156 billion respectively) nor in terms of their scale.

#### Box 1. Russia's Sakhalin II project

Russia's Sakhalin-II project involves the offshore oil and gas production and transportation of hydrocarbon volumes through twin pipelines across Sakhalin Island to an oil terminal and an LNG plant. This Production Sharing Agreement, the first signed in Russia's post-Soviet era, was signed in 1994 with 100% foreign ownership (Shell, Mitsui and Mitsubishi). The terms of this agreement have been harshly criticized as being extremely unfavourable for Russia. Throughout the 1990s, the development of this project was constantly delayed by the project's partners due to their reluctance to provide financing in times of low oil prices. Local populations also voiced their concerns with the project's shortcomings in terms of the

<sup>&</sup>lt;sup>19</sup> A dispute arose in November 2002 when the Western companies in the Tengiz consortium sought to finance a \$3.5 billion expansion of the Tengiz oil field using the project's oil revenues. Kazakhstan's government protested, as the plan would erode its tax receipts.

development of the local infrastructure and the improvement of decreasing living standards for the islanders. In addition, environmental NGOs criticised the project over the construction of pipelines in this highly seismic zone, not to mention the oil spills and waste discharges that they argue have affected the marine and wildlife on the island.

In 2006, facing cost escalations, Shell insisted on doubling the budget from \$10 billion to \$22 billion, thus postponing profits for the Russian government. The Sakhalin project was soon after almost completely stalled by the Russian authorities, who threatened to withdraw the license on environmental grounds. Eventually, Gazprom took the majority share in Sakhalin-II with a \$7.45 billion deal, while Mitsui, Mitsubishi and Royal Dutch Shell agreed to halve their stakes.<sup>20</sup> The 2006 negotiations over Sakhalin II were conducted at the highest political level, involving the governments of Great Britain, the Netherlands, Japan and Russia.

## The government's new stance on Kashagan

During the visit of the Italian Prime Minister Romano Prodi to Kazakhstan in October 2007, the message of President Nazarbaev was clear:

"ENI has taken a number of commitments. First, production started in 2005. Second, the resolution of environmental problems. Third, - the sharing of operations with the Kazakh company. Fourth, - the 'Kazakh content' and gas processing. I hope the Eni group will not go back on its words and on its commitments." <sup>21</sup>

Cost overruns, the breach of environmental regulations, and violations of security and labour rules are constantly emphasized by Kazakhstan officials. These are examined in following section.

### a) Production delays and cost overruns

The announcement by ENI to postpone the start of production from 2005 to  $2010^{22}$  and to increase the capital costs of the project will likely force the Kazakh government to revise its oil extraction targets of 75-80 million tonnes for 2010 and 120-130 million tonnes in 2015. According to some estimates, Kazakhstan could also lose oil revenues of up to \$20 billion over the next decade, though the consortium does not recognize such a figure. The delay in project implementation will have a serious impact on Kazakhstan's economy, which is largely dependent on the hydrocarbons sector. The petroleum industry accounts for about 30% of the country's GDP. Oil exports represent over half of Kazakhstan's export revenues: 52% in 2000 and 64.7% in 2004. Kazakhstan's hydrocarbon exports were at \$33 billion in 2007. This explains why the production delay and the escalating budget were not well received in Kazakhstan. According to Kazakh officials, Kashagan's oil profits were "already included in our strategic plans for economic development and improving social conditions for our people." Bakhut Sultanov, the Minister of Economic Affairs and Budget Planning,

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<sup>&</sup>lt;sup>20</sup> Financial Times, 22 January 2007.

<sup>&</sup>lt;sup>21</sup> Translated from Russian, Vremja Novostei, 09 October 2007.

<sup>&</sup>lt;sup>22</sup> In May 2008, Agip KCO announced that the Kashagan production would be delayed until 2013.

<sup>&</sup>lt;sup>23</sup> Financial Times, 21 December 2007

<sup>&</sup>lt;sup>24</sup> United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), Economic and social survey of Asia and the Pacific, 2007, Kazakhstan.

<sup>&</sup>lt;sup>25</sup> RFE-RL, 8 October 2007.

declared that the delay in extracting at Kashagan might also lead to significant financial gaps in the National Fund.<sup>26</sup>

Following negotiations over Kashagan in January 2008, the consortium partners had agreed to compensate the Kazakh government for any cost overruns and delays. This "fine" or levy is expected to reach around \$3.5 billion, depending on the price of oil at the commencement of commercial operations.<sup>27</sup> In addition, Kazakhstan will receive a share of the profit before participating companies have recovered their initial investment costs.

#### b) Environmental concerns

As mentioned earlier, Kashagan is located in the fragile North Caspian environment, which is home to numerous rare species, including the endangered Beluga sturgeon and the Caspian seal. It is situated on major migratory routes with millions of birds passing through this area every year. During the Soviet period, part of the North Caspian was declared a natural reserve where all hydrocarbon explorations were banned. There are serious concerns in Kazakhstan that the post-Soviet oil rush in this area may have a negative impact on this unique environment.

To reiterate, the Kashagan field is situated about 70 km from Atyrau. The town of approximately 150,000 inhabitants is about 20 meters below sea level. According to some local experts, should any event involving the large-scale release of toxic gases from the nearby processing plant or oil wells occur, it may result in devastating consequences for the area's inhabitants. As mentioned above, the field lies in very shallow water. Thus, water depth is insufficient to disperse any oil spills that might occur. Professor Obryadchikov of the Gubkin Oil and Gas Institute asserts that: "The sub-soil in this sector of the Caspian Sea abounds in geological faults that have torn apart the natural borders of oil-bearing structures. Theoretically, any drilling may provoke a leakage of oil through those faults, from fissures located at outer side of the well."

As mentioned above, similar to Kashagan, the neighbouring Tengiz field also has very high contents of sulphur. TCO started production of sulphur in order to solve the problem of high levels of hydrogen sulphide in Tengiz. However, in 2007 Kazakhstan's authorities fined the consortium for stockpiling millions of tonnes of sulphur in the open from 2003 to 2006. In the summer of 2007 the Kazakhstan's Parliament threatened to revoke the Tengiz/Korolevskoye exploration licence if TCO failed to reduce stockpiles of sulphur which are damaging to the environment. In general, the consortium agreed to spend about \$900 million over three years on environmental measures.<sup>30</sup>

Kazakhstan's Environmental Protection Ministry also accused Agip KCO of systematic violations of norms set for emissions and waste disposal in the sea. As a result, in October 2007 the work on Kashagan was halted for three months.

<sup>&</sup>lt;sup>26</sup> In January 2008, the Fund amounted to \$21.6 billion. See *Vremja Novostei*, N°150, 22 August 2007.

<sup>&</sup>lt;sup>27</sup>Kazakhstan news bulletin, N°2, 23 January 2008, Embassy of the Republic of Kazakhstan, www.kazakhembus.com

<sup>&</sup>lt;sup>28</sup> BBC News Online, 04 December 2002, <a href="http://news.bbc.co.uk/2/sci/tech/2540321.stm">http://news.bbc.co.uk/2/sci/tech/2540321.stm</a>

<sup>&</sup>lt;sup>29</sup> Alexander's Gas and Oil Connections, 6(10), 01 June 2001

<sup>&</sup>lt;sup>30</sup> The Economist, 01 August 2007.

# c) The new role of KazMunaiGaz.

Historically, unlike Azerbaijan or Russia, there was no significant oil industry in Kazakhstan. Only in 1999, with the revision of the Law on Subsoil and Subsoil Use,<sup>31</sup> was the concept of a "national company" introduced. Subsequently, any new bidder would need to cooperate with the national companies to obtain rights over subsoil usage.<sup>32</sup> In 2000, the Kazakh government established KazTransGaz, a gas subsidiary of the national oil transportation monopoly, KazTransOil. In early 2002, Nursultan Nazarbaev signed a decree establishing the national oil and gas company, KazMunaiGaz, by merging Kazakhoil with the national company Oil and Gas Transportation.<sup>33</sup> Since 2004, the national oil and gas company, KazMunaiGaz, has also been actively expanding its asset base in both the oil and gas sectors.

More recently, although the share of KazMunaiGaz in the Kashagan consortium will increase from the current 8.33% to 16.81%, this is not an indication of Kazakhstan's intention to reduce the presence of international oil companies within its domestic energy industry. Although resource-rich nations generally enjoy considerable leverage in choosing partners for their oil and gas projects— especially in light of increasingly fierce global competition over access to hydrocarbon reserves—Kazakhstan's national oil and gas company, KazMunaiGaz, does not have the adequate financial resources or technological background to develop the geologically sophisticated Caspian hydrocarbon fields. Therefore, in the case of Kazakhstan, the domestic political establishment will be required to choose from only a handful of companies with the technological expertise and experience necessary to extract oil and gas from the Caspian. In this situation, Kazakhstan is likely to use its growing, yet limited, position in the domestic hydrocarbon sector to influence the way the industry and export routes are developed.

# 3. Kazakhstan's energy sector: domestic politics and society

The evolution of Kazakhstan's political system since the collapse of the USSR is best described as a continuous system-change where a variety of interest groups and institutionalised elites are in competition with each other for resources and political power. Bargaining transactions between actors involved in this competition are the key to understanding the future of Kazakhstan's energy sector.

Kazakhstan's political system is similar to post-independence political regimes in most parts of the former Soviet Union. The weakness and even absence of a multiparty system and a developed civil society in the majority of post-Soviet states resulted in a situation where relations between administrative and industrial elites became the main political arena. A

<sup>&</sup>lt;sup>31</sup> Law No. 2868 on subsoil and subsoil management.

<sup>&</sup>lt;sup>32</sup> See Gulzhan Nurakhmet, "New realities, new role...Regarding the Mining policy in Kazakhstan", *Kazakhstan international business magazine*, N°2, 2006.

<sup>&</sup>lt;sup>33</sup> Decree of the President of the Republic of Kazakhstan, No. 811, 20 February 2002.

super-presidential system of government has been another key characteristic of these political systems where the survival and success of political and economic elites is based on privileged personal contacts with the chief executive.<sup>34</sup> Consequently, competition between corporate actors is focused on the level of their access to the president. Naturally, such a system lacks an institutionalised mechanism for the succession of political power, thus creating a potential for inter-elite conflict, where the political and economic fortunes of financial-industrial groups could be reversed overnight.

So far, Kazakhstan has managed to avoid violent inter-elite conflicts or revolts such as in Kyrgyzstan in 2005. An explanation for Kazakhstan's more peaceful political developments after independence could be rooted in the country's social stratification system, which has traditionally been organised around the three "hordes" the Senior, Middle and Junior zhuz<sup>36</sup>—each containing a number of clans.<sup>37</sup> In the Soviet Union, most of the non-Russian ethnic communities, Kazakhs included, retained and reinforced traditional patronage networks based around ethnic clans.<sup>38</sup> In the 1990s, this pre-existing social stratification played a major role in the formation of the political and business elite in Kazakhstan, both in terms of access to key resources and lobbying interests within the political and economic systems. However, after 2000, the influence of the historical zhuz system of ethnic Kazakhs became less prominent, especially within the country's business circles. If the early 1990s were dominated by the Soviet party nomenclature forged by personal loyalties and blood ties, by 2000 a new entrepreneurial elite, sharing common business interests, had also been formed. As a result, Kazakhstan witnessed the formation of two types of corporate groups – the old and the new. The old companies were formerly subordinate to the Soviet industrial ministries, where the directorship took over control during privatisation. The newly established businesses generated enormous profits, either by using state finances to grant high interest loans or by securing ownership over public property during privatisation. During this period, the Kazakh president Nursultan Nazarbaev extended his powers in order to circumvent the emerging confrontation between the old and new elite groups.<sup>39</sup>

Between the spring and summer of 2007, Kazakhstan was de facto transformed from a presidential to a presidential-parliamentary system, expanding the legislature's powers and

<sup>&</sup>lt;sup>34</sup> "Superpresidentialism is an "apparatus of executive power that dwarfs all other agencies in terms of size and the resources it consumes; a president who enjoys decree powers; a president who de jure or de facto controls most of the powers of the purse; a relatively toothless legislature that cannot repeal presidential decrees and that enjoys scant authority and/or resources to monitor the chief executive." See: M. Steven Fish, 'The Executive Deception: Superpresidentialism and the Degradation of Russian Politics', in Valerie Sperling (ed.), Building the Russian State: Institutional Crisis and the Quest for Democratic Governance (Boulder, CO, 2000), pp. 177-192; John T. Ishiyama & Ryan Kennedy, "Superpresidentialism and Political Party Development in Russia, Ukraine, Armenia and Kyrgyzstan", Europe-Asia Studies, Vol. 53, No. 8, 2001, pp. 1177–1191.

<sup>&</sup>lt;sup>35</sup> Horde - a term of Turkic origin meaning a clan of nomads, a political subdivision of central Asian nomads or a people or tribe of nomadic life. See: Merriam-Webster Online Dictionary, http://www.m-<u>.com/dictionary/horde</u>

36 The term *zhuz* appears to be derived from the number 100 referring to a multitude or horde.

<sup>&</sup>lt;sup>37</sup> These are also described as the Great, Middle and Small zhuz or the Elder, Middle and Younger zhuz. See: Martha Brill Olcott, The Kazakhs, 2nd edition, Stanford: Hoover Institution Press, 2005. These three zhuzs represent the traditional division of the Kazakh nation.

<sup>&</sup>lt;sup>38</sup> See: Kathleen Collins, Clan Politics and Regime Transition in Central Asia, Cambridge: Cambridge University Press. 2006.

<sup>&</sup>lt;sup>39</sup> See: Alisher Sagadiev, "Rasklad tekushchego momenta", Informatsionno-analiticheskii tsentr po izucheniyu obshchestvenno-politicheskikh protsessov na postsovetskom prostranstve Moskovskogo gosudarstvennogo universiteta, November 2006; Dosym Satpaev, "An Analysis of the Internal Structure of Kazakhstan's Political Elite and an Assessment of Political Risk Levels", in Uyama Tomohi, ed., *Empire, Islam, and Politics in* Central Eurasia, Slavic Research Center, Hokkaido University, 2007, pp. 283-300.

granting political parties greater influence in the decision-making process. Members of the lower chamber of the legislature are now elected by party lists, whereas in the past only around 7 percent were elected in this way. The president consults political parties in the parliament before appointing a new prime minister. The presidential term of office was also reduced from seven to five years. However, at the same time, the capping for the current president's number of terms in office was removed. Despite these constitutional amendments, the president's power has only been strengthened further. The parliament elected in August 2007 is controlled by the pro-presidential party, *Nur-Otan*, with other parties being unable to pass the 7 percent electoral barrier. The sudden parliamentary elections (originally scheduled for 2009) caught key opposition parties by surprise. Many of these have also been weakened by prolonged internal disputes within the opposition.

The weakness of mass and non-systemic actors in Kazakhstan's political system makes interelite interactions of paramount importance for the economic and political stability of the system, including the domestic energy complex.

Kazakhstan's top elite groups.

Until summer 2007, the two most powerful elite groups of Kazakhstan were associated with President Nazarbaev's two sons-in-law, Rakhat Aliev and Timur Kulibaev.

# Rakhat Aliev and Dariga Nazarbaeva

Rakhat Aliev was once married to President Nazarbaev's oldest daughter Dariga, and was Kazakhstan's deputy foreign minister and Ambassador to Austria. A son of the Soviet Health Minister for Kazakhstan, Aliev began his career in the mid-1990s as an importer of medical equipment and drugs, and subsequently moving into the sugar business. He then joined public service as a deputy head of the Tax Police and by the late 1990s had already been responsible for supervising activities of the tax police and customs. By 2001, he was promoted to the post of the deputy head of Kazakhstan's state security service, the Committee for National Security. Aliev's preoccupation with a public career considerably undermined his opportunities in business. Although he was directly in charge of power ministries, supervising activities amongst companies operating in Kazakhstan, he did not extend his business influence to key segments of the national economy, unlike Nazarbaev's other son-in-law, Timur Kulibaev. Apart from some petroleum trading business, Aliev had never managed to get seriously involved in the domestic oil and gas sector, though he was more successful in banking and especially the media market where he controlled key television channels and newspapers. Aliev's presidential ambitions could explain his strong interest in expanding his influence over power ministries and the media. In 2001 he allegedly masterminded a plot to oust Nursultan Nazarbaev, and was demoted to Foreign Service and posted abroad. However, Aliev's continued aggressive methods of enlarging his business empire and openly-voiced political ambitions in the end led to his demise: in the summer of 2007 he was removed from all government positions, divorced from his wife, and has a pending warrant for his arrest in Kazakhstan on a number of criminal charges, ranging from kidnapping and murder to corruption and money laundering. 40 Although his former spouse - the president's daughter, Dariga - has retained control over key assets of Rakhat Aliev's group, she no longer possesses access to important administrative resources previously associated with Rakhat Aliev.

 $<sup>^{\</sup>rm 40}\, See$ : "RFE/RL Newsline," June 4, 6, 13, and 19, 2007.

#### Timur Kulibaev

Rakhat Aliev was often viewed as a political and economic competitor to Timur Kulibaev, who is married to Dinara, the second daughter of Kazakhstan's President. Kulibaev himself comes from a powerful Kazakh family from the Senior zhuz. In Soviet times, his father, Askar Kulibaev, was a mayor of Almaty (the Kazakh capital before 1997), then worked as the Communist party boss of Gur'ev oblast, now Atyrau oblast. The oblast is home to the key Caspian oil and gas fields of Kazakhstan, such as Tengiz and Kashagan. <sup>41</sup> As the oblast head, Kulibaev-senior developed strong personal ties with the top management of the oil and gas industry of Kazakhstan, most of whom come from the Junior zhuz. Kazakhstan's energy sector has traditionally been dominated by a conglomerate of prominent families from the Senior and Junior zhuz, which is presently headed by Timur Kulibaev. Through his marriage to the president's daughter, Timur Kulibaev became a vital link between the top management of the national energy sector (the Junior zhuz) and the president, Nursultan Nazarbaev, who himself comes from the Senior zhuz. Therefore, it unsurprising that Kulibaev has traditionally occupied top positions in Kazakhstan's oil and gas industry, and has often been described as an unofficial Kazakh oil and gas minister. 42 The influence of the Kulibaev-led conglomerate spreads over a large section of the banking, telecommunications, and oil and gas sectors, including the national oil and gas company KazMunaiGaz and most of the regional administrations in the oil and gas provinces. Today, KazMunaiGaz deals with all key energy issues in Kazakhstan, including production, refining, transportation, sales, and relations with foreign investors. Moreover, the company de facto sets up export quotas for domestic and foreign producers of hydrocarbons. At present, the Kulibaev-led conglomerate is the most powerful financial-industrial group in Kazakhstan, which is unsurprising, taking into account the importance of the energy sector for the domestic economy.

The political departure of Rakhat Aliev further boosted the political profile of Timur Kulibaev and has considerably undermined the existing balance of power between elite groups in Kazakhstan. In the future, Nursultan Nazarbaev could lower the political standing of the Kulibaev group by removing important economic and administrative resources from under the group's control or by promoting other elite groups within the system in order to counterbalance Kulibaev. His resignation (in late August 2007) from the board of the state holding company, Samruk, which manages KazMunaiGaz and other key state assets of the republic, cannot, however, be perceived as Nazarbaev's attempt to undermine the Kulibaev group. The president's second son-in-law remains the Chairman of KazEnergy, Kazakhstan's powerful "association of oil-gas and energy sector organizations", while his close associate, the prime minister of Kazakhstan, Karim Massimov, obtained support from the newly elected parliament, fully controlled by pro-Nazarbev party *Nur Otan*. Moreover, in late August 2007 another representative of Kulibaev's group, the head of Samruk, Sauat

<sup>&</sup>lt;sup>41</sup> In 2005, Atyrau oblast's share in the domestic oil and gas production was 43.6% and 51.4% respectively. See: http://www.oil-gas.kz/en/2006/

<sup>&</sup>lt;sup>42</sup> Since the mid-1990s, Kazakhstan's energy sector has gone through various stages of re-organisation. During this period, Timur Kulibaev was always at the forefront of the industry: Vice-President of the national oil company, Kazakhoil, President of the national oil transportation monopoly, KazTransOil, President of the national company, Transportation of Oil and Gas, Vice President and President of the national oil and gas company, KazMunaiGaz, and until late August 2007 deputy chairman of the board of the national state holding, Samruk, which controls all the key state assets, including the national oil and gas complex.

<sup>43</sup> See: "Kazakh President Sacks Another Son-In-Law", *RFE/RL*, 28 August 2007. http://www.rferl.org/featuresarticle/2007/8/bfc8c54c-0c66-41cb-831d-a7ba18d823ed.html

<sup>&</sup>lt;sup>44</sup> "Kazakh PM put question of confidence in Government before new Parliament", *Kazinform*, 02 September 2007.

Mynbaev, was appointed as the new energy and mineral resources minister of Kazakhstan. In his new position, Mynbaev will seek to renegotiate the terms of the giant Kashagan oil and gas project, where KazMunaiGaz is likely to replace ENI as a project operator.<sup>45</sup>

Therefore, the more likely scenario for Nazarbaev is to promote another elite group as a counterweight to the Kulibaev conglomerate, rather than undermining his highly loyal second son-in-law who, unlike Rakhat Aliev, seems to have no political ambitions. There are two more top-tier groups that could fulfil this role:

# Kairat Satybaldy and the Eurasian group

Perhaps the most powerful of them is represented by an alliance between the President's nephew, Kairat Satybaldy, and the Eurasian Group, headed by a prominent entrepreneur Alexander Mashkevich. For many years, Kairat Satybaldy worked in the security services of the republic and has also occupied top managerial positions in Kazakhoil and KazMunaiGaz. Alexander Mashkevich's Eurasian Group is one of the largest financial-industrial groups in Kazakhstan, with strong interests in banking, metallurgy, coal, and mining. Currently the Group's key assets include Eurasian Bank, Eurasian Energy Corporation, KazChrome and Kazakhstan Aluminium. The Group can be considered an outsider in relation to the preexisting *zhuz* system of Kazakhstan. Since 2001, the Eurasian Group and the president's nephew have forged an alliance that could potentially become a powerful counterweight to the growing influence of Timur Kulibaev.

# Nurzhan Subkhanberdin and Kazkommertsbank

Nurzhan Subkhanberdin's group controls Kazkommertsbank, the largest and oldest banking conglomerate in Kazakhstan. Kazkommertsbank was originally created as one of the first commercial banks that was authorised to handle accounts of the leading corporate clients in Kazakhstan. It also advised the Kazakh government during the privatisation of several state enterprises. Today, its influence extends to the energy, trade and media sectors. In the past, the Kazkommertsbank group backed liberal reformers in the government and was often associated with dissident entrepreneurial and political circles in the Kazakh establishment. The group has been a traditional ally of Timur Kulibaev and, for this reason, has had access to Kazakhstan's oil and gas sectors.

Apart from the above-mentioned, four top political-economic groups, there are other "second tier" elite groups. Yet most of them lack the political and economic resources to play any serious role in the political system, let-alone in the Republic's energy sector.

#### Succession and stability.

Today the president of Kazakhstan has the final say in potential conflicts within the elite. His institutionalised dominance within the hierarchy of government agencies ensures his control over administrative and political decision-making, and the coercive apparatus. As a result, the power over economic resource allocation and state coercion has made the Kazakh president a primary target for influence by corporate groups and government officials. Since party politics is of little importance, the president is the only force in the political system that could

<sup>&</sup>lt;sup>45</sup> "Kazakhs Seek Active Kashagan Role, Talks With Eni CEO", *Dow Jones*, 06 September 2007.

<sup>&</sup>lt;sup>46</sup> See: Eurasian Group, Ignatov and Company Report, August 2007.

maintain its stability. He can boost or undermine the financial and political standing of different elite groups in order to counter-balance them against each other. Therefore, the standing and interactions of these elite groups in Kazakhstan's political system is of paramount importance for the stable power transfer in the post-Nazarbaev era.

In this respect, several scenarios are possible:<sup>47</sup>

- Russian-style succession. A consensus candidate acceptable to the key elite groups emerges and succeeds Nazarbaev on the same principle as Vladimir Putin succeeded Boris Yeltsin as the Russian president on 31 December 1999;
- Azerbaijan-style succession. A relative of Nazarbaev's inherits his power in the same way Geydar Aliev transferred power to his son, Ilham, in Azerbaijan;
- Turkmen-style succession. Unexpected death of a president catches the elite by surprise. New president is selected by key elite groups and comes to power as a result of a consensus among them, at least initially.
- Ukrainian/Georgian/Kyrgyz style succession. Revolutionary change of the leadership.
- Succession as a result of a conflict between leading elite groups. Everyone is against everyone else. A dominant actor emerges and takes power and redistributes economic resources, or the elite groups reach a pact on the redistribution of assets.

At present, the last two scenarios are highly unlikely in Kazakhstan due to the President's popularity, the absence of mass or non-systemic actors, and the removal of a key systemic actor, Rakhat Aliev, who constantly destabilised the existing status quo within the elite.

Kazakhstan's geopolitical standing as an important oil and gas producer and the growing international competition for its hydrocarbon resources has evidently been very skilfully used by the country's leadership to consolidate power at home.

# 4. The geopolitics of Kashagan

Kazakhstan's geographic location alone raises the geopolitical importance of this second largest post-Soviet state, equivalent in size to Western Europe or two thirds of the continental US. The country is bordered by Russia, China, the Central Asian states of Turkmenistan, Uzbekistan, and Kyrgyzstan, and the Caspian Sea. It is also located within geographic proximity to Turkey, Iran, Afghanistan, and the Caucasian republics, including Azerbaijan and Georgia. Kazakhstan's vast oil and gas resources amplify its geopolitical importance for Europe, Russia, the US, Asia, and the Middle East.

Kazakhstan's success in attracting foreign investors for its oil and associated gas projects have been curtailed by the lack of transport infrastructure, vital for the export of hydrocarbon products to global markets. Historically, Kazakhstan has been dependent upon Russia for oil and gas transit. The country is especially frustrated with oil export quotas imposed by the Russian pipeline monopoly, Transneft, and reluctance on the part of the Russian government to expand the capacity of the Caspian Pipeline Consortium (CPC) pipeline. This factor,

<sup>&</sup>lt;sup>47</sup> See: Gel'man, et al, 2003, pp. 22-23; Terry Lynn Karl and Philippe Schmitter, "Models of Transition in Latin America, Southern and Eastern Europe", *International Social Science Journal*, Vol. 43, No. 128, 1991, pp. 269-284, Gerardo L. Munck and Carol Scalnik Leff, "Modes of Transition and Democratization: South America and Eastern Europe in Comparative Perspective", *Comparative Politics*, Vol. 29, No. 3, 1997, pp. 343-362.

coupled with a projected increase in domestic oil output to 150 million tonnes in 2015, has compelled Kazakhstan to diversify its oil exports via alternative routes. The current and future export routes for Kazakh gas will largely be shaped by gas volumes from Turkmenistan and possibly Uzbekistan. However, Turkmenistan will remain a major gas supplier for Russian and Chinese export routes. The paragraphs below present an assessment of pipeline projects.

# Oil exports

With the planned Kashagan oil outflow, the existing transport export infrastructure requires a considerable expansion to meet the incremental hydrocarbon volumes. Ambitious export forecasts will largely depend on the exports routes available. Geographically, Kazakhstan is far from the coast and from the main internationally important networks. Most of the oil production is located in the Western part of the country with Kashagan in the northern part of the Caspian Sea. At the moment, Russia is Kazakhstan's main export route for access to international and Russian markets. The bulk of oil exports is currently transported via the Black Sea from the Odessa (Ukraine) and Novorossiysk (Russia) Ports, through the North Pipeline, and by rail to Russia. The Caspian Pipeline Consortium, built in 2001, further elevated Russia's position as a transit country for Kazakh oil exports. Meanwhile Kazakhstan is also pursuing a pragmatic strategy, balancing Russia, China, the European Union, and the United States. In fact, any market seems to fit Kazakhstan's export policy: "Our policy towards it is a multi-vector one. The Russian routes are important to us today. And if the Russians give more opportunities, we will take them. If not, we will go via the Caspian Sea to the Caucasus to supply our crude to international markets," declared by President Nazarbaev<sup>48</sup>

Export through Russia: traditional and new transport options

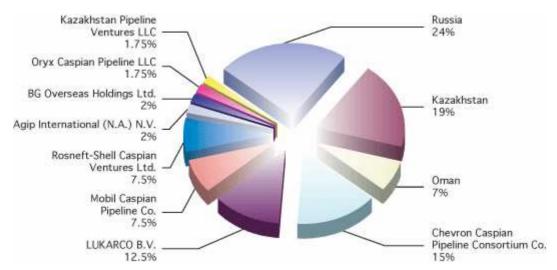
Two main operating trunk oil pipelines, Uzen-Atyrau-Samara and the Caspian Pipeline Consortium transport oil from Kazakhstan to Russia.

The first connects western oil fields in the Atyrau and Mangistrau regions to the Russian distribution system at Samara over a distance of 1,232 kilometres. Before the construction of alternative transport options, it was transporting the bulk of Kazakh oil exports. In June 2002, Kazakhstan signed a 15-year oil transit agreement with Russia. Under this agreement, Kazakhstan will export at least 17.4 million tonnes per year (350,000 b/d) of crude oil using the Russian pipeline system.

Operational since 2001, the CPC pipeline connects Western Kazakhstan (Tengiz field) with the CPC terminal near the port of Novorossiysk (Russia) on the Black Sea. The CPC has a complex organizational structure involving three governments and ten companies representing seven countries (see figure below). Most of Kazakh oil exports are currently exported via this pipeline (1/3 in 2002), which has enabled Kazakhstan to boost its exports volumes since 2001. Kazakhstan seeks to double the existing pipeline capacity of 30 million tonnes per year.

<sup>&</sup>lt;sup>48</sup> Press Conference by the President of the Republic of Kazakhstan Nursultan Nazarbayev and the President of the EBRD Jean Lemierre, 18th Plenary Session of the Foreign Investors Council, 7 December 2007.

Figure 2. The CPC structure



Source: Caspian Pipeline consortium

The BTC and the "Kazakhstan Caspian Transportation System" (KCTS) project

The 1,768 km long Baku-Tbilisi-Ceyhan oil pipeline<sup>49</sup>, the construction of which Russia opposed and for which the US lobbied, represents the second alternative route for Kazakhstan's oil. The oil pipeline has a total annual capacity of 50 million tonnes (one million barrels per day) and runs through Azerbaijan, Georgia, and Turkey to the Ceyhan Marine Terminal on the Mediterranean Sea. In June 2006 Kazakhstan announced its decision to join the BTC project and to supply around 7.5 million tonnes of oil a year. This figure could subsequently increase to 25 million tonnes. In August 2007 Kazakhstan's prime minister, Karim Massimov, stressed that the BTC pipeline could become the key alternative to Kazakh oil exports via the CPC pipeline, if the latter is not expanded. 50 Between August and September 2007 Kazakhstan reached some provisional agreements with Azerbaijan on the construction of the US\$1.6 billion Kazakh-Caspian Transportation System, which is scheduled to come into operation by 2010 and will incorporate a new 730-km pipeline from Eskene to the Caspian port of Kuryk, new terminals in Kazakhstan and Azerbaijan, and construction of an oil tanker fleet.<sup>51</sup> In May 2008 Kazakhstan's parliament ratified these provisional agreements, which came into force on 30 May when President Nazarbaev signed them. 52 The initial estimated costs amount to \$3bn for a capacity of around 500,000 b/d. In the first step, a feasibility study for the construction of a pipeline, and later on an energy export hub at the city of Aktau is to be launched.

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<sup>&</sup>lt;sup>49</sup> Baku-Tbilisi-Ceyhan pipeline, BP, <a href="http://www.bp.com/sectiongenericarticle.do?categoryId=9006669">http://www.bp.com/sectiongenericarticle.do?categoryId=9006669</a>, last visited on the 10 May 2008.

<sup>&</sup>lt;sup>50</sup> Vasilii Kashin, Fillip Sterkin, "KTK mal Kazakhstanu", *Vedomosti*, No. 155 (1929), 21 August 2007, <a href="http://www.vedomosti.ru/newspaper/article.shtml?2007/08/21/131351">http://www.vedomosti.ru/newspaper/article.shtml?2007/08/21/131351</a>; "Kazakhstan Prepared to Construct New Oil Pipeline via Azerbaijan and Georgia", *Trend Capital*, 07 September 2007.

<sup>&</sup>quot;Kazakhstan announces Trans-Caspian oil transport system", December 2006, http://www.kogiguk.com/News/Archive/2006/Dec/Article2932.htm

<sup>52 &</sup>quot;Kazakhstan ratifies oil transit treaty with Azerbaijan", Kazinform, 30 May 2008.

This proposed export route would allow Kazakhstan to bypass Russia. The oil volume to be supplied from Kazakhstan to the BTC remains to be defined in the context of uncertainties surrounding the beginning of production at Kashagan. Kazakhstan has committed to supply an initial volume of 150,000 b/d, which will subsequently reach 400,000 b/d.

# **Box 2**The Legal Status of the Caspian Sea

Apart from its problematic economic viability, the proposed sub-sea pipeline faces an uncertain legal status with regard to the Caspian Sea, which is yet to be determined by all five littoral states. Before the collapse of the USSR in 1991, there were only two Caspian littoral states: Iran and the Soviet Union. Although both signed bilateral treaties on the Caspian Sea in 1921 and 1940, they never established seabed boundaries or held any consultations regarding oil and natural gas exploration in the area. After the collapse of the Soviet Union, there were attempts by the littoral states to resolve the legal status of the Caspian Sea. However, the negotiations have not been successful apart from a bilateral agreement between Russia and Kazakhstan on the division of the Caspian hydrocarbon fields, reached in 2002. Turkmenistan and Iran had initially denounced the Russian-Kazakh agreement as contravening the existing legal regime of the sea. However, Azerbaijan welcomed the deal.

The main problem today is whether to define the Caspian body of water as an inland lake or a sea. If it is indeed defined as a sea, then the Law of the Sea Convention applies. This designates that full maritime boundaries of the five states (Azerbaijan, Kazakhstan, Russia, Turkmenistan, and Iran) bordering the Caspian would be established and that the sea and submarine resources would be divided into national sectors. The Law of the Sea does not apply to inland lakes, in which case the Caspian would be developed jointly.

An agreement on the legal status of the Caspian Sea will require not only Russian but also Iranian consent which, under the current state of Washington's relations with Teheran, is highly unlikely due to the controversy over Iran's nuclear programme. Russia has already voiced its concerns about the possible environmental effects that the Trans-Caspian gas pipeline can produce within the region. Russia also demands that all Caspian countries should be consulted before the project commences, in which case Russia and Iran could stall the entire project.

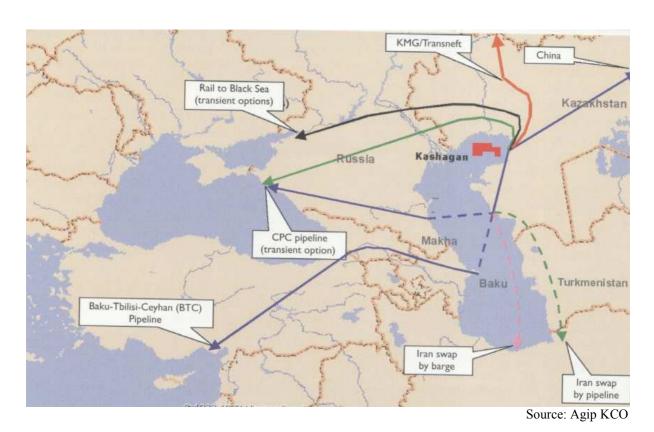
Simultaneously, Azerbaijan and Kazakhstan must reach a consensus with Turkmenistan on the division of hydrocarbon resources in this area, which has been contested since the collapse of the Soviet Union. Although Kazakhstan signed a similar agreement with Russia in 1998 and with Azerbaijan in 2001, it has so far been unsuccessful in courting Turkmenistan in this respect. Other proposed pipeline routes through Afghanistan to India and Pakistan or via Iran (favoured by Kazakhstan) also appear to be hindered by political circumstances.

#### The Chinese option

The Kazakhstan-China oil pipeline became the country's first successful new oil export project. In December 2005, China and Kazakhstan put into operation the Atasu-Alankshu pipeline and Kazakhstan began delivering oil to China in May 2006. The initial capacity is 10

million tonnes per year (200 000b/d) and could be increased to 20 million tonnes (400,000 b/d). The extension and connection of different parts of infrastructure will create a new export corridor, stretching from the oil-rich province in Western Kazakhstan to China. The Atyrau-Alashankou 3,000 km long oil pipeline is scheduled to be completed in several stages by 2011 and is projected to bring around 200,000 barrels of Caspian oil per day to China (or 20 million tonnes annually, with a potential to reach 50 million tonnes).<sup>53</sup>

This pipeline is a priority for China's energy security interests, as it would give the country direct access to oil resources and help to diversify import sources. China would also certainly benefit from its new pivotal geostrategic position between key Asian consumers and potential suppliers to Asia.<sup>54</sup> However, it is worth remembering that Kashagan and other major oil fields are located in Western Kazakhstan, while China's main consuming markets are located (at the distance of 6,000 kilometres) in the extreme east of the continent. So shipping oil westward rather than east may be more attractive from an economical point of view.



Map 1: Export options for Kashagan oil

Gas exports

<sup>&</sup>lt;sup>53</sup>c Kazakhstan-China oil pipeline opens to operation", *China View*, 12 July 2006, http://news3.xinhuanet.com/english/2006-07/12/content\_4819484.htm

<sup>&</sup>lt;sup>54</sup> See G. Cristoffersen, "China's intentions for Russian and Central Asian oil and gas", Analysis, The National Bureau of Asian Research, vol.9, N°2, pp.24-28. See as well Mehmet Ögütçü, "Kazakhstan's expanding cross-border gas links. Implications for Europe, Russia, China and other CIS countries".

Central Asian gas has traditionally been supplied to external markets via the Russian territory and has played an important role in the Russian gas balance both in terms of domestic consumption and exports. Thus, Central Asian gas plays an important role in Russia's gas export strategy in relation to Ukraine<sup>55</sup> and Europe.<sup>56</sup> In 2006, a lion's share (6.48 bcm) of Kazakhstan's gas exports (7.88 bcm) ended up in Ukraine.<sup>57</sup>

In 2006, Kazakhstan transported 7.8 bcm of its own gas via the traditional Russian route, in addition to 42 bcm of gas from Turkmenistan and around 9 bcm of Uzbek gas. According to preliminary KazMunaiGaz estimates, from 2010 to 2020 Kazakhstan could supply 5.83 bcm of Tengiz gas and 3.3 bcm of Kashagan gas annually via the traditional Russian route if a large portion of gas is re-injected and if up to 9 bcm if the produced gas if fully utilised.

These projected export volumes are bound to face bottlenecks in the traditional export system until the Central Asia-Centre and Pre-Caspian pipelines are refurbished and expanded.

In order to solve the aforementioned problem of bottlenecks within the existing pipeline export infrastructure, in May 2007 Russia, Turkmenistan, Kazakhstan, and Uzbekistan reached a preliminary agreement on the modernisation of the Central Asia-Centre gas pipeline and the construction of the Pre-Caspian gas pipeline.

#### Central Asia-Centre pipeline.

Kazakhstan seeks to expand the annual capacity of the Central Asia-Centre (CAC) trunk gas pipeline network from the current level of 54.8 bcm to 100 bcm. The need for expansion is driven by the deterioration of the network and the projected increase of gas output from Turkmenistan, Uzbekistan and Kazakhstan. Note that the CAC system was constructed in the 1960s-1980s and the most significant portions of it need urgent modernisation. In 2004 Bateman Engineering N.V. concluded a feasibility study on the reconstruction and modernisation of the Central Asia-Centre gas pipeline network from 2004 to 2020.

Kazakhstan intends to implement the CAC upgrade on its own (via KazMunaiGaz subsidiary, Kaztransgaz) as long as transit volumes of Turkmen and Uzbek gas do not exceed 60 bcm. Kaztransgaz has already completed Stage One of the CAC modernisation project. By May 2008 the second stage will be finished, bringing CAC transit capacity to 60 bcm.

Kazakhstan has stressed that it may seek to form a joint venture between Kaztransgaz and Gazprom to increase the CAC capacity beyond 60 bcm per annum. Both companies will be equally represented in the new consortium, which could also become an operator of the expanded CAC section. However, the new joint venture will not control any of Kaztransgaz's existing gas assets, which includes a substantial part of the CAC gas pipeline network.

Preliminary estimates put the CAC 80 bcm expansion at over \$2 billion. Further increase in the CAC throughput by 20 bcm (up to 100 bcm) will cost an additional \$1.1-1.5 billion.

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<sup>&</sup>lt;sup>55</sup> The issue of Central Asian gas exports to Ukraine is thoroughly explored in: Simon Pirani, *Ukraine's Gas Sector*, Oxford: Oxford Institute for Energy Studies, June 2007, <a href="http://www.oxfordenergy.org/pdfs/NG21.pdf">http://www.oxfordenergy.org/pdfs/NG21.pdf</a>
<sup>56</sup> Gazprom's European strategy is examined in: Jonathan Stern, *The Future of Russian Gas and Gazprom*, Oxford: OUP, 2006

<sup>&</sup>lt;sup>57</sup> In 2006, Russia also exported 36.5 bcm from Turkmenistan and 4.77 bcm from Uzbekistan. See Pirani, p. 28.

However, these costs would eventually depend on how Gazprom and KazMunaiGaz choose to handle this project, including the selection of sub-contractors and suppliers.

Pre-Caspian gas pipeline.

According to the above-mentioned May Declaration, Russia, Turkmenistan and Kazakhstan aim to build a new Pre-Caspian gas pipeline which will run from Turkmenistan (360 km) along the eastern shore of the Caspian Sea into Kazakhstan (150 km) then parallel to the Central Asia-Centre 3 pipeline which is also scheduled to be upgraded. The initial cost of building this new pipeline is estimated at \$1 billion. The Pre-Caspian pipeline will be built in two stages: during the initial stage (2009-2010), the gas pipeline will have an annual capacity of 20 bcm, which could be increased to 30 bcm during the second stage (2010-2015). Both Kazakhstan and Turkmenistan have already pledged to supply each 10 bcm of gas per annum. In terms of pipeline construction and gas production, the new Caspian project is likely to be handled by the Russian companies Gazprom and Zarubezhneft, as well as KazMunaiGaz and Turkmenneftegaz. Both Turkmenistan and Kazakhstan will be responsible for the construction of the Pre-Caspian pipeline sections within their territorial boundaries. In order to accommodate new volumes of Central Asian gas, Russia will expand the pipeline connection point of the Central Asia-Centre pipeline network at Alexander Gay.

It is also unclear whether the Russian gas transport system will have adequate spare capacity to receive new volumes (about 40-50 bcm per annum) of Central Asian gas in 2010-2015. According to the Russian Ministry of Economic Development, the existing Russian gas transport system is inadequate even for exporting larger volumes of domestically produced Russian gas. However, Valery Yazev, the chairman of the Russian Natural Gas Association and chairman of the Energy, Transport, and Communications Committee at the State Duma, is confident that Russia will expand the capacity of the gas transport system in time: "The total capacity of our pipelines is to grow by nearly 30 billion cubic meters of gas, reaching 90 billion. That gas will come to Russia, and we will re-export it through Russian pipelines together with Turkmenistan and Kazakhstan". 58

Although the May Declaration stated that a specific agreement between Russia, Turkmenistan, Kazakhstan and Uzbekistan on the Caspian pipeline would be signed by the 1<sup>st</sup> of September 2007, the tri-lateral negotiations continued until late December 2007. The new project was hindered by diverse views among the three countries on gas prices and the way gas exports via the existing and the new routes will be handled.<sup>59</sup>

In November 2007, Gazprom signed a supplementary agreement to the existing gas contract with Turkmenistan, setting the gas prices at \$130 (instead of the current \$100) per one thousand cubic meters for the first half of 2008, which would increase to \$150 per one thousand cm in the second half of 2008. In December 2007 Gazprom reached a similar agreement on a price increase in relation to gas supplied by Uzbekistan and Kazakhstan (see Table 4). From the 1<sup>st</sup> of January 2009, the price will be calculated under a new formula based on price fluctuations on the international gas market.

Table 4. Central Asian gas prices for Gazprom in 2008.

(\$/1000 cm)

<sup>59</sup> Oil and Gas of Kazakhstan, No. 6, 2007.

<sup>&</sup>lt;sup>58</sup> Kirill Martynov, "Cost of Victory", Kommersant, 29 June 2007

Country	First half of 2008	Second half of 2008
Kazakhstan	180	180
Uzbekistan	145	175
Turkmenistan	130	150

Source: Kazmunaigaz, March 2008

# Kazakhstan-China gas pipeline network.

On 18 August 2007, Kazakhstan and China reached an agreement on the construction and operation of the Kazakhstan-China gas pipeline network. This was followed by a further agreement (signed in November 2007) between Kazakhstan's and China's respective national oil and gas champions, KazMunaiGaz and CNPC. Provisional agreements envisaged that the Kazakhstan-China gas pipeline network would consist of two trunk pipelines. The first pipeline (running through Southern Kazakhstan) will be the Kazakh section of the Turkmenistan-China gas pipeline. This particular pipeline will primarily rely on gas volumes from Turkmenistan while the second one is projected to run from resource-rich western Kazakhstan to China.

The Kazakhstan-China pipeline will feed into China's West-East gas pipeline network that runs from Xinjiang province to the east coast of China (along the Yangtze River Delta) and subsequently to China's southern coast. The rapidly growing and densely populated southeastern part of China is the main industrial centre of the country, which will be responsible for the largest portion of China's future gas demand.

### Trans-Caspian gas pipeline.

Recent geopolitical developments involving Russia as well as the Middle East have renewed European and American interest in the Trans-Caspian Gas Pipeline (TCGP) System. The project, actively lobbied by the United States in the 1990s, initially aimed to promote gas exports (between 30 billion cubic meters per annum) from eastern Turkmenistan via the submarine pipeline to the coast of Azerbaijan and on to Turkey. The pipeline was to be 1,020 miles in length and was to cost between \$2-3 billion. The project was designed to accommodate 16 bcm of gas for the Turkish market and 14 bcm for European consumers. However, from the beginning the project has been very problematic to implement, despite two successful feasibility studies by Enron and Unocal, the 1999 gas agreement between Turkmenistan, Georgia, Turkey and Azerbaijan, and the formation of PSG, an international pipeline consortium, which included the Bechtel Group, General Electric and Shell. Subsequently, the project stalled and was finally abandoned mainly due to a conflict between Turkmenistan and Azerbaijan over their gas share in the proposed pipeline and the division of Caspian hydrocarbon fields. Although in May 2001 both countries tried to resolve such differences, the pipeline project became embroiled in a dispute regarding the unclear legal status of the Caspian Sea, which in the Soviet times was controlled by the USSR and Iran (see Box 2). The two countries never established a maritime border.

Recently, renewed European and US interest in the Trans-Caspian pipeline has been associated with the Nabucco gas project, which was initiated in 2002 and has been actively promoted by the EU under its Trans-European Energy Networks initiative. The proposed

3,300 km Nabucco pipeline is likely to run from Erzurum, Turkey to a major Austrian gas hub at Baumgarten an der March.<sup>60</sup> At Erzurum, the Nabucco pipeline will be linked with the Tabriz-Erzurum gas pipeline and the South Caucasian gas pipeline, Baku-Tbilisi-Erzurum, which could also be potentially connected with the proposed Trans-Caspian gas pipeline. Nabucco is projected to initially carry 4-13 bcm of gas per year. By 2020, Nabucco's gas volumes could reach up to 31 bcm per annum. The construction of the Nabucco pipeline is estimated at €7.9 billion (\$12.3 billion).

In 2004 the Nabucco Gas Pipeline International GmbH was formed by OMV (Austria), MOL (Hungary), Transgaz (Romania), Bulgargaz (Bulgaria) and Botas (Turkey) with each company holding a 20% share. The consortium is led by OMV. Since then, more companies have expressed their interest in joining the consortium, namely Gaz de France (France), RWE (Germany), the national oil company of Azerbaijan, and Kazmunaigaz (Kazakhstan).

Potential gas volumes for Nabucco could come from a variety of energy-rich countries, including Azerbaijan, Turkmenistan and Kazakhstan as well as Iran, Iraq and potentially other Persian Gulf producers. Among those, Iran holds the most significant gas reserves (second after Russia). Due to the US occupation of Iraq and the hostile position of the US administration against Iran, gas volumes for Nabucco could only come from Central Asian suppliers. Kazakhstan could also become the key onshore harbour for Central Asian gas supplies for the updated Trans-Caspian Gas Pipeline (TCGP) project which could run from Aktau on the Caspian coast of Kazakhstan (by the Tengiz hydrocarbon field) to Baku, Azerbaijan. At Baku, the TCGP will be connected to the South Caucasus gas pipeline that runs onshore from Baku, Azerbaijan via Tbilisi, Georgia to Erzurum, Turkey. The Kazakhstan section of the TCGP will also be connected at the port of Turkmenbashi to Turkmenistan's Caspian fields. TCGP's total length will be 1,592 kilometres which includes onshore sections in Kazakhstan (600 km), in Azerbaijan and Turkey, from Baku to Erzurum (692 km), and the offshore section at the bottom of the Caspian Sea (300 km). The pipeline will have a nominal capacity of 20 bcm, expandable to 30 bcm. The initial estimated costs of the updated Trans-Caspian gas pipeline project are \$5.4 - 6 billion.

There are several issues that make the construction of the Trans-Caspian and Nabucco pipelines problematic, namely competition from other projects, Russia's well-known opposition to the pipeline and Central Asia's involvement in it, as well as the unclear legal status of the Caspian Sea.

2008 export Pipeline Capacity Length Cost Year Suppliers Transit (bcm) (km) (billion \$) prices per 1000 cm (\$) Uzbekistan 2012-Turkmenistan Uzbekistan Kazakhstan 80-100.2 2015 CAC expansion 1,968 1.1 - over 2150-190 Kazakhstan 20-30 510 2009-150-190 Turkmenistan Kazakhstan Pre-Caspian at least 1 Kazakhstan 2015

*Table 5. Export pipeline projects.* 

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 $<sup>^{60}</sup>$  It is important to note that the actual starting point of the Nabucco pipeline will depend on the suppliers of gas.

Western Kazakhstan- Western China	10	1,480	7-11	2009- 2012	195	Kazakhstan	None
Turkmenistan- China	30-40	2,051		2008- 2010		Turkmenistan	Uzbekistan Kazakhstan
Trans-Caspian	28-32	1,592 to Turkey Hub	5.4-6.0	?	120-130	Turkmenistan Kazakhstan Azerbaijan	Kazakhstan Caspian Sea Azerbaijan

Source: Gazprom, KazMunaiGaz.

# Pipeline competition

The great powers are involved in a large geopolitical competition for access to Caspian resources. China and Russia have differing approaches toward securing Central Asian energy deals compared to the US or the EU. Whereas the latter are inclined to attach political or economic reform measures as part of their loan offers and often encourage these states to partake in international organisations, such as the Organisation for Security and Co-operation in Europe (which Kazakhstan has been approved to chair in 2010), Beijing and Moscow, in contrast, have traditionally been less questioning of the authoritarian political regimes typically prevalent in Central Asia.

In economic terms, growing competition between China and Russia to secure Central Asian gas supplies has resulted in the determination of both countries to forge favourable commercial ties with Central Asian producers. In contrast, member-states within the EU (hence the EU as an entity) often lack a common political approach in this respect. So far, the European gas agenda, which involves Central Asian gas supply, has not moved toward practical implementation, unlike the Russian and Chinese projects.

Although Russia has often cashed in on pre-existing economic, political and cultural ties with Central Asian countries, it now seeks to use economic rationale to forge ties with Kazakhstan, Turkmenistan and Uzbekistan. The ever-increasing interest of Beijing, Washington, and Brussels in securing Central Asian energy supplies as an alternative supplier (mainly in lieu of Russian and the Middle Eastern/African sources) has prompted Moscow to offer financial incentives to Kazakhstan, and other Central Asian producers, in order to ship their oil and gas through Russian territory instead. It is therefore unsurprising that Russia has already agreed to pay European prices (minus transport and other related costs) for Central Asian gas from the January 1<sup>st</sup>, 2009. Kazakhstan estimates that the result of these arrangements will be a 60-70 percent gas price increase from the 2008 level of \$180 per one thousand cubic meters to \$306 per 1000 cm in January 2009.

In 2007, Gazprom also pushed forward a long-delayed deal with its Kazakh counterpart, KazMunaiGaz, to develop a potentially highly lucrative energy project involving the refining of Karachaganak gas at the Russian Orenburg refinery. Another key factor that will determine Kazakhstan's stance vis-à-vis Russia is the dependence of the Atyrau and Mangystau hydrocarbon-rich provinces of Western Kazakhstan on Russian electricity and water supplies, which are crucial for the successful operation of the local energy infrastructure.

<sup>&</sup>lt;sup>61</sup> "On working meeting of Alexey Miller and heads of gas companies from Kazakhstan, Uzbekistan and Turkmenistan", JSC "Gazprom", Press Release, 11 March 2008.

<sup>62 &</sup>quot;Kazakhstan sees 70 pct gas price rise from 2009", Reuters, 18 March 2008.

The Chinese rationale behind commercially unsound pipelines is often questioned, unlike its financial endowment and ability to implement large-scale industrial projects. Beijing is keen to secure additional energy supplies to fuel its growing economy at whatever cost the construction of new pipelines may require. Central Asian countries are disposed to engaging with a rapidly growing China, despite their traditional cautiousness towards their Eastern Asian neighbour. Energy co-operation with Beijing can bring other considerable benefits for Central Asian states such as investment, infrastructure development (such as the construction of roads and railways), and growth in other trade sectors. China has an upper hand over Russia in terms of its "cash power" and in terms of effective implementation of large-scale projects. However, the United States and Europe have a serious technological advantage over Russia and China in terms of Caspian offshore oil and gas development.

The intensified competition for Central Asian gas has also enabled some Central Asian producers such as Kazakhstan to re-negotiate the initial deals reached with international companies during times of low oil prices and the economic chaos of the post-Soviet era. Additionally, if KazMunaiGaz manages to increase its stake in the Kashagan project, Kazakhstan could obtain a greater standing in determining where the incremental Caspian oil and gas volumes go.

# **Concluding remarks**

The PSA was one of the cornerstones of Kazakhstan's investment policy in the petroleum sector. However, high commodity prices and the desire to increase the control and involvement of the government in the oil and gas industry have impelled the authorities of Kazakhstan to abandon the use of PSAs. Constant production delays and escalating costs have certainly given the Kazakh authorities a unique opportunity to renegotiate the contract in order to gain greater control over the field.

Several conclusions can be drawn from the Kashagan case, which can be applied generally to Kazakhstan's new stance on PSAs:

- The main reason for Kazakhstan's dissatisfaction with the development of the Kashagan project is the failure of Agip KCO to respect the schedule of production and the initial costs, as well as compliance with the environmental norms. Systematic failures of IOCs and contractors to comply with requests from the Kazakh state have led to natural frictions between the government and the international consortium.
- Increasing oil prices and the recent legislative reforms have strengthened the government's bargaining position: "It is surprising how our government discovered all of these ecologic and customs violations after a decade of closing their eyes on them. A big mistake by the investors was to accept the rules of the game and make those violations, after becoming accustomed to "blindness" of our officials. Now these officials successfully use the mistake as a powerful pressure tool." Vladimir Shkolnik, the former Minister of Energy summed up the official position in a rather straightforward way: "You do not like it leave. There is already a whole line of those desiring Kazakhstan's oil fields."

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<sup>&</sup>lt;sup>63</sup> Dosym Sotpev in Exclusive analytical review, 10 (67) October 2007.

<sup>&</sup>lt;sup>64</sup> New Europe, Issue 719, 3 March 2008, www.neurope.eu/view\_news.php?id=70834 - 54k

- Kazakhstan still requires large investments to develop its resources. In this respect, relations between KazMunaiGaz and its foreign partners is crucial for the country's investment policy. The search for a balance of interests between the oil industry and the government will certainly result in new developments in the next few months. KazMunaiGaz does not have adequate financial resources and technological background to develop the geologically sophisticated Caspian hydrocarbon fields. Therefore, in the case of Kazakhstan, the domestic political establishment will be required to choose only from a handful of companies with the technological expertise and experience necessary to extract oil and gas from the Caspian. In this situation, Kazakhstan is likely to use its growing, yet limited, influence in the domestic hydrocarbon sector to influence the way the industry and export routes are developed. This could have a potential impact on the way the associated gas is utilised and where it is likely to go: towards domestic projects or to external markets.
- The future of Kashagan's gas development depends on the successful implementation of various technological approaches to gas processing/reinjection at Tengiz as well as the economic viability of gas utilisation for external markets and domestic consumption.
- In the 1990s, there were speculations that the Caspian region could be considered a serious alternative to Middle Eastern oil supplies. However, recent estimates suggest that the combined proven reserves of Kazakhstan and Azerbaijan constitute only half of the reserves of the United Arab Emirates or Kuwait<sup>65</sup>. Moreover, the Caspian region is unlikely to boost the non-OPEC oil supply in the foreseeable future due to the nature of its of reserves, as well as logistical and investment challenges. Meanwhile, declining onshore reserves will force resource-rich nations to develop undersea oil and gas hydrocarbons. According to some forecasts, roughly 40 percent of global oil and gas will be produced offshore by 2015. IOCs, having access to mere 7% of world's oil and gas reserves, will play a major role in future offshore hydrocarbon production.
- Kazakhstan's "multi-vector policy" could promote the diversification of the existing export transport infrastructure. In this respect, Kazakhstan, and neighbouring Turkmenistan and Uzbekistan are likely to enjoy the economic and political benefits of the growing competition between Russia, China and Europe for Central Asian hydrocarbons.

For the time being, the renegotiation of the conditions of the Kashagan consortium should be seen as a particular case in the context of serious technical, environmental and fiscal challenges of a hugely complex industrial project rather than yet another sign of the systematic projection of "resource nationalism" to the detriment of international oil companies. These challenges also reduce Kashagan's (and with it Kazakhstan's) importance for the future of global oil supplies from "crucial" to "significant". Yet given the fast-changing contours of the new "great game" between the young republics of Central Asia, China, Russia, the United States and Europe, Kazakhstan's governance of its oil and gas sector will continue to be closely watched.

<sup>&</sup>lt;sup>65</sup> See BP Statistical Review of World Energy 2007

Georgia John Westwood, Owen Williams, Michael Smith, Offshore Prospects—A Long Term View, SUT-Society for Underwater Technology, London, 20 April 2005, http://events.sut.org.uk/past\_events/2005/0504201/050420.pdf.

# Kazakhstan's profile<sup>67</sup>.

**Territory**: 2,717,300 sq km including *land*: 2,669,800 sq km and *water*: 47,500 sq km

**Coastal line:** 0 km (landlocked); borders the Aral Sea, now split into two bodies of water (1,070 km), and the Caspian Sea (1,894 km)

**Border countries:** China 1,533 km, Kyrgyzstan 1,051 km, Russia 6,846 km, Turkmenistan 379 km, Uzbekistan 2,203 km

**Population**: 15,284,929 (July 2007 est.)

**Population below poverty line:** 19% (2004 est.)

Life expectancy at birth: Men: 61, Women: 72

**Ethnic groups:** Kazakh 53.4%, Russian 30%, Ukrainian 3.7%, Uzbek 2.5%, German 2.4%, Tatar 1.7%, Uygur 1.4%, other 4.9% (1999 census)

Religions: Muslim 47%, Russian Orthodox 44%, Protestant 2%, other 7%

Languages: Kazakh 64.4%, Russian 95%.

Currency: Tenge (KZT) per US dollar - 126.09 (2006), 132.88 (2005), 136.04 (2004)

**GDP** (purchasing power parity): \$143.4 billion (2006 est.)

**GDP - real growth rate:** 10.6% (2006 est.)

**GDP** - per capita (PPP): \$9,400 (2006 est.)

**GDP - composition by sector:** *agriculture:* 5.7%, *industry:* 39.8%, *services:* 54.4% (2006 est.)

**Exports:** \$38.76 billion f.o.b. (2006 est.)

**Exports-commodities:** oil and oil products 58%, ferrous metals 24%, chemicals 5%, machinery 3%, grain, wool, meat, coal (2001)

**Exports-partners:** Germany 12.4%, Russia 11.6%, China 11%, Italy 10.5%, France 7.5%, Romania 5% (2006)

**Imports:** \$24.12 billion f.o.b. (2006 est.)

**Imports-commodities:** machinery and equipment 41%, metal products 28%, foodstuffs 8% (2001)

**Imports - partners:** Russia 36.4%, China 19.3%, Germany 7.4% (2006)

Corruption perception index (2007): 2.1, Kazakhstan's ranking position: 150 out of 180 countries

<sup>67</sup> CIA-The World Fact Book, 2007, Transparency International CPI 2007.

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#### Annexe 2

# Les conséquences de la fermeture d'Ignalina en Lituanie

En négociant son adhésion à l'Union européenne, la Lituanie s'est engagée à fermer progressivement les deux réacteurs nucléaires du site d'Ignalina pour la fin 2009. La centrale nucléaire, mise en service par les Soviétiques dans les années 1980<sup>68</sup>, assure actuellement environ 70% de l'approvisionnement en électricité du pays et 31% de la consommation énergétique. La dépression économique qui a frappé le pays au lendemain l'indépendance en 1990 avait entraîné une forte réduction de la demande énergétique : la consommation a été divisée par deux, celle du pétrole et du gaz environ par trois au cours des années 1990. La production d'énergie d'origine nucléaire a également diminué, mais sa part dans la génération d'électricité est passé de 60% en 1990 à près de 86% en 1993, pour osciller par la suite entre 70 et 80%, un des taux les plus élevés au monde. En l'absence de réserves significatives en énergies fossiles (pétrole, gaz, charbon), la fermeture de la centrale signifie non seulement la perte d'une source d'électricité bon marché, mais aussi celle d'une source d'énergie indépendante.

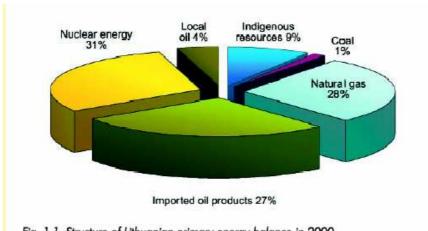


Fig. 1.1. Structure of Lithuanian primary energy balance in 2000

En effet, l'accroissement prévu des capacités de génération à cycle gaz, destiné à compenser l'arrêt de la production d'électricité d'origine nucléaire, nécessite d'importer plus de gaz naturel. Actuellement la Lituanie importe la totalité de son gaz de Russie, grâce au réseau gazier construit à l'époque soviétique. Cette dépendance reste politiquement sensible pour un pays qui cherche à s'affranchir à tout prix de son passé soviétique depuis son indépendance. Le blocus énergétique temporaire infligé par les autorités soviétiques en représailles contre la déclaration d'indépendance de mars 1990 avait déjà mit en évidence la vulnérabilité énergétique de la Lituanie. La cessation des livraisons de pétrole russe à la raffinerie de Mazeikiai depuis juillet 2006 a également contribué à détériorer les relations russo-

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<sup>&</sup>lt;sup>68</sup> La centrale comprend deux réacteurs nucléaires de type RBMK-1500, le modèle le plus avancé et le plus puissant de cette série. Ce type de réacteur de grande dimension ne permet pas la construction d'un d'enceinte de confinement.

lituaniennes, affectant par la même occasion les relations UE/Russie<sup>69</sup>. L'hyper sensibilité des Lituaniens sur la question de la dépendance russe est par ailleurs perceptible sur d'autres dossiers énergétiques: pour certains politiques, le projet de gazoduc NordStream « a été inventé par les Russes pour détruire la politique énergétique européenne commune ». Ce projet fait toutefois partie des projets prioritaires au titre du réseau transeuropéen d'énergie (RTE-E) de la Commission européenne et par conséquent des *projets d'intérêt commun*.

Animés par des rancœurs historiques, les Lituaniens brandissent ainsi la menace russe : « la Russie n'est pas un fournisseur fiable et nous voulons que l'UE révise son jugement à l'égard de la Russie » nous explique un responsable lituanien. Mais le temps presse et les autorités lituaniennes ne semblent pas avoir pris les mesures nécessaires pour faire face au problème de l'approvisionnement futur. Le projet de construction d'une nouvelle centrale, qui devrait associer les trois pays baltes et la Pologne, est ralenti en raison des difficultés à trouver un compromis entre les partenaires. Initialement prévu pour 2015, les experts prévoient qu'un démarrage ne serait possible avant 2017-2020, si toutefois les pays impliqués parviennent à trouver rapidement un accord. La question du financement n'est pas non plus tranchée. De plus, la viabilité du projet lituanien pourrait être remise en question depuis l'annonce des Russes d'un projet de construction de deux réacteurs sur le territoire de Kaliningrad, près de la frontière lituanienne : une telle centrale excèderait largement les besoins de l'enclave russe, ce qui signifie que le surplus pourrait être exporté vers les pays baltes, avec lesquels l'enclave est déjà connectée. En attendant la définition d'une politique cohérente de long terme en Lituanie, un groupe a été spécialement chargé de faire du lobbying auprès des institutions européennes afin d'obtenir le prolongement du fonctionnement d'Ignalina.

Production Electricité	1940	1960	1965	1970	1975	1990	1995	2000	2004	2005
en milliards kWh	0,08	1,12	3,85	7,4	9,0	28,41	13,90	11,42	19,2	13,5

Enfin, l'absence de connexion entre la Lituanie et les autres Etats membre de l'UE met en évidence les limites d'une éventuelle solidarité entre les membres de l'UE. Les trois Etats baltes forment une sorte « d'îlot énergétique » au sein de l'UE : le réseau électrique, hérité de l'époque soviétique, reste connecté au seul réseau russe. Les Lituaniens prévoient de mettre en place une interconnexion avec le réseau électrique Nordpool (Suède) par la Lettonie et une interconnexion avec la Pologne, espérant ainsi résoudre une partie du problème de l'approvisionnement en électricité. Toutefois le gouvernement polonais n'approuvera l'interconnexion qu'à condition que la Pologne puisse recevoir 1/3 de l'électricité de la nouvelle centrale. La Lituanie n'a donc pas résolu la question de la sécurité énergétique et

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<sup>&</sup>lt;sup>69</sup> La Russie a interrompu ses livraisons pétrole à la raffinerie de Mazeikiai depuis juillet 2006, peu après son rachat par la compagnie polonaise PKN, invoquant des fuites sur l'oléoduc Droujba. Fin avril 2008, le gouvernement lituanien avait bloqué le mandat de la Commission européenne pour négocier un nouvel accord de partenariat et de coopération, exigeant d'inclure des questions sensibles pour elle en matière de sécurité, comme l'interruption des livraisons de pétrole par la Russie.

devra faire face à un accroissement significatif des prix de l'électricité (multipliés par 2 ou 3) ce qui pourrait pénaliser son économie.

20
15
10
10
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005
-5
Indigenous resources Nuclear energy Coal Natural gas Oil products Electricity export

Fig.1.2. Evolution de la consommation d'énergie en Lituanie (1990-2005)

Source: Miskinis, Galinis, Vilemas (2007)

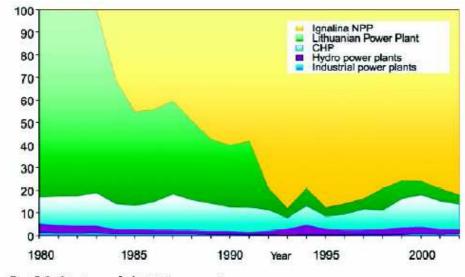


Fig. 5.2. Structure of electricity generation

Source : Stratégie énergétique de la Lituanie (2003)

2007	Lithuania	Russia	France
GDP (PPP)	\$16 700	\$14 600	\$33 800
GDP growth rate	8%	8.1%	1,8%
Population growth rate	-0,29%	-0.48%	+0,59%
GINI Index	36	41,3	28
Inflation	5,4%	12%	1,5%

Export partners	Import partners
Russia – 12,8%	Russia – 24,3%
Latvia – 11,1%	Germany- 14,9%
Germany-6,5%	Poland- 9,5%

# Le réseau d'oléoducs (carte de gauche) et gazoducs (à droite) :

