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The politics of oil in Lithuania: strategies after transition

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Abstract

This paper examines the political context of oil refining and supply in Lithuania in the period following the initial phase of transition from a Soviet planned to a largely free-market economy. It begins with a short overview of the Russian oil market, exports and transport issues and the major players and then moves on to review more specifically the Lithuanian oil industry. Given the highly political and qualitative nature of oil logistics policy in the region, and in particular the ownership framework, a 'Delphi' technique was used to gather expert opinion on strategy in a formalised way. The results are presented in the second part of the paper.

Keywords: Oil; Politics; Lithuania

1. Introduction

The significance of Russia and Russian oil exports to the oil infrastructure of Lithuania is hard to over-emphasise as until very recently, it was the only source of oil for the refining and exporting facilities in Klaipeda and Butinge in Lithuania. This situation had derived from the political situation prior to 1991 when Lithuania was part of the Former Soviet Union and as such not only could rely upon the supply of Russian oil but also had little economic fear in resting upon Moscow and nowhere else. This situation has now changed. However, to begin to understand the political context for oil in Lithuania today, we need firstly to examine the Russian oil industry and its allies in oil transport.

2. Russian oil exports and transport

The process of economic reorganisation and privatisation in Russia started just after the break-up of the Soviet Union in 1991, and the results in the Russian oil sector were that the industry was divided between vertically integrated companies (VIC) and a smaller number of regional independent producers (mainly consisting of foreign joint ventures) (Locatelli, 1999).

2.1. Vertically integrated companies

Each Vertically Integrated Company usually includes up to five upstream units, up to three refineries and a marketing chain encompassing multiple regions. The state owns stakes in a number of these companies, although a lot of them had been sold by 1998 as a result of the removal of the 1992 decree that limited foreign ownership of privatised oil companies to only 15% (Table 1).

Twelve VICs were established, consisting of the following: Lukoil, Yukos, Surgutneftgas, Sibneft, Sidanko, Slavneft, Onako, Eastern Oil Company, Tyumen Oil Company, Chechen State Oil Company, Komitek and Rosneft. The largest company in terms of production is Lukoil, with crude oil output of 1.1 million bbl/d in 1997. Yukos and Surgutnefiegas are also very large producers, each producing around 0.7 million bbl/d in 1997.[1]

The country's largest oil company Rosneft is still entirely State owned, but Russia's State Property Committee has already approved its privatisation plan. Nevertheless, this plan has already been postponed twice because of a lack of the bidders.

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[1] http://www.eia.doe.gov/emeu/cabs/russia.html

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Table 1
Capital structure of the main Russian oil joint stock companies (1998)[a]

Shareholders	Company	Percentage
Lukoil	Lukoil	32.1
	International investors	20.38
	State Property Fund	16.5
	Russian investors	15.38
	Russian state	11.57
	Others	4.07
Sibneff	Finansovaja Neftenaja Kompanya	51
	SINS	19
	REFINEOIL	15
	Others	15
Sidanko	Interros, subsidiary of Uneximbank	85
	MENATEP	4
	Others	11
Slavneff	Russian state	65
	Belarus state	11
	Employees	10.2
	Mozyr Refinery	6
	Others	7.8
Surguinefigas	Pension fund of Surgutneftgas	40
	Neft-Invest	40
	Others	20
Tyumen Oil Company	Russian state	51
	Alfa Groupe	40
	CADET	9
Yukos	MENATEP	85
	Employees	7
	Yukos	7
	Others	1
Onako	Russian state	51
	Russian investors	44
	International investors	5
Eastern Oil Company	Russian state	85
	Private investors	15
Rosneff	Russian state	100
Komitek	State Committee for State Property	21
	Yeuroseverneft	38
	SB TRUST	29.3
	MENATEP	3.9
	Others	7.8
Yunko	Local authorities	100
Tatneft	Tatarstann Authorities	46.6
	Employees	41.3
	Private investors	12.1

[a] *Source*: Locatelli (1999).

Table 2
Russian oil exports 1996[a]

Exports to non-FSU countries *Seaports*	10^3 tons	Percentage
Novorosijsk	30262.5	25.0
Ventspils (Latvia)	14180.8	12.0
Odessa (Ukraine)	8631.3	7.0
Tuapse (Russia)	4444.8	4.0
Rostock (via Belarus, Poland and Germany)	2204.4	2.0
Germany (other)	13482.9	11.0
Poland	8778.9	7.0
Czech Republic	5277.5	4.0
Slovenia	5056.3	4.0
Hungary	4812.5	4.0
Railways		
Finland	159.1	0.1
Total export non-FSU	97290.7	
Export to FSU countries		
Belarus	11586.3	10.0
Ukraine	8006.3	7.0
Kazakhstan	3494.5	3.0
Lithuania	1420.3	1.0
Total export to FSU	24507.3	
Total export from Russia	243596.0	100.0

[a] *Source*: Institute of Energy in Lithuania (1998).

2.2. Joint ventures

The second main organisations created during the oil industry's restructuring and presently responsible for 6% of aggregate crude oil output are the foreign joint ventures. The major joint ventures are as follows: Vanyoganneft (58,000 bbl/d), Vatoil (52,000 bbl/d) and LUKoil-Aik, Polar Lights, Komiarcticoil and Nobel Oil producing over 20,000 bbl/d together.[2]

The main activities of these joint ventures includes new field developments, rehabilitation and technical activities at existing fields; however the key to their profitability is always pipeline access to export markets. During 1997 only 30% of joint venture total output was exported and sold at world prices.[3]

2.3. Exports and transportation

Oil and gas exports generate nearly half of Russia's hard currency revenue and therefore they are the most important industrial sectors in the country (Institute of Energy in Lithuania, 1998). As a consequence they are highly politicised and subject to constant interference. Whilst aggregate crude oil exports declined between 1989 and 1998, Russia's overall export structure also underwent drastic changes.

Oil exports to countries outside the former Soviet Union (FSU) increased from 1.85 bbl/d in 1992 to 3.2 bbl/d in 1998. The main reason for this increase was the higher prices available in these markets and therefore increased hard currency earnings. For example, an average export price for Russian crude oil shipped to other countries of the FSU in 1996 was US$88 per ton, whilst

[2] http://www. eia. doe.gov/emeu/cabs/russia. html
[3] http://www.eia.doe.gov/emeu/cabs/russia.html

Table 3
Russian oil exports outside the former Soviet Union ($\times 10^3$ bbl/d)[a]

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Druzba pipeline	890	686	728	716	818	834	877	903	1029
Novorosiisk (Russia)	590	338	479	591	551	669	680	679	813
Tuapse (Russia)	187	89	121	160	133	178	208	187	232
Odessa (Ukraine)	360	319	245	259	212	218	212	206	223
Klaipeda (Lithuania)	*130*	*153*	*93*	*136*	*91*	*55*	*72*	*45*	*43*
Tallin (Estonia)	0	0	0	0	30	47	95	157	164
Ventspils (Latvia)	483	386	308	333	382	360	464	496	467

[a] *Source*: http://www.eia.doe.gov/emeu/cabs/rusexp.html.

export price to other countries outside the former Soviet region was around US$132 per ton. Most Russian oil exports are destined for Western European customers, including the United Kingdom, France, Italy, Germany and Spain (Table 2).[4]

About 60% of Russia's crude exports are shipped by tankers and nearly 50% of these shipments depart from the Novorossiysk terminal (Black Sea). The rest go via another two Black Sea ports — Tuapse (Russia) and Odessa (Ukraine) — or the Baltic Sea ports of Ventspils (Latvia), Tallinn (Estonia) and Klaipeda (Lithuania). The remainder (40%) of the crude oil is exported via the 'Druzbha' (Friendship) pipeline, which passes through Ukraine on the way to Slovakia, the Czech Republic, Poland, Hungary and Germany (Table 3). During 1995 and 1997 the utilisation of the pipeline ranged from 70 to 75% and rose to 85% in 1998 (Institute of Energy in Lithuania, 1998).

3. An introduction to Lithuania

In the post Second World War period, Lithuania was one of the Soviet Union republics and the entire economy was structured along Soviet lines with collectivisation of agriculture, Soviet style industrialisation and central planning from Moscow.

In 1991 Lithuania became independent and since then has achieved a number of goals. The Government adopted comprehensive stabilisation and reform programmes, which led to the rapid development of a market economy. An extensive privatisation programme has transferred almost 50% of small and medium enterprises from state property to the private sector and most trade has gradually shifted from former Soviet to western markets. During the period of transition Lithuania faced many difficulties in adjusting to a market economy, but nevertheless most of the major problems have been solved.

One of the major problems that Lithuania had to face was that the country was heavily dependent upon external energy, mainly Russian oil and gas. In response to Lithuania's declaration of independence Russia refused to supply energy, but eventually a compromise was found. Lithuania has also been penalised by Russia for not joining the Commonwealth of Independent States (CIS), by charging it a world price for oil instead of the lower price charged to CIS members.[5]

In 1992 Lithuania suffered severe shortages of energy and consequently very high inflation as well as economic recession. By 1994 the country appeared to have pulled out of recession but in early 1995 a banking crisis hindered the recovery. Despite all difficulties, since 1995 Lithuanian GDP has continued growing and inflation has been reduced substantially.

3.1. The energy sector

The main energy suppliers in Lithuania are Mazeikiai oil refinery and Ignalina nuclear power station.[6] Mazeikiai refinery supplies all oil products required by Lithuania and receives crude oil from Russia's Siberian oil fields. There were many problems after Lithuania became independent, which emerged during trade negotiations with the CIS and during 1991–1992 the output of the refinery temporarily ceased. However problems were resolved and Mazeikiai refinery reopened (Master Plan, 1993).

In 1998 the Government decided that private investments were necessary for the oil sector and therefore at the end of 1999, 33% of Mazeikiai oil refinery was sold to the USA company Williams International. The issues stemming from this will be discussed in a later section.

Ignalina nuclear power station is also a very important energy supplier in Lithuania. It came into operation in 1984 and since then half of its generated electricity output provides 80% of Lithuania's domestic needs and the remainder is exported to Latvia and Belarus.

However since Lithuania gained independence and started negotiations to join the EU, the European Commission (EU's executive body) has put a lot of pressure on

[4] http://www.fe. msk.ru/infomark/rinacoplus/research/oil_10.html

[5] http://www.gasandoil.com/goc/company/cnr93712.htm

[6] The data is from http://www.lda.lt/invest.cp.basiccountrydata.html

the Lithuanian Government to set the date for closing Ignalina (The Baltic Times, 1999). The main reason is that Ignalina is modelled on the same design as the Chernobyl plant in Ukraine and could constitute a considerable danger for the region.

On 8 September 1999, Lithuania and the EU reached agreement that one of the two nuclear reactors will be closed by 2005 at a cost of around US$2.5 billion. The final date for closing the second reactor has not been set yet, but according to Jurgis Vilemas, director of Lithuanian Energy Institute, it is possible that it will be closed by 2010 (The Baltic Times, 1999).

4. The oil industry in Lithuania

4.1. Historical background

Oil exploration in Lithuania began in 1958 and over the last forty years more than 300 wells have been drilled and nineteen oil fields discovered. Nevertheless, oil resources in Lithuania are too small to meet the country's demands for oil products.

During Soviet Union times, Lithuania was an important region, mainly because of its oil facilities. It retains a number of these facilities which were built in order to provide the Soviet Baltic region and its local allies with a variety of required oil products (Institute of Energy in Lithuania, 1999).

The main oil facility during Soviet Union times was the Mazeikiai oil refinery, which has a capacity of refining 14 million tons of crude oil per annum. Russia supplied the majority of the crude oil through a branch of the Druzbha pipeline. Refined products were distributed mainly by rail to Latvia, Estonia and part of Belarus as well as some exported to other countries, through the oil terminal in the Lithuanian port of Klaipeda.

However, since Lithuania became independent, the oil industry has faced tremendous changes. The branch of the Druzbha pipeline became a separate company named Birzu Naftotiekis[7] and the Lithuanian oil industry, even though it remained State owned, was effectively split into three sectors — Mazeikiai oil refinery, Klaipedos Nafta (oil terminal), and Birzu Naftotiekis (pipeline).

4.2. Facilities of the Lithuanian oil industry

4.2.1. Mazeikiai oil refinery

Mazeikiai crude oil refinery commenced operations in 1980, but it is still one of the most modern refineries in the region. According to the Mazeikiai Refinery Research Department, the refinery is equal in status and quality of output to other refineries in Finland, Poland, Czech Republic, Slovakia, Hungary, Belarus, Russia and Ukraine (Lloyd's List, 1999a). Mazeikiai has a capacity of producing 14 million tons per annum.

Until 1991 (under the Soviet Union) Mazeikiai oil refinery supplied all the oil products required by Lithuanian consumers and a large Soviet hinterland, including distillate required by Latvia and most of the gasoline required by Estonia (Lloyds List, 1999b). Around 14% of the refinery's product mix was also exported to other neighbouring regions (mainly Belarus — then part of the USSR). Due to its convenient location and technological advantages, Mazeikiai oil refinery was competitive with other regional refineries and had captured a reasonable market share, provided the market for oil products in neighbouring countries was liberalised.

Mazeikiai is the only crude oil refinery in the Baltic States and was designed to achieve a greater conversion of crude oil to higher value distillates than any other refinery in the FSU west of the Urals. Operating in the 'conversion mode' at 8 million tons per annum, it is the only refinery in the region, which could be viable at Western Europe refinery-grade product and crude oil prices.

Since Lithuanian independence there was a number of problems arising mainly from the fact that the only crude oil supplier for the refinery was Russia, through a branch of the 'Druzbha' pipeline. This left the refinery highly susceptible to the political, financial and economic vagaries of the East European (and particularly Russian) oil market. A solution was thought to have been found in 1996, when the Lithuanian Government took a strategic decision to build a new oil import/export terminal at Butinge on the Lithuanian coast close to the Latvian border and a pipeline connecting it with the Mazeikiai refinery. In 1999 the new oil import/export terminal in Butinge started operating.

At present, oil products refined at Mazeikiai refinery meet the standards of Western Europe and there are opportunities for exporting naphtha, jet kerosene and low sulphur diesel to this region. Until now all the exports of gasoline, diesel, kerosene and fuel to Western Europe have been through the Latvian port of Ventspils using railway transportation. However, it has been clear for some time now, that Mazeikiai refinery needs investments in order to expand its capacity and exports to Western Europe.

4.2.2. Butinge terminal

Butinge terminal is the most modern branch of Mazeikiu Nafta, and was designed to meet the most recent American Petroleum Institute (API) and Lithuanian standards. It is a reverse oil import/export terminal built on the Baltic Sea coast, which is ice-free all year and offers significant opportunities for exporting oil from CIS (Commonwealth of Independent States) countries and importing light or medium oil from Western

[7] http://www.nafta. lt/birzai/lt.htm

countries. The Single Mooring Buoy (SPM) with the Catenary Anchor Leg Mooring (CALM) system is located 7.5 km from shore and in 20 ms water depth. It is connected to the Butinge terminal by a 36 in diameter oil pipeline, which was designed for reverse flows thus releasing Lithuania from the grip of Russian oil supplies.

The terminal consists of the onshore pipeline connecting Mazeikiai oil refinery and Butinge terminal, Mazeikiai pump station, terminal facilities and tank farm at Butinge, an offshore pipeline and SMS buoy. The tank farm capacity is about 150,000 m^3, but there are plans to extend it by another 150,000 m^3 and build an oil product import/export pipeline.

The main competitor to Butinge oil terminal is Ventspils port in Latvia, where the oil terminal is owned by Ventspils Nafta, which continues to be used for the export of Soviet crude oil to various Western countries. It can accommodate tankers up to 12.4 draft and its total export capacity is about 30 million tons per annum (Master Plan, 1993). However, in 1999 Ventspils Nafta managers were very concerned about growing exports through Butinge terminal and stated that in the year 2000, they will reduce their tariffs by US$0.2 per ton in an attempt to attract more traffic (Lietuvos Rytas, 1999b). Nevertheless, Butinge oil terminal would still be competitive, as Lithuania can reduce their pipeline tariffs whilst Latvia does not have such an opportunity.

Given this situation, at the end of 1999 Ventspils port introduced a new crude oil pipeline project for the development of infrastructure in the Latvian Oil Transit Corridor (LOTC). The programme involves the construction of a new oil pipeline connecting Polotsk or Nevel and Ventspils. The possibilities of success have been improved as both the EBRD and Lukoil have already shown interest in becoming involved.

4.2.3. Birzu Naftotiekis pipeline

The pumping station in Birzai (Lithuania) and oil pipeline connecting Polock (Russia) and Mazeikiai started operations in 1980 as a branch of the Druzbha pipeline providing crude oil for Mazeikiai refinery.

After Lithuania became independent, the pumping station in Birzai and the oil pipeline became a state owned Transportation Company named Naftotiekis.[8] At the moment, the company operates around 500 km of crude oil and product pipelines which includes 87.4 km of crude oil pipeline between Polock–Ventspils, 87.4 km of product pipeline between Polock–Ventspils, 225.5 km of crude oil pipeline between Polock–Mazeikiai and 91.5 km of crude oil pipeline between Mazeikiai–Butinge. There are also plans to build a product pipeline connecting Mazeikiai and Butinge.

In 1998 Naftotiekis transported 14.5 m tons of crude oil, 3 m tons of diesel to Ventspils and 6.3 m tons of crude oil directly to Mazeikiai (Institute of Energy in Lithuania, 1999). The main companies using Naftotiekis are Lukoil, Ozako Tupeks, Sidanko and Yukos.

[8] http://www.nafta.lt/birzai/lt.htm

4.2.4. Klaipeda oil terminal

Until 1999, the oil terminal in Klaipeda was used only for exporting fuel oil from refineries in Russia, Belarus and Ukraine. The requirement for terminal capacity at Klaipeda mainly depends upon the choices made with respect to the output of the Mazeikiai oil refinery and the markets it will supply. However, it also depends on the export of fuel oil refineries in Russia and Belarus (Master Plan, 1993).

During 1999 Klaipeda oil terminal was modernised in order to be able to work as an import terminal as well, again as part of the Lithuanian strategy of releasing energy supplies from the Russian stranglehold.

5. The Lithuanian oil industry

Since Lithuania became independent, most of its crude oil and oil products have been imported from the Former Soviet Union (FSU). Crude oil is mainly supplied by Russia through a branch of the Druzbha pipeline and processed at Mazeikiai oil refinery. This refinery produces a wide range of products which are sold to local consumers and exported to other Baltic States as well as to some other FSU and western countries.

Russian crude oil prices have risen considerably between 1996 and 2000 and have almost reached world price levels. Russian economic instability, lack of long-term supply contracts and problems with payments, encouraged the Lithuanian Government to increase the security and diversity of oil imports. One of the primary ways to solve the problem was to build an oil import/export terminal at Butinge and to construct a pipeline connecting it to Mazeikiai refinery.

5.1. Structure of the oil industry and privatisation

In 1996 Lithuanian Government took a decision based on world-wide experience, that only those oil industry structures which have oil exploration, transport, processing, distribution, wholesale and retail departments are likely to survive and prosper. The structure of the Lithuanian oil industry at that time did not correspond with these requirements. Therefore, in 1996 the Government decided to create a public company, Lietuvos Nafta, which consolidated the efforts of the four main players outlined above (Mazeikiai refinery, Birzu Naftotiekis, Klaipedos Nafta and Lietuvos Kuras). The ultimate objective was that the Lithuanian State, a number of Russian oil companies and a series of Western oil companies would each hold one-third ownership of Lietuvos Nafta.

Nevertheless, the Lietuvos Nafta plan never came into effect for although the creating the company came into force in September 1996, one-month later, elections to the parliament were held, where the opposition Conservative Party won the majority of votes and Lietuvos Nafta and its associated plans were cancelled.

At the beginning of 1998, the Lithuanian Government started negotiations with the US based company Williams International, over privatisation of the Lithuanian oil sector. Williams International specialised in the building of pipelines and telecommunications (Lloyds List, 1998) and had investments in more that 29 countries in Asia, Latin America and Europe.[9] On 20th February 1998 Williams and the Lithuanian Government signed an agreement in principle for investment in and operation of, several oil and gas infrastructure projects in Lithuania.

On the 16th July 1998, Williams offered to buy a 33% stake in the three most important Lithuanian oil companies (Mazeikin Nafta, Butinges Nafta and Nattotiekis) for US$150 million, plus US$150 million in reinvested profits (Lloyds List, 1998). However the Lithuanian government valued the package at US$400 million and final agreement was not reached. However, price was not the only reason delaying the deal, as the Lithuanian Government was also threatened by the main Russian crude oil supplier Lukoil that they would withhold the supply of oil unless a one-third stake of the Lithuanian oil complex was sold to Lukoil's subsidiary company Nikoil.

However, despite the disagreements with Russian crude oil suppliers, the negotiations with Williams continued. According to the letter singed by Lithuanian Economy Minister Vincas Babilius and Williams International Co. on the 31 July 1998, Williams would own 33% of each of the companies:[10] Mazeikiu Nafta (oil refinery), Naftotiekis (Birzu pipeline) and Butinges Nafta (import/export oil terminal). It was also agreed that these three companies would be merged if the agreement was signed (Lloyds List, 1998). Williams would also gain the priority right to buy more shares if the Government decided to sell them.

On the 8 October 1998 the president of Lithuania Valdas Adamkus, signed a law concerning reorganisation of the Butinges Nafta, Mazeikiu Nafta and Naftotiekis companies. Reorganisation involved creation of the Mazeikiu Nafta concern, by merging all three major companies involved in the Lithuanian oil industry.

On the 14 April 1999, Lithuania's State Defence Council approved the Government's plan to privatise all three enterprises by selling 66% of their shares to the foreign investor.[11] In July 1999 Lithuanian president Valdas Adamkus signed amendments to the oil privatisation law allowing Williams to take up to 66% in Mazeikiu Nafla and the Lithuanian Parliament then passed the legislation. However this legislation had a very negative effect on Lithuania's negotiations with Russian crude oil suppliers.

In July, the main oil supplier Lukoil proposed a plan for linking Nikoil (a subsidiary of Lukoil) and Mazeikiu Nafta, in order to help eliminate oil supply problems between the two countries. Nikoil offered to link the Russian oil fields with Maziekiu Nafta in exchange for a 33% stake in the Lithuanian oil sector. However despite the clear significance of this offer and the political context for the industry, they failed to receive any response from the Lithuanian Government.

On the other hand Williams announced that they were close to signing a deal with BP Amoco to buy oil products from Mazeikiai oil refinery. They also said that they were talking with several other oil companies including Elf, Statoil and Neste about becoming customers of Mazeiku Nafta.[12]

Meanwhile, the new Government announced that the review of the agreement with Williams was delaying the final closure of the deal because it had indicated that from their viewpoint, some aspects of the agreement needed to be amended.[13] These proposed amendments included:

- Williams should be made liable for any losses caused by personnel problems;
- the part requiring the Lithuanian Government to be liable for any undisclosed problems at the refinery should be deleted;
- the Government should not be solely responsible for problems associated with potential cut-off of crude oil supplies from Russia.

Despite intense government pressure, Williams refused to make any of these changes, but did agree to several others, including allowing the EBRD and IFC to take equity stakes in the company.[14]

In September 1999 the Lithuanian Government was asked to sell 12.5% stake in Maziekiu Nafta to another major crude oil supplier from Russia — Yukos. In return, the company offered an annual supply of 1.7 million tons of crude oil to Mazeikiai refinery and to export 2.5 million tons annually though the Butinge terminal (Lietuvos Rytas, 1999b). However, here again, the Lithuanian Government did not show much interest and the offer was allowed to lapse.

On 5 October 1999 a package of law amendments was approved by the Lithuanian parliament, which was seen as a final stage in closing the deal with Williams. The amendments allowed Williams to buy a 33% stake in Mazeikiai Nafta for US$150 million and also to double

[9] http://www.gasandoil.com/goc/company/cnr81452.htm
[10] http://www.gasandoil.com/goc/company/cnr84093.htm
[11] http://www.gasandoil.com/goc/company/cnr92279.htm
[12] http://www.gasandoil.com/goc/company/cnr93267.htm
[13] http://www.gasandoil.com/goc/company/cnr94156.htm
[14] http://www.gasandoil.com/goc/company/cnr94277.htm

this share over the next seven years. The law also allowed a small equity stake to be sold to financial institutions such as EBRD, IFC or crude oil suppliers. This could result in Williams owning only a 51% stake in seven years instead of a 66% stake, which was originally agreed. The requirement for the Lithuanian State to retain a 25% stake was removed in the amendments and the Government was also:

> authorised to back US$650 million in loans with state guarantees needed for the refinery's reconstruction, working capital shortfall and completion of the Butinge oil terminal (Lloyds List, 1999a).

In the middle of October 1999, Lithuania's Prime Minister Rolandas Paksas announced that he intended to resign his post due:

> to his opposition to a controversial oil industry privatisation (Lloyds List, 1999a).

At that time the president Valdas Adamkus was on a working visit to the USA and Rolandas Paksas promised to ensure stable Government until the president returned. Before the return of the president the Prime Minister personally rejected the deal and stated that Lithuania:

> could not afford to finance some US$350 million in long-term loans to Mazeikiai Nafta, raising the fiscal deficit to some 9.8% of GDP and jeopardising a new precautionary agreement with the IMF (Lloyds List, 1999a).

He finally handed in his resignation on 27 October 1999 along with six other cabinet officials. Even though the main reason for his resignation was the privatisation and overseas sale of Mazeikiai Nafta, Rolandas Paksas continued to emphasise that he was in favour of privatisation, but not on the terms offered by Williams (Lietuvos Rytas, 1999a). The deal was finally closed on 29 October 1999 when Williams International President John Bumgarner and the new Lithuanian Prime Minister lrena Degutiene, signed the protocol.

6. The research framework

One of the objectives of this research was to analyse the opinion of a number of Lithuanian experts in the oil sector on the privatisation of Mazeikiai Nafta and its possible consequences. An approach using a Delphi technique was selected, involving the opinion of 26 experts from the oil and related industrial sectors on this matter.

The Delphi technique has been selected in preference to the two other main qualitative research approaches — in-depth interviews and group discussions — for this research for a number of reasons. First of all there is a confidentiality problem, because most of the experts selected were not willing to give an interview or meet in discussion where their identity is likely to be revealed, as the subject remains an important economic and political issue. Furthermore, in-depth interviews are very time consuming and hence costly and therefore could not be selected, even if some experts would have been willing to give an interview. The Delphi technique overcomes both these problems. Table 4 presents the main advantages and disadvantages of all three techniques.

It can be clearly seen in the Table 4 that the Delphi technique has many advantages over depth interviews or group discussions.

There are three types of Delphi technique which can be applied to estimate unknown parameters, make decisions and analyse policy. This research centred around the analysis of experts' opinions on policy issues and therefore a Policy Delphi method was applied.

6.1. The policy Delphi technique

The original Delphi technique, which dealt with technical topics and was used to obtain consensus between the groups of experts, has been used since 1948, when it was first performed in order to *"improve betting scores at horse racing"* (Woudenberg, 1990). In the 1950s its use was extended as a forecasting technique in the USA. Policy Delphi was introduced in 1970 and it has a different objective from the original method. Policy Delphi *"seeks to generate the strongest possible opposing views on the potential resolutions of major policy issues"* (Abdel-Fattah, 1997). Examples of its application elsewhere in the maritime policy, logistics and transport policy fields can be found in a variety of publications from Linstone and Turoff (1975), Kapoor (1987), Cranfield University (1992) and Technology Foresight (1995).

6.2. The process of the Delphi technique

The first stage of the Delphi technique involves four elements identified by Hakim and Weinblatt. First of all the problem has to be identified, then the type of information required should be determined, furthermore the variables that have to be assessed have to be identified and finally the questionnaire has to be designed. The latter is the main instrument of the Delphi technique (Hakim and Weinblatt, 1993).

The research method involves a number of rounds of questionnaires, which have to be completed by the selected panel of experts of the industry. The experts are asked to make judgements and give their opinions on a specific issue. The Delphi survey has been described by Crotty, as a:

> means of systematically collecting and aggregating the informed judgements of a group of experts on specific questions or issues (Crotty, 1996).

The choice of experts participating in the survey, is crucial for the success of the research. Delbecq stated, that the participants *"must have a deep interest in the problem and experience to share"* (Delbecq, 1975) and it was pointed out by Duffield (1998) that for the findings of a Delphi survey to be acceptable, the members of the panel should be *"representative of their profession or professional organisation"*.

The experts selected for the survey in this research were those involved in the industry, including the operators of logistics companies, academics from Klaipeda University and representatives of Mazeikiai Nafia. Both the nature of the research and the technique used suggested confidentiality and so those involved are not indicated in detail here. The ideal number of experts selected for any Delphi survey may vary from 10 to 1685, as outlined by Williams and Webb (1994). However in their own study they chose 24 experts and similar numbers were also used by Hitch and Srnden (30) in 1983 as quoted by Abdel–Fattah (1997), Kapoor (39) in 1987 and Technology Foresight (21) in 1995. As a result, some 26 experts from the industry were selected. Table 5 provides general details of those who participated in the study — full details were kept confidential as anonymity is a requirement of the Delphi approach.

Table 5
Participants in the Delphi process[a]

Participants	Number	Percentage
Logistics industry	12	46
Academics	3	12
Government	8	30
Oil industry	3	12
Total	26	100

[a]All identities, including company affiliation, were guaranteed to be kept confidential to meet the requirements of the Delphi process.

Another important aspect of the Delphi technique is the decision concerning the number of rounds of questionnaires that will be carried out as this largely determines the degree of consensus that can be achieved. The number can be changed given different circumstances and yet its choice is commonly significant in arriving at final policy decisions.

Within a Delphi analysis, after the first round of questionnaires is completed, the statements that have not been agreed have to be reformulated following the comments of the experts. The process is then repeated and after the second round, if consensus still has not been reached, the same process can be repeated as many times

Table 4
The Delphi technique compared with others[a]

Advantages of other techniques *Group Discussion*	*Delphi technique*
Response is encouraged in a group setting	The panel members work both individually and together as a group, through providing feedback on collective opinions and attitudes of the others
All influences on attitude and behaviour are highlighted	The technique maintains anonymity by using postal questionnaire
Responses in a group often spark experiences	The technique allows individual treatment of each panelist Easy to identify who said what
It is easy to observe groups	Less time consuming
Dynamic and more creative	Cheaper
	Obtain consensus
	More opportunity for creativity
Depth interview	
Personal material can be discussed	
Overcomes recruitment difficulties	
Easy to identify who said what	
All opinions can be captured	
Disadvantages of other techniques	
Group discussion	
The panel may react negatively to the moderator	
Strong personality may overawe the other members	
Some people do not make full contribution in a group	
Not easy to identify who said what	
Depth interview	
Time consuming	
Costly	
Gives wide range of opinions	
Less opportunity for creativity	

[a]*Source*: Abdel-Fattah (1997).

as desired. There were many previous cases where three rounds of questionnaires have been conducted incuding Kapoor (1987), and Crotty (1996), however others maintained only two rounds, such as Duffield (1998), Cranfield University (1994) and Abdel-Fattah (1997).

This research involved two rounds of questionnaires. In many others having three rounds, the first round was only used for obtaining the opinion of the experts about the very broad issues and it was only in the second round that the main issues were presented in any detail. The main issues in this research were clearly present before the Delphi Study was initiated and had been widely discussed in the Lithuanian media making the initial, generalised round unnecessary. The statements could thus be derived without gathering expert opinion and two rounds of questionnaires were thus considered to be sufficient. (Appendix A details the statements in rounds one and two).

6.3. Characteristics of the technique

There are four main characteristics of the Delphi Technique, which give it advantages over other approaches to qualitative research. The first is anonymity, because by answering the questionnaires, panel members stay unidentified from each other and they also have an opportunity to change their opinion freely, without interference from other members (Whitman, 1990). Secondly the technique is iterative, as the number of rounds can be predetermined in advance or may be altered according to level of consensus reached (Woudenberg, 1990). Thirdly feedback can be controlled by the researcher, by asking only relevant or required information from the experts in the second or subsequent rounds (Hakim and Weinblatt, 1993). Finally, the members of the panel can receive statistical measures of agreement, *"which help to screen out the biases produced by the group thinking of committees'*, (Abdel-Fattah, 1997).

6.4. Means of consensus

After concluding four studies using the Delphi Technique it was pointed out by Williams and Webb (1994), that *"when using the Delphi technique the meaning of consensus is uncertain"*.

The means of consensus is a very important issue in two types of the Delphi approach: when estimating unknown parameters and in a Decision Delphi. However, in a Policy Delphi *"generating consensus is not a prime objective"* and compared with the other types of Delphi Technique, Policy Delphi is a *"tool for analysing issues and not a mechanism for making a decision"* (Linstone and Turoff, 1995). This characteristic of Policy Delphi was the main criterion for choosing this technique as the issues surrounding the Lithuanian oil industry are highly volatile and political and consequently it is unrealistic to expect to make any decisions based on the results of the survey, rather to gain an insight into opinion.

In the research questionnaires, experts were asked to indicate their opinion in terms of agreement, disagreement or their inability to comment, following the approach of Abdel-Fattah (1997). After the first round, the statements that did not meet consensus across the experts, were revised taking into account their comments. They were then sent out as a second round. The questionnaire was applied in the Lithuanian language and hence the issues, assumptions and statements presented here are translations of the original.

Statements were considered to be agreed when more than two-thirds of the experts agreed it. This relatively low figure was chosen because the issues discussed were highly political and therefore it was difficult to reach a high level of consensus across a range of individuals. Table 6 contains details of the consensus achieved.

7. Analysis

The following section will discuss the issues which the survey covered and place some interpretation upon the Delphi results obtained.

Issue 1: State control in the Lithuanian oil industry

The most important issue affecting the Lithuanian oil industry in 1999, was that of state control in the energy industry and progress towards privatisation. As a result, the first issue and first assumption followed by three statements dealt with this issue.

Assumption 1: The state should retain a certain number of shares in Mazeikiai Nafta

1.1.1. The state should retain 67% of shares in order to have full control over Mazeikiai Nafta. Over 80% of the experts disagreed with this statement, as most of them believed that private sector involvement was crucial for the wellbeing of Mazeikiai Nafta. Some commented that the state should not be involved in the business at all, but should deal with environmental and ecological issues. It was also noted, that one of the possible solutions was for the state to keep *a 'golden share'*, which would give them control of the concern when needed.

The low level of consensus meant that this statement has to be revised for the second round and returned to the experts. After analysing the responses in more detail, in the second round this statement was changed to:

> The state should not have any control over a private company, and in this case over Mazeikiai Nafta, because it would restrict the company from achieving its goals.

In the second round 76% of the experts agreed with the statement. However, some mentioned that the state

Table 6
Delphi research results[a]

	Original statements				Revised statements			
	Agree	Disagree	No comment	Agreed %	Agree	Disagree	No comment	Agreed %
Issue 1								
Assumption 1								
Statements								
1.1.1	4	20	2	15.40	20	6	0	76.90
1.1.2	7	16	3	26.90	21	4	1	80.80
1.1.3	4	21	1	15.40	24	2	0	92.30
Assumption 2								
Statements								
1.2.1	18	6	2	69.20				
1.2.2	22	2	2	84.60				
1.2.3	18	6	2	69.20				
1.2.4	9	13	4	34.60	25	1	0	96.00
Issue 2								
Assumption 1								
Statements								
2.1.1	21	4	1	80.80				
2.1.2	3	21	2	11.50	16	8	2	61.50
2.1.3	9	13	4	34.60	17	9	0	65.40
Issue 3								
Assumption 1								
Statements								
3.1.1	26	0	0	100.00				
3.1.2	18	7	1	69.20				
3.1.3	17	9	0	65.40				
Issue 4								
Assumption 1								
Statements								
4.1.1	6	12	8	23.00	26	0	0	100.00
4.1.2	20	5	1	76.90				
4.1.3	18	6	2	69.20				
Assumption 2								
Statements								
4.2.1	19	4	3	73.00				
4.2.2	19	5	2	73.00				
4.2.3	6	12	8	23.00	19	6	1	73.00

[a] *Source*: Author survey.

should not lose all control as Mazeikiai Nafta was a strategic enterprise.

1.1.2. The state should retain 51% of shares in order to keep partial control over the concern.

No consensus was reached about this statement, as the opinions of the experts varied considerably. Some 30% strongly agreed, by stating that if the state was to retain 51% of shares, the situation would be more stable and control over Mazeikiai Nafta would be maintained. However a number of others (49%) disagreed and said that the state should not be involved in the business at all and the control required could be maintained through legislation. Responding to the views expressed, in the second round the statement was changed to:

> The state should retain some influence over Mazeikiai Nafta; however control (or even partial control) is unnecessary.

Some 81% of the experts agreed with the statement on the second round. Some commented that the state has enough influence through the taxation system and therefore does not need to keep more than 25–30% of the shares.

1.1.3. The state should not have sold any of its share, as the energy industry is vital for the country's welfare and should have remained state owned.

Almost 85% of the experts strongly objected to the statement. Some said that only private institutions or individuals should manage Mazeikiai Nafta because state ownership is not efficient enough.

In the second round the statement was changed to:

> Mazeikiai Nafta should have been privatised in order to increase efficiency (it has been proved that private companies always work more efficiently) even if it is strategically significant.

Just over 92% of the experts agreed that even if Mazeikiai Nafta was a strategic object, it still should be in private hands, and state involvement should be minimised through taxation.

Assumption 2: The strategic investor for Mazeikiai Nafta should have been chosen using specific criteria

1.2.1. The investor should have guaranteed the supply of crude oil (not less than 6–10 million tons per year).

Some 69% of the experts agreed with this statement; however most were not able to comment on the amount of oil that should be supplied, but nevertheless, the uniform opinion was that Lithuania needs a profitable refinery and therefore it is up to the investor to ensure constant supply.

1.2.2. The investor should have guaranteed US$200 million investment in the refinery's modernisation programme, to reach European standards.

Some 85% of the panel members agreed that investments are necessary, however some mentioned that the amount required for the reconstruction of the Mazeikiai refinery could be as high as US$500 million. Others pointed out that this amount of money could be from reinvested profits if around 10 million tons of crude oil were refined annually. The general opinion expressed was that the refinery needs modernisation and the strategic investor should ensure that it occurs.

1.2.3. The investor should have had an established market for the refinery output.

Some 86% of the experts agreed that an established market is a very important criterion for the choice of strategic investor. Some emphasised that this should be one of the main criteria for choosing the investor. However others suggested that there would be opportunities for developing new markets in Western Europe, after the refinery was modernised.

1.2.4. The shares should have been sold to different companies to ensure that all of the selection criteria were met.

When judging this statement 35% of the experts agreed, 15% were not able to comment and the rest (50%) disagreed. Some said that Mazeikiai Nafta should be in the hands of one company, as it is so important to Lithuania's economy, however others disagreed by stating that it is possible that the spilt ownership would eliminate some problems, for example in terms of oil supply. As consensus was not reached, in the second round the statement was reformulated as follows:

> Mazeikiai Nafta needs investment not only from Williams International, but from Russian oil companies as well.

Here only one member of the panel disagreed with the statement, while others strongly agreed. One of the experts stated that such a strategy would eliminate the problems of oil supply without affecting Lithuania's sovereignty.

Issue 2. The importance of privatisation in Lithuania

Assumption 1: Private companies are always more efficient than those state-owned

2.1.1. Privatisation will improve the state of the Lithuanian energy industry

Around 81% of the experts agreed that privatisation would improve the state of the Lithuanian oil industry but not necessarily with the specific Williams International privatisation programme. Some said that only those enterprises should be privatised, which do not have a strategic profile within the country's economy.

2.1.2. As the Lithuanian oil industry is very dependent upon Russian crude oil supply, Williams' investment was the only option to help balance this situation.

Over 87% of the experts disagreed with this statement and expressed the general opinion that Lithuania had always been dependent upon Russian crude oil, but this did not cause any problems until Williams interfered. One of the experts assumed that when Williams had control of 66% of Mazeikiai Nafta shares, they might sell the package to a Russian company. Therefore the statement was changed to:

> As the Lithuanian oil industry is dependent upon the supply of Russian oil, Williams' investment balanced this situation to a certain extent.

After the re-formulation, 61% of the experts agreed with the statement. Nevertheless, a number of experts did not agree and stated that the success of Mazeikiai Nafta still depended upon the willingness of Russian crude oil suppliers to co-operate.

2.1.3. Privatisation is a necessary condition for Lithuania to become a member of the EU and therefore the privatisation of Mazeikiai Nafta was a good decision made by the government.

65% of the experts disagreed with such statement, as they did not consider privatisation to be a necessary condition to enter the EU. Many of them thought that privatisation of Mazeikiai Nafta was not carried out in an appropriate way. In the second round the statement was changed to:

> Lithuania is integrating into the EU and private investments are necessary. Therefore Mazeikiai Nafta had to be privatised sooner or later.

65% of the experts agreed with this statement. Some stated that indeed privatisation is necessary, however the conditions of the agreement should not favour any party in particular. Privatisation should be carried out in an open contest, thus providing equal opportunities for all potential investors to make their offers.

Issue 3: Lithuania's facilities to import crude oil

Assumption 1: Russia is not a reliable supplier of crude oil

3.1.1. Lithuania had to ensure an alternative supply of crude oil.

This was the only statement that was agreed by all experts in the first round. There were many different opinions expressed stating why an alternative supply was necessary, however the most common comment was that Russia was an unreliable supplier. The experts thought that with the frequent changes of Russian Government, oil supply could not be secured as much depended upon the political situation between the countries. Furthermore the experts stated that the alternative oil supply has to be politically, economically and ecologically acceptable.

3.1.2. Construction of Butinge terminal was a necessary step to ensure Lithuania's political independence from Russia.

69% of the experts agreed that building of the Butinge terminal was a very important strategic step. They stated that it will give Lithuania more political freedom and possibly more opportunities for doing business with Russian oil companies. However, some had doubts about successful functioning of the terminal and said that it would have been a lot cheaper to reconstruct the Klaipeda oil terminal, as it already had an established business and some of the required facilities.

3.1.3. Crude oil imported through Butinge terminal will always be a lot more expensive than Russian crude oil, and this increase in price might have a negative impact on Lithuania's economy.

65% of the experts agreed and stated that it was to be expected that oil imported from other than Russia, will be more expensive, but in Lithuania's situation an alternative was necessary. Some stated that sooner or later Russia will start selling oil at world price level and therefore the prices will increase anyway. However, one expert stated that even if the higher price of oil imported through Butinge terminal negatively influenced the Lithuanian economy the unprediction political situation in Russia would inflict the same damage.

Issue 4: The effect of Williams's investment on the Lithuanian energy industry

Assumption 1: *Williams will improve the situation for the Lithuanian energy industry*

4.1.1. Williams helped Mazeikiai Nafta by lending working capital needed to buy crude oil for the refinery.

Only 23% of the experts agreed with the statement; the others stated that Williams itself did not lend any money as all loans were guaranteed by the Lithuanian State. Some stated that since Williams was not responsible for any loans, its objectives should be to ensure that the work of the refinery increased in efficiency.

Therefore in the second round the statement was reformulated to:

> Williams as a strategic investor, should ensure a constant supply of crude oil and constant work for the refinery.

All the experts agreed with this statement.

4.1.2. Williams as a strong and prosperous company and experienced negotiator, should be responsible for all negotiations concerning crude oil transportation from Russia and other CIS countries.

76.9% of the experts agreed and stated that it would be beneficial for Lithuania if Williams would negotiate with other companies involved in this industry. Some said that it is always easier for a big company with a good reputation to negotiate with other market players, especially if it has something to offer in return. In this case, Russia currently needs an exit to the Baltic Sea and Williams controls Butinge terminal and therefore they could make a deal with Russian crude oil suppliers and offer them reduced transportation tariffs.

4.1.3. Williams's investment will ensure constant supply of crude oil to Mazeikiai oil refinery.

Just over 69% of the experts agreed with the statement. They stated that if Williams wanted their investment to work successfully, they would have to ensure a steady supply of crude oil. However, some stated that supply of Russian oil also depends upon political relations between the countries and therefore as long as Russia is the main supplier, it is not possible to guarantee security.

Assumption 2: *The contract signed between Williams and the Lithuanian Government secures only the interests of Williams International*

4.2.1. With their control of Mazeikiai Nafta, Williams will be able to influence the Lithuanian economy significantly.

73% agreed with the statement. One of the experts stated that the energy sector in Lithuania is one of the most important industries, and influences the economy to a large extent and therefore if Williams is in control of Mazeikiai Nafta, it is bound to influence the Lithuanian economy. Some others mentioned that the Lithuanian economic and political situation is not very stable and therefore Williams will have many opportunities to influence it, especially when controlling such strategic facilities.

4.2.2. Williams have a good chance to expand and control other strategic investments, by manipulating oil product prices.

Here again 73% of the experts approved the statement. They agreed that the Lithuanian Government might have to accept that Williams would start manipulating oil product prices. Some stated that all energy sectors in Lithuania could be sold soon, including gas and electricity suppliers, as some foreign companies have already shown interest. The experts stated that is very likely that Williams will show interest in investing in other strategic facilities in Lithuania including Klaipedos Nafta oil terminal.

4.2.3. Gradually Williams might influence Lithuanian politics, and thus might reduce Lithuania's chances of becoming an EU country.

Only 23% of the expert agreed with this statement. Those who disagreed said that Williams might influence the Lithuanian political situation but should not have any influence over relations with the EU. However, some stated that it is not clear yet what attitude Williams has towards Lithuania's EU membership. In the second round the statement was changed to:

> Gradually Williams will influence the Lithuanian economy more and more, and thus in the future this could have a negative effect on the country's economy.

In the second round 73% of the experts agreed. Some experts stated that it is likely that the situation will depend upon relations between the EU and the USA. They stated that the Lithuanian economy was already influenced negatively in that the Government guaranteed the loans for Mazeikiai Nafta and signed the contract on terms required by Williams.

Summary of the analysis

Where state involvement in the Lithuanian oil industry was concerned, the experts' opinion was that the state should not be involved in the business and that privatisation was necessary as private companies work more effectively. There were some suggestion made how the state could control Mazeikiai Nafta, i.e. by keeping a golden share or through taxation policies.

General opinion about the strategic investor (Williams) was that it should be up to the company to ensure oil supply to the refinery and to make the necessary investments, mainly by reinvesting profits. It was also emphasised that when the investor was selected, the state should have made a reliable market an important criterion. The general opinion expressed was that the state should have chosen a different way to privatise such an important strategic facility.

The second issue was the importance of privatisation in Lithuania. The majority of experts agreed that the whole privatisation process should have been undertaken in a different way because many aspects of the agreement with Williams were formulated in favour of the company.

Thirdly, Lithuania's facilities to import and export crude oil were analysed. All experts agreed that Lithuania had to ensure an alternative oil supply but many suggested that reconstruction of Klaipeda oil terminal would have been a lot cheaper than building the Butinge terminal.

Finally, the effect of William's investment on the Lithuanian energy sector was brought up as an issue. Experts reached the uniform opinion that the effect could be positive if Williams worked profitably. They also agreed that Williams could be a good negotiator with other major oil companies, even though a lot depends on the political relations between Lithuania and Russia. Experts also agreed that Williams could have a major impact on Lithuania's economy.

8. Conclusion

The Lithuanian oil industry is heavily dependent upon Russian crude oil supply, even though Lithuania has it's own crude oil import/export terminal at Butinge. Russian oil remains cheaper than oil imported from the Middle East or Western Europe and therefore Butinge oil terminal is likely to remain an export terminal unless a major conflict between Lithuania and Russian oil suppliers occurs. However, the Butinge Terminal does give Lithuania potential, political leverage in negotiations with Russia over oil supplies in the future.

However since 1997, Russia has planned to build a new port on the Baltic Sea at Primorsk (Gulf of Finland, East of St. Petersburg), which will handle crude oil, oil products, gas and liquid chemical cargoes of up to 45 million tons a year. This would be the third largest Russian port on the Baltic Sea. The main reason for building this terminal is that Russia has been losing up to US$600 million annually (1997 figure) by transporting its cargoes through foreign sea ports of the Baltic Sea.

There have been many obstacles since 1997, delaying the terminal construction works but nevertheless in 1999, the Russian government announced that they were determined to complete the new oil terminal at Primorsk, convinced that Russia needs its own oil terminal, because it is heavily dependent on exports for budget revenues and at the moment the only access to the Baltic Sea is through the ports of Lithuania, Latvia and Estonia. In addition to the new terminal, the government took the decision to create a new Baltic Pipeline System, which would deliver oil to the Primorsk terminal and thus divert exports from the current arrangement using the Druzbha Pipeline and the ports of the Baltic States. These developments — if they ever come to fruition, will have substantial impact upon oil logistics and politics in the region.

The Delphi research produced some interesting results. It was expected that most of the experts would agree that Mazeikiai Nafia should have remained state owned, but nevertheless a large number was in favour of some sort of privatisation. Most also stated that Lithuania needed private investments; however none approved the deal with Williams. They also realised the importance of trading with Russia and that good political relations were a necessity. This places Lithuania in a difficult position at the moment, with USA based Williams in control of the majority of the oil sector but Russian crude oil suppliers (forming the overwhelming source of oil for the Lithuanian infrastructure) dissatisfied with this decision of the Lithuanian Government. This has already resulted in some conflicts and an increase in Russian oil prices, but the future may hold other developments as parties on all sides begin to realise the commercial opportunities and political realities that exist.

Appendix A

Delphi Statements

Round 1

Issue 1. State control in Lithuanian oil industry

Assumption 1: The state retain a certain number of shares in Mazeikiai Nafta

Statements:

1.1.1. The state should retain 67% of shares in order to have full control over Mazeikiai Nafta.

1.1.2. The state should retain 51% of shares in order to keep partial control over the concern.

1.1.3. The state should not have sold any of its share, as the energy industry is vital for the country's welfare and should have remained state owned.

Assumption 2: The strategic investor for Mazeikiai Nafta should have been chosen using specific criteria

1.2.1. The investor should have guaranteed the supply of crude oil (not less than 6–10 million tons per year).

1.2.2. The investor should have ensured US$200 million investment in the refinery's modernisation programme, to reach the European standard.

1.2.3. The investor should have had an established market for the refinery output.

1.2.4. The shares should have been sold to different companies in order to ensure that all of the selection criteria were met.

Issue 2. The importance of privatisation in Lithuania

Assumption 1: Private companies always are more efficient than those state owned

2.1.1. Privatisation will improve the state of Lithuanian energy industry.

2.1.2. As the Lithuanian oil industry is very dependent upon Russian crude oil supply, Williams' investment was the only option to help balance the situation.

2.1.3. Privatisation is a necessary condition for Lithuania to become a member of the EU and therefore the privatisation of Mazeikiai Nafta was a good decision made by the government.

Issue 3. Lithuania's facilities to import crude oil

Assumption 1: Russia is not a reliable supplier of crude oil

3.1.1. Lithuania had to ensure an alternative supply of crude oil.

3.1.2. Construction of Butinge terminal was a necessary step to ensure Lithuania's political independence from Russia.

3.1.3. Crude oil imported through Butinge terminal will always be a lot more expensive than Russian crude oil, and this increase in price might have a negative impact on Lithuania's economy

Issue 4. The effect of Williams's investment on the Lithuanian energy industry

Assumption 1: Williams will improve the situation for Lithuanian energy industry

4.1.1. Williams helped Mazeikiai Nafta by lending working capital needed to buy crude oil for the refinery

4.1.2. Williams as a strong company and experienced negotiator should be responsible for all negotiations concerning crude oil transportation form Russia and other CIS countries

4.1.3. Williams's investment will ensure constant supply of crude oil to Mazeikiai oil refinery

Assumption 2: The contract signed between Williams and the Lithuanian Government secures only the interests of Williams International

4.2.1. With their control of Mazeikiai Nafta, Williams will be able to influence the Lithuanian economy significantly.

4.2.2. Williams have a good chance to expand and control other strategic investments, by manipulating oil product prices.

4.2.3. Gradually Williams might interfere or influence Lithuanian politics, and thus might reduce Lithuania's chances of becoming an EU country.

Round 2

In Round 2 a number of statements were reformulated in an attempt to achieve a higher degree of consensus. Those listed below are the revised statements

Issue 1: State control in the Lithuanian oil industry

Assumption 1: The state should retain a certain number of shares in Mazeikiai Nafta

Statements:

1.1.1. The State should not have any control over a private company, and in this case over Mazeikiai Nafta, because it would restrict the company from achieving its goals.

1.1.2. The State should retain some influence over Mazeikiai Nafta; however control (or even partial control) is unnecessary.

1.1.3. Mazeikiai Nafta should have been privatised to increase efficiency (it has been proved that private companies always work more efficiently), even if it is strategically significant.

Assumption 2: The strategic investor for Mazeikiai Nafta should have been chosen using specific criteria

Statements:

1.2.4. Mazeikiai Nafta needs investment not only from Williams International, but from Russian oil companies as well.

Issue 2: Importance of privatisation in Lithuania

Assumption 1: Private companies always are more efficient than those state-owned

Statements:

2.1.2. As the Lithuanian oil industry is dependent upon the supply of Russian oil, Williams' investment balanced the situation to a certain extent.

2.1.3. Lithuania is integrating into the EU and private investments are necessary. Therefore Mazeikiai Nafta had to be privatised sooner or later.

Issue 4: The effect of Williams's investment on the Lithuanian energy industry

Assumption 1: Williams will improve the situation for the Lithuanian energy industry

Statements:

4.1.1. Williams as a strategic investor, should ensure a constant supply of crude oil and constant work of the refinery.

Assumption 2: The contract signed between Williams and Lithuanian Government secures only the interests of Williams International

Statements:

4.2.3. Gradually Williams will influence the Lithuanian economy more and more, and thus in the future this could have a negative effect on the country's economy.

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