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Bulgaria, the Balkans and the Pan-European infrastructure projects

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1 WHY HAS THE BALKANS BECOME AN ATTRACTIVE TRANSIT AREA FOR THE OIL AND GAS IMPORTS IN EUROPE?

Since the beginning of the XXI century there has been an increasing interest in establishing the Balkans (South Eastern Europe) as a transit corridor connecting Russia and Caspian region with the European energy market. It was due to the need of building a new infrastructure that could carry the necessary quantities of oil and natural gas, diversify the sources and assure more safety in the energy traffic towards and across Europe.

In 1990s the energy dependence of the EU member states on supplies from abroad was around 45%. By 2008 it reached 53.8% (1). In 1997 the share of the import in the gross inland consumption of natural gas in the EU was 45.2 % but ten years later it reached 60.3%. As to the crude oil the share was respectively 76% and 82.7% (2). The energy experts estimate that by 2020 the share of the imports in the total energy consumption in the EU will exceed 60%.

Towards 2030 the EU will import 94% of the quantity of oil it needs. As to natural gas, the share is expected to be smaller - 80%, yet significantly larger if compared with the situation at the end of the first decade of the present century (3). In the new EU energy strategy, presented by the Commissioner for Energy Günther Oettinger in November 2010, the EU dependence from imports of natural gas by 2020 is expected to be 73 - 79% and ten years later it may even grow to 81 - 89% of the total gas consumption in the member states. (4).

Another major reason for the increasing importance of the Balkan region as an energy transit corridor is the aim of the EU and most European countries to diversify the foreign sources in their imports of oil and natural gas. In the core of this strategy lays their endeavour to reduce the high degree of their dependence on the imports of energy raw materials, and especially natural gas from Russia.

In 2007 Russia's share in the EU oil imports was 32.6%. Regarding the natural gas this share was 38.7%, of which almost 90% was transported by using the pipelines running across Ukraine and Belarus built up at the time of the former USSR (5). Russia's share in the gas imports to four EU member states (Finland, Lithuania, Latvia and Estonia) covered 100% of their domestic consumption. For other eight EU member states

(Slovakia, Bulgaria, Czech Republic, Greece, Hungary, Slovenia, Austria and Poland) the share varied between 50% and 9 %. The percentage was relatively lower for Germany, Italy, Romania and France, i.e. between 14% and 36%.

The attitude of the Balkan countries towards the plans for transforming the region into a transit corridor for the transportation of oil and natural gas to Central and Eastern Europe is quite positive. Some of them were among the promoters of most energy infrastructure projects proposed to run through the area which clearly explains their economic and financial interests in the process.

The construction of the Pan-European oil and gas pipelines crossing the Balkans will increase the global importance of the region, secure more stable, safer and diversified supplies of energy from abroad. This is a strategic long-term goal in the energy policy of all Balkan states for almost all of them are heavily dependent on the imports of oil and especially natural gas coming exclusively or mainly from Russia.

What was the exact situation in this field at the end of the first decade of the century?

According to data provided by the national statistics, **Bulgaria** imports 96% of the oil used for domestic needs. The country's natural gas dependence is even higher - 98%. Practically all the imports of natural gas originate from Russia, while the share of the imports of petroleum in Bulgaria amounts to 71%. The remaining quantities of oil are imported primarily from Ukraine whose share in this respect is 25%.

Turkey gets from abroad 98% of its natural gas used for domestic consumption. The percentage of the imported oil is 92 %. The share of Russian gas in the overall Turkish natural gas imports reaches 65% but it is much smaller (about one third) in the total imports of crude oil. **Greece** meets almost 100% of its national demands for oil and natural gas via supplies from abroad coming mainly from Russia (66%) and, to a lesser extent, from Algeria (24%). The OPEC countries are the main suppliers (58%) of crude oil for Greece, while the share of Russia in this domain is 35%.

Due to the availability of own petroleum and gas deposits, the dependence of **Romania** on imports of energy products is lower than that of the other Balkan states. Towards the end of the first decade of the century Romania imported 52% of the oil it needed from two main suppliers - Kazakhstan (64%) and Russia (36%). The share of imports

of natural gas in the domestic consumption accounts for 28% of the overall volume and comes entirely from Russia.

Although the share of natural gas in the national energy balance of the countries located in the Western Balkans is, as a whole, considerably lower compared to the states mentioned above, they almost entirely import it from Russia as well. Some of them (**Montenegro and Kosovo**) practically have no demand of natural gas and therefore are not dependent on any imports. A substantial part of the gas imports in **Croatia, Bosnia and Herzegovina, Serbia and Republic of Macedonia** comes from Hungary through the pipeline which was again built at the time of the former USSR.

Slovenia imports around 50% of the natural gas it needs from Russia with the rest supplied by Algeria and Austria. Thanks to its own energy reserves, Albania is the only country in the Western Balkans which fully meets its rather limited domestic needs and even manages to export some oil to neighbouring Kosovo and Montenegro. Another country in a relatively good position in this respect is Croatia providing by itself for up to 60% of its needs for natural gas. Serbia also produces natural gas but on a small scale – its own production is sufficient to meet up to 10% of the national demand (6).

The domestic oil production enables Serbia and Croatia to cover no more than 20% of their national consumption. The remaining volume and almost all necessary supplies of oil for the other Western Balkans countries are imported. The main source is Russia - its share in the oil imports to Serbia, Croatia and Republic of Macedonia is two thirds, while in Bosnia and Herzegovina it soars to 100%. Apart from Russia, other suppliers of crude oil for the Western Balkans are the countries in North Africa and the Persian Gulf, as well as Albania and Greece but they account for insignificant quantities.

The vulnerability of the Balkan countries ensuing from their high degree of dependence on foreign natural gas was made evident in January 2009 during the "gas crisis" in Russian - Ukrainian relations when the Russian imports to the region were for a short period totally cut off. As a result, Bulgaria turned out to be one of the most affected countries in the region – its financial losses, according to the Bulgarian Ministry of Energy and Transport, amounted to 456 million BGN or around 250 million euros (7). Exact data for the financial losses incurred by the gas crisis for all Balkan countries were not published, but the author's calculations show that the overall

negative impact on the region following the temporary suspension of imports could be estimated to approximately 700 - 800 million euros.

Turkey and Greece were the only countries in the region, which remained practically unaffected by the gas crisis due to the fact that they get natural gas from Russia mainly through the pipeline across the Black Sea and could also utilize the direct gas connection between the two countries which has been in operation since 2007. Moreover, since the early 1990s Russia has been supplying natural gas for Turkey by using another direct pipeline running across the territory of Romania and Bulgaria.

To compensate the shortage of natural gas some of the Balkan countries had to increase the domestic production (as did Croatia and Serbia) or to use natural gas stored in local or foreign repositories, as did most of the other countries. Some of a partial solution applied by some states was the increasing of consumption of petroleum and even coal.

The "Balkan route" for transporting energy resources towards Central and Western Europe became started being contemplated as early as 1990s. The first projects for building new oil and gas pipelines across South Eastern Europe were put forward in 1992–1993. However, the necessary conditions for their real launch emerged more than ten years later.

The factors of critical importance were the enhanced regional stability and the achieved headway in the European and Euro-Atlantic integration of the Balkan countries. Over that period three (Slovenia in 2004, Bulgaria and Romania in 2007) joined the EU and five of them (Slovenia, Bulgaria, Romania in 2004, Albania and Croatia in 2009) became members of NATO.

At the same time, there was an increasing interest by European countries inside and outside the EU in the construction of energy communications via the Balkans which were to be instrumental in reducing the risk of using the sole and somewhat uncertain route via Ukraine and Belarus. The fresh impetus for accelerating the practical implementation of the new projects was the gas crisis in January 2009.

The transportation of oil and natural gas across the Balkans from the Caspian region became a more attractive option as it was considered to be an alternative route

bypassing the energy supplies from Russia. What's more, it could avert the existing potential danger of Russia using its monopoly position as a dominant supplier of natural gas with the possible aim to exert political pressure on the European countries.

Another advantage of the Balkan route is that it will avoid the extremely busy shipping lane for oil supplies running through the Bosphorus and Dardanelles. Only in 2009 more than 51,000 tankers crossed the straits having carried around 115 million tons of oil. The estimates show that by using that particular maritime route Russia transports up to a quarter of its petroleum exports (8).

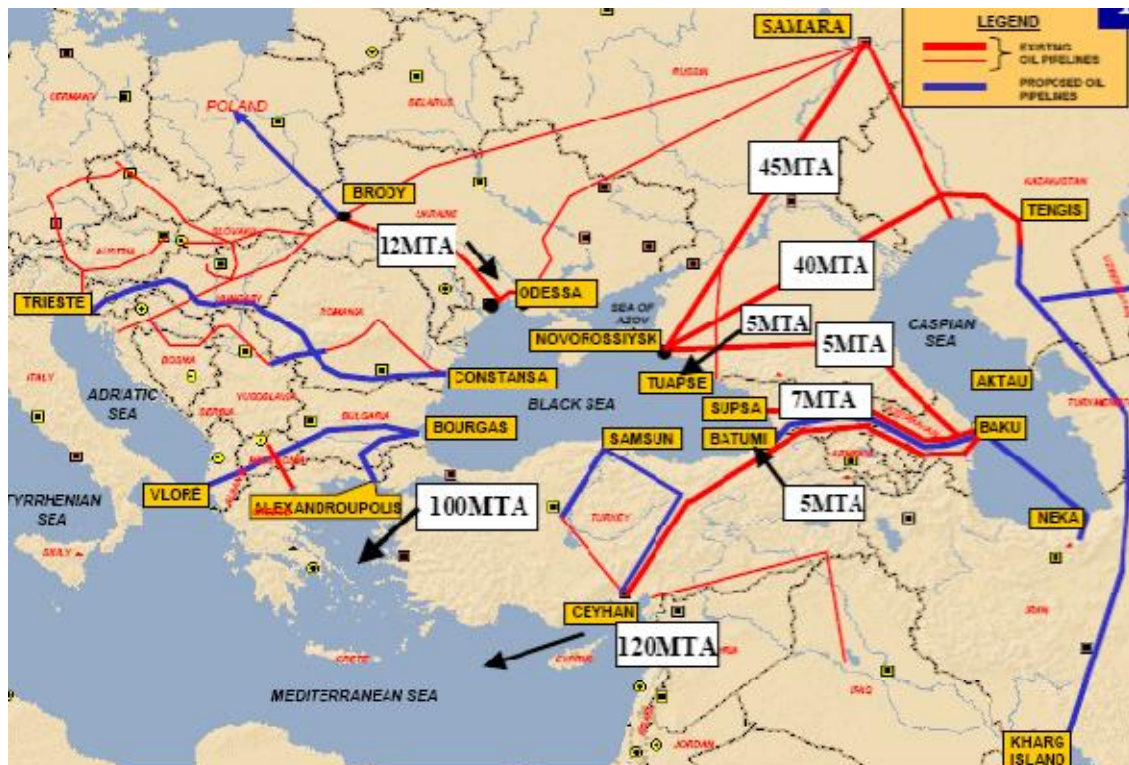
2 THE CONTEMPLATED OIL PIPELINES ARCOSS THE BALKANS

At the end of 2010 there are known more than ten major projects for the construction of oil and natural gas pipelines via the Balkans. The participants willing to join the projects come from a number of EU member states (Italy, France, Germany, Austria, Hungary, Slovenia, Romania, Bulgaria, and Greece), as well as from Russia and practically from all Balkan countries. Despite the series of signed intergovernmental and corporate agreements, there has been made a rather insignificant progress in their implementation.

Four of these projects involve transportation of oil from Russia or the Caspian basin to Central Europe: the pipeline from Bulgaria via the Republic of Macedonia to Albania and later to Italy; the pipeline from the Bulgarian coastal city of Burgas to the Greek port of Alexandroupoli on the Aegean Sea; the pipeline from the Romanian city of Constanta on the Black Sea coast via Romania, Croatia, Serbia and Slovenia to the Italian Adriatic city of Trieste and the pipeline from the city of Samsun on the coast of the Black Sea across the territory of Turkey to the Mediterranean seaport of Ceyhan **(See the map)**.

In January 2007 the governments of Bulgaria, the Republic of Macedonia and Albania signed an agreement for the construction of the **AMBO pipeline**. (See **Attachment № 1 – a detailed map and basic facts of the project**). The idea for the project dates back to 1994. The route of the pipeline will run from the Bulgarian port city of Burgas via the territory of the Republic of Macedonia to the Albanian Adriatic city of Vlore, with an extension to Italy. The agreement was ratified by the parliaments of the three countries. The length of the pipeline is 912 km, it has a capacity of 750 000 barrels per day and it is planned to transport annually around 35 - 40 million tons of Russian or Caspian oil to Western Europe and the USA.

Figure 1. MAP OF THE MAJOR FUTURE OIL PIPELINES ACROSS THE BALKANS



A prominent investor in the project will be an international company headed by the American businessman Edward Ferguson. The initial cost of the pipeline was about 1.5 billion dollars. The three participant countries expect to get from its operation annual revenues totaling around 100 - 120 million dollars. The construction of the pipeline was originally intended to start in 2009 and to be completed by 2011 – 2012 when AMBO is to enter into operation.

Following the lack of financial resources and the difficulty to provide enough oil for the proper functioning of the pipeline, the implementation of the project has not commenced. Facing the competition of other three projects listed above, the prospects for the project have become quite unclear. By the end of 2010 all the activities regarding its realization have been frozen.

In March 2007 Bulgaria, Greece and Russia signed an intergovernmental agreement for the construction of **Burgas – Alexandroupoli pipeline**. The route of the pipeline starts from the Bulgarian city of Burgas on the Black Sea and across the territories of Bulgaria and Greece it reaches the Greek Aegean port of Alexandroupoli. The pipeline

is called **Trans-Balkan pipeline** (See **Attachment № 2 – a detailed map and basic facts for the project**). The project negotiations began as early as 1993. The pipeline is expected to be 279 km long, to be able to transport initially 15 – 25 million tons of Russian oil annually and to have a total capacity of 35 million tons per year.

The project includes the construction of three oil refilling stations. With estimated costs for its construction of about 700 million euro at its start, it later became clear that the price will be much higher. In 2010 it was announced that the project would cost 1.5 billion euro.

The Burgas – Alexandroupoli pipeline is the largest joint economic project of Bulgaria and Greece with an active participation on the part of Russia being the future oil supplier. The signing of the agreement was warmly welcomed by the European Commission (EC). An international project company (Trans - Balkan Pipeline B.V.) will be in charge of the construction and will be the owner of the pipeline. A consortium of three Russian energy companies – Transneft, Rosneft and Gazprom Neft have 51% stake in the enterprise. The Bulgarian participant in the project, a joint stock company entitled Project Company Oil Pipeline Burgas – Alexandroupolis BG and registered in the Netherlands, holds 24.5% of the shares and will be carrying out the feasibility study, the design and the exploitation of the pipeline on the territory of Bulgaria.

In March 2010 the Ministry of Finance took over the functions of coordinator and supervisor of the Bulgarian participation in the project. The Greek share in the capital of the international project company is the same as that of Bulgaria, i.e. 24.5%. It is distributed among Hellenic Petroleum SA, Helpe-Thraki AE with 23.5% and the Greek government with 1%. Bulgaria expects annual revenues of 35–40 million euro from the collection of exploitation fees on its territory. The implementation of the project is to create up to 5000 new jobs in the two Balkan countries.

In April and May 2007 the national parliaments of the three participating countries ratified the agreement for the construction and operation of the pipeline. Originally the construction was set to start in early 2009 and to be completed by 2011. That same year the Greek President Karolos Papoulias promoted the idea of building up a gas pipeline that would be parallel to the oil pipeline.

Similar to the AMBO project, the launch of the construction of the Burgas - Alexandroupoli pipeline was also delayed. The main reason was the opposition by some environmental organizations both in Bulgaria and Greece. The issue was put to the vote in three local referenda held in different towns in Bulgaria - in Burgas (February 2008), in Sozopol (April 2008) and in Pomorie (May 2009). Although the turnout was below the statutory minimum rate of participation, the results showed that the majority of voters were against the construction of the pipeline.

Nevertheless, the Bulgarian government of that time didn't withdraw the country's part in the project. The present Bulgarian cabinet, which assumed office in July 2009, announced it would review the negotiated conditions and demand an environmental impact assessment of the future oil pipeline provided by international experts.

At his meeting with his Russian counterpart Vladimir Putin in September 2009, the Bulgarian Prime Minister Boyko Borisov said that the final position on the participation in the project would be announced after carrying out a thorough analysis of the likely financial benefits and environmental risks for the country (9).

Adding to his environmental concerns, B. Borisov later pointed out that the agreement for the Burgas - Alexandroupoli pipeline was inconsistent with the Bulgarian national interests. He stated that the pipeline was "very important for Greece and Russia", while the Bulgarian territory would be used only as a "transit area" (10). Initially, the Prime Minister set the end of 2009 as a final point for Bulgaria to declare its decision on the participation in the project. Later, the term was extended until the autumn of 2010 and eventually until an unspecified date in 2011 following the completion of the public discussions about the expected international environmental impact assessment of the project and the ultimate decision of the government. As a result of the unclear Bulgarian position, the implementation of the project was actually stopped.

During his visit to Moscow in February 2010 the Greek Prime Minister Georgios Papandreou and his Russian host V. Putin declared that their countries were in favour of the speediest fulfillment of all technical, environmental and other procedures necessary for the implementation of the project. They further stated that upon a positive response by Bulgaria, the construction could start as early as 2010 and the pipeline might be commissioned by the end of 2012 (11)..

On May 12, 2010 the Russian Energy Minister Sergei Shmatko unexpectedly proposed a merger of the project with a similar undertaking in neighbouring Turkey – Samsun – Ceyhan oil pipeline (12). In fact, such an idea was voiced for the first time at the beginning of 2009 when it was announced that representatives of Transneft were discussing the issue with their partners in this project (13).

The route of **Samsun - Ceyhan pipeline** starts from the Black Sea port of Samsun through the territory of Turkey to reach the Mediterranean oil terminal in Ceyhan (See **Attachment № 3 – a detailed map and basic facts for the project**). The idea of building the pipeline dates back to 2000. After the necessary exploratory works were over, the Turkish company Çalık Enerji and Italian one Eni S.p.A. signed in September 2005 a Memorandum of Understanding for the joint construction of the pipeline.

The first sod was symbolically turned in April 2009. Six months later, on 19 October, Turkey, Italy and Russia signed an intergovernmental agreement, stipulating that the Russian companies Transneft and Rosneft will also be involved in the project. The length of the pipeline is 550 km and its capacity - 1.5 million barrels per day. The construction is set to start in the second half of 2011 and its costs are evaluated to \$ 2 billion.

The oil will be supplied with tankers across the Black sea from Russia or the Caspian region to Samsun from where it will be transported to Ceyhan, available to be exported to other countries, mainly in Europe. This pipeline has in fact the same target as Burgas – Alexandroupoli oil pipeline, i.e. to shorten the distance for the supply of Russian or Caspian oil to Europe, as well as to avoid the busy shipping traffic through the Bosphorus.

The Russian Energy Minister stated on May 12, 2010 that the option of pooling the projects for the pipelines Burgas - Alexandroupoli and Samsun - Ceyhan is possible, provided that the Bulgarian government would withdraw its opposition to participate in the first project and take the respective steps in this direction.

Furthermore, a month later S. Shmatko announced that due to the unclear position of the Bulgarian side on its future participation in the project, the Russian companies Rosneft and Transneft could cease funding the preparatory works for the pipeline construction for an indefinite period of time (14). B. Borisov issued immediately a

statement that Bulgaria would refrain from taking part in the project, meaning that the pipeline would not be implemented at all. Yet, later on he made it clear that the definitive decision would be made after examining the results of an international environmental impact assessment of the pipeline (15)..

Meanwhile, the Minister of Environment and Water Nona Karadjova said she expected that the assessment would be ready by February 2011 (16). The Bulgarian Premier, however, was not so optimistic about it and added that the project was futureless since it was impossible to find enough oil for the pipeline. The negative position of the Bulgarian government on the project was clearly expressed by B. Borisov in an interview with **the Financial Times**. He stated that his country was no longer interested in the project implementation because of the existing environmental risks. He went on to draw an analogy with the major oil disaster in the Gulf of Mexico that happened earlier this year (17).

Still, the fate of the pipeline was not completely decided. Greece and especially Russia confirmed their readiness to assure the environmental safety of the project. There was a series of phone calls from V. Putin to the Bulgarian and Greek Prime Ministers on July 20, 2010 followed by a meeting between Vladislav Emilyanov, General Director of Trans-Balkan Pipeline B.V., and Simeon Djankov, Deputy Prime Minister and Minister of Finance of Bulgaria. At the press conference after the meeting Mr. Emilyanov said the project should be implemented since, in his words, it would render benefits to all the three countries. He described it as "a hen that lays golden eggs." He concluded that the main outcome of the meeting was that all sides reached "a full understanding to work and cooperate." (18).

In order to meet the Bulgarian environmental requirements, Russia and Greece proposed some additional measures against any such risks backed by a substantial complementary financing, if needed. An agreement was also reached on the Bulgarian outstanding financial contributions for the current activities of the joint venture amounting to 6.4 million euro and crucial to avoid interruption in the preparatory works of the project.

The main goal of the Bulgarian partners was to salvage the project. The concessions they made could be primarily explained by the strong economic interest in the construction of the Burgas - Alexandroupoli pipeline, which in V. Emilyanov's opinion is

more competitive than the Samsun - Ceyhan pipeline. The advantages he points out are that it "could be built more quickly" and that "the necessary sources of oil supply for the pipeline are already provided." (19).

On October 4, 2010 Trans-Balkan Pipeline B.V. forwarded the environmental impact assessment of the project on Bulgarian territory prepared by international experts. It was submitted by two consulting companies, ILF Consulting Engineers and Environmental Resources Management, and consisted of two documents - an evaluation report on the environmental impact of the project and the attached report assessing the degree of impact on the environmentally protected areas included in Natura 2000. On this occasion the Deputy Minister of Environment and Water Evdokia Maneva stated that the Ministry would announce its position on the experts' assessment in 45 days (20).

The Ministry's position was made public on November 9, 2010 and indicated that the reports contained "significant gaps and ambiguities" (21). As a result they were returned to the consulting companies for completion which should take no longer than two months. Upon the submission of the final version of the reports the Ministry is to present a new statement within a period of another two months. Should it be positive, the procedure will continue with public discussions of the project involving representatives of the affected communities and municipalities on the Bulgarian territory. The final decision will be made by the Minister of Environment and Water within 45 days after the last public meeting.

This means that, depending on the Bulgarian Ministry's position regarding the environmental impact assessment, the final decision on the country's participation in the project will be announced no earlier than the spring of 2011. It seems that in the long run Bulgaria is not likely to go for the project.. Its position will hardly be changed due to the actions taken by Russia and Greece in support of the pipeline. In the autumn of 2010 Greece adopted specific legislation allowing the speed-up of the pipeline construction on its territory. At the end of October 2010 Russia and Greece agreed to set up a joint working group that should present by year's end a common position of both countries on the project (22).

At the same time, senior government officials in Greece and Russia have declared they will respect the Bulgarian government's position and there are already indications that

the two states have somewhat come to terms with the idea that the project is going to be dropped. At the visits of V. Putin and K. Papoulias to Bulgaria in November 2010, the issue of the implementation of the pipeline was not discussed at all.

On April 3, 2007 Romania, Serbia, Croatia, Slovenia and Italy signed a Memorandum of Understanding on the construction of **the Pan-European oil pipeline from Constanta to Trieste**. (See **Attachment № 4 - a detailed map and basic facts of the project**). The document was signed also by the then EU Commissioner for Energy Andris Piebalgs

The idea about the pipeline dates back to 2002. Its route starts from the Black Sea port near the Romanian city of Constanta, crosses Serbia and reaches the Adriatic port of Rijeka in Croatia. From Rijeka it runs across Slovenia to Trieste where it will be connected with the Transalpine pipeline going to Austria and Germany. The pipeline is expected to be 1 856 km long and to have a capacity of 1.2 - 1.8 million barrels per day. The facility will be able to transport annually up to 100 million tons of oil from the Caspian region to Western Europe and the USA. The expected costs of the pipeline initially were around 3.5 billion euro, but later the figure doubled to reach almost 8 billion euro.

An agreement on setting up a Pan-European Oil Pipeline Project Development Company was signed on 22 April 2008 by the Romanian companies Konpet Ploiesti and Oil Terminal Constanta, the Serbian Transnafta and the Croatian company Yanaf. In the period 2008 - 2010 there were held several meetings of the company's Managing Board of Directors.

In the autumn of 2009 it became known that Kazakhstan had expressed interest in joining the project. Meanwhile, controversy arose among the participants over different financial matters, including the fees for participation. Croatia even blocked temporarily its preparation for the project implementation. Another sensitive issue is the participation of Slovenia. The government in Ljubljana is a bit reluctant to take part in the project because a section of the pipeline will pass across an environmentally protected zone.

Consequently, by the end of 2010 the progress achieved in the implementation of the project was quite limited. It could hardly be expected that the construction of the

pipeline will be completed by the end of 2012 as initially planned. Among the serious issues are its funding and the supply of the necessary quantities of oil that will make the pipeline financially profitable. All this reveals a rather uncertain future for the project and its implementation is not likely to be completed before the middle of the second decade of the century at best.

3 THE BALKANS AS A TRANSIT CORRIDOR FOR THE NATURAL GAS IMPORTS IN EUROPE

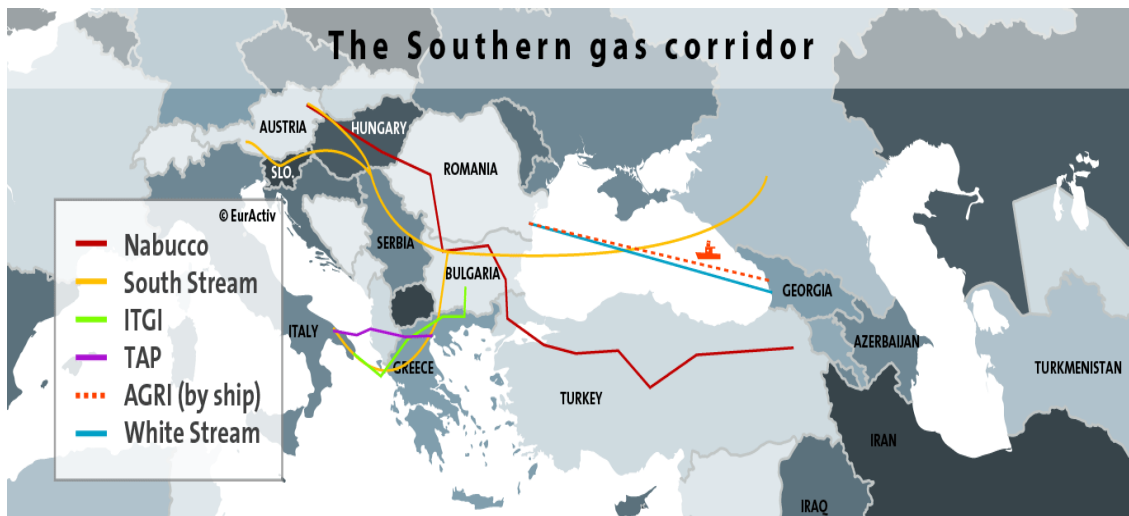
Compared to the oil pipelines, the number of contemplated gas pipelines to cross the Balkans is significantly larger. The reason for that is the genuine interest the European countries take in using the Balkan route in order to increase the quantities and diversify the sources of natural gas they import. Among the proposed energy projects are the largest Pan-European gas pipelines - Nabucco and South Stream.

As a whole, the Balkan countries are perceived to become a transit corridor for at least 5 – 6 big gas pipelines (See **the map**). The proposed projects constitute a crucial element in an already elaborate energy strategy whose implementation will strengthen the region's position in Europe. Yet, this process symbolizes the divergent interests of the European countries and gradually turns the Balkans into an arena of the competitive interests of Russia and the West, mainly the EU and the USA, on the energy market.

What was the situation in this sphere at the end of 2010?

One of the projects deals with the construction of a gas pipeline from Turkey to Greece and Italy. It is called **Interconnection Turkey – Greece - Italy (ITGI)** (See **Attachment № 5 - a detailed map and basic facts for the project**). The idea for the construction of this pipeline dates back to 2003. A preliminary feasibility study funded by the EC was conducted and two years later, in April 2005, the Greek gas company DEPA and the Italian energy company Edison SpA signed a Memorandum of Understanding. In January 2007 Greece and Italy worked out an intergovernmental agreement about the EC-backed gas project.

Figure 2. THE MAP OF THE LARGEST GAS PIPELINES ACROSS THE BALKAN COUNTRIES



The ITGI is actually an extension of the 300-km-long gas pipeline connecting Turkey and Greece and was commissioned in November 2007. Its total length is 1150 km: the Greece – Italy section is 807 km long, 590 km of which are located on Greek territory. The length of the offshore section (named Poseidon pipeline) is 217 km long and will run on the seabed of the Ionian Sea.

The pipeline route starts from Karacabey in Turkey runs via Alexandroupoli to Komotini in Greece and crosses the Ionian Sea to reach Otranto in the Apulia region in Italy. The gas pipeline will annually transport 11.5 billion cubic meters of natural gas from the Caspian region, primarily Azerbaijan to Greece, and 10 billion cubic meters from Greece to Italy. The costs of the gas link between Greece and Italy are evaluated to be around 1.2 billion euro.

In May 2010 Greece and Turkey signed a Memorandum aimed at speeding up the implementation of the project. After a meeting with his Greek counterpart G. Papandreou in October 2010, the Turkish Prime Minister Recep Tayyip Erdogan announced that the term for completing the construction of the pipeline section to Italy was 2015 (23). In 2007 Bulgaria also expressed its interest in joining the project. The proposed plan is for building a cross-border pipeline which is to connect the Bulgarian gas grid with the Greek section of the ITGI. In this way Bulgaria could, to a certain extent, diversify the sources of its own gas imports.

The consent on the project between Bulgaria and Greece was reached in mid-July 2009 and an agreement was signed in early March 2010. A project management company - Asset Company - was established with equal share participation (50%) in its capital on the part of the Bulgarian Energy Holding (BEH) and IGI Poseidon consortium (including the Greek companies DESFA and DEPA, as well as the Italian oil company Edison SpA).

The agreement deals with the construction of a gas pipeline from the city of Komotini in Greece via the town of Dimitrovgrad to the district center of Stara Zagora on the Bulgarian territory. The project should be completed by 2013 and come into operation a year later. The length of the pipeline is 168 km and its capacity is for an initial volume of 3 - 5 billion cubic meters of natural gas which will be imported from Azerbaijan. With all disputable issues resolved the final agreement was signed on November 30, 2010.

The construction costs are estimated at 160 million euro. One third of them (45 million euro) will be provided as financial aid by the EU under the adopted financial support of 2.3 billion euro for the implementation of 43 energy projects in Europe. The planned gas connection between Bulgaria and Greece will be a branch of the Turkey – Greece – Italy gas pipeline.

Another local project that aims to diversify the sources of imported natural gas in Bulgaria concerns the construction of a new pipeline between Bulgaria and Turkey. The general agreement about such a gas connection was reached in January 2010 during the visit of the Bulgarian Prime Minister B. Borisov to Ankara.

It was during the same visit (January 31, 2010) that the Energy Ministers of both countries signed a memorandum for the construction of a pipeline which connects the gas terminal on the shores of the Sea of Marmara in Turkey with the compressor station nearby the summer resort of Lozenetz in Bulgaria. It will be a separate gas pipeline in addition to the one already in operation since the 1990s which provides for gas transit from Russian across Bulgaria to Turkey.

The construction of the new gas connection is expected to require investments amounting to 120 million euro. The Bulgarian side will provide about 30 million euro. Through this pipeline Bulgaria will be able to import natural gas from Azerbaijan, Qatar, Egypt and possibly Iran. In early August 2010 the Bulgarian Minister of Economy,

Transport and Tourism Traycho Traykov announced that the Turkish side had already presented several versions of the pipeline route (24).

The Minister believes the connection could become a starting point for the implementation of the Nabucco Pan-European gas pipeline and will be built according to the technical standards of the project. The Bulgarian government expects that the implementation of the gas connection between Bulgaria and Turkey will be financially supported by the EU with aid from the budget of 200 million euro allocated for the construction of the Nabucco pipeline. In October 2010 the Prime Minister B. Borisov stated that he had conferred with the European Commissioner for Energy G. Oettinger about the possibility of getting from the EC funding of 60 - 65 million euro for the construction of the Bulgarian - Turkish gas connection (25).

Another direction of the Bulgarian regional energy policy is the cooperation with Romania. In February 2009 Bulgaria and Romania agreed to carry out a co-investment study for the construction of a cross-border pipeline connecting the cities of Rouse and Giurgiu located on the opposite banks of the Danube. In July 2009 the Bulgarian government included the pipeline to Romania on its list of energy sites of national importance. In March 2010 the EC decided to grant for the project a financial aid worth 8.9 million euro. In November 2010 it was announced that the Bulgarian state-owned energy company Bulgartransgas and its Romanian equivalent Transgas worked out a road map for building up the gas connection across between Rouse and Giurgiu in Romania.

Meanwhile, the Energy Ministers of Bulgaria and Serbia signed in Brussels an agreement for the construction of a pipeline that connects the gas transmission networks in the Black Sea and the European energy market. The length of the pipeline is 180 km and the capacity is 2 billion cubic meters of natural gas. The project should be completed by 2013 and the costs are estimated to be 120 million euro. Bulgaria will contribute 60 million euro which is included in the budget of Operational Program "Regional Development". The co-financing on the Serbian side will be provided from its EU pre-accession funds.

Till the end of 2010 most of the other Balkan countries have signed a number of agreements and in some cases have even succeeded in commissioning a few local pipelines connecting their energy systems. The same process has been under way in

countries outside the Balkans - Hungary, Austria, Italy, etc. One of the projects already implemented is the Arad - Szeged pipeline. It officially entered into operation in mid-October 2010 and connects the gas systems of Romania and Hungary. Its total length is 107 km and it is to become part of the Nabucco Pan-European pipeline. By completing these projects the countries in the region aim to diversify the sources of supply of natural gas and to reduce the high degree of dependence on Russia.

In 2003 the Swiss energy company EGL Group announced its plan to construct a gas pipeline that goes from the Balkans across the Adriatic Sea to reach Italy. The project was called **Trans – Adriatic pipeline (TAP)** (See **Attachment № 6 - a detailed map and basic facts about this pipeline**). Initially two possible route options were studied – the first one was from Bulgaria via Romania to Albania and the second one was from Greece to the Albanian coast of the Adriatic Sea. The latter one was favoured in the end.

The pipeline starts from the port of the Greek city of Thessaloniki, crosses the territory of Albania and by a 115-km- long underwater connection in the Adriatic Sea it reaches the port near the city of Brindisi in Italy. The pipeline runs parallel to the route of ITGI between Turkey and Italy and will transport natural gas from the Caspian basin and the Middle East to the European energy market.

In February 2008 EGL Group and the Norwegian energy company Statoil signed an agreement to set up a joint venture called Trans Adriatic Pipeline AG, which will develop, build and run the pipeline. In July 2010 a German energy company, E.ON Ruhrgas, joined the project. EGL Group and Statoil hold a share stake of 42.5 % each in the capital of the joint project company. The stake of E.ON Ruhrgas is 15%. The pipeline will be 520 km long and will have a capacity of up to 20 billion cubic meters of natural gas. The expected costs for its construction are \$ 2.3 billion (1.8 billion euro). The pipeline should become operational in 2016 – 2017.

Its derivation is **the Ionian - Adriatic gas pipeline** (See **Attachment № 7 - a detailed map and basic facts about the project**). Its construction is an outcome of the intergovernmental declaration signed on September 25, 2007 between Albania, Montenegro and Croatia. The pipeline starts from the Albanian city of Fier and has the seaport of Ploce in Croatia as its destination. The length of the pipeline is 410 km altogether, of which 170 km are on Albanian territory, 100 km run through Montenegro

and 140 km go across Croatia. It has a capacity of up to 10 billion cubic meters of natural gas per year. Its construction costs are to be 230 million euro and the three participant countries will jointly fund the implementation of the project. Albania will contribute 90 million, Montenegro – 60 million and Croatia – 80 million euro. The construction itself will be carried out by EGL Group and the Croatian gas transmission operator Plinacro Ltd. The project should be completed approximately at the same time when the construction of TAP ends.

Another pipeline that will cross the Balkans is called **White Stream** and was put forward by then Prime Minister of Ukraine Yulia Tymoshenko in 2005 (See **Attachment № 8 - a detailed map and basic facts about it**). It will deliver natural gas from Azerbaijan to the Georgian port of Supsa, from where it could follow two different routes - the first option is to cross the Black Sea and reach Constanta in Romania; the second option is to connect Supsa with Crimea in Ukraine and further by an underwater connection across the Black Sea to go to Constanta.

In the first option the land connection between Supsa and Constanta will be 1 105 km long whereas in the second option the land and underwater sections from Crimea to Constanta will be 620 km long. In the end, the total length of the pipeline could come out to be 1 238 km. The pipeline is planned to transport initially 8 and later on up to 32 billion cubic meters of natural gas per year. The project should be implemented by 2016.

A modified version of the White Stream gas pipeline came to the fore in September 2010 when state-owned energy companies from Azerbaijan, Georgia and Romania signed a memorandum on a project to transport liquefied natural gas. Hungary also expressed interest in taking part in the project called **the Azerbaijan - Georgia - Romania Interconnector (AGRI)**. Its route coincides with the first option of the White Stream project. The difference is that in the case of AGRI tankers will be used for the transportation of the liquefied gas.

4 NABUCCO GAS PIPELINE

The Nabucco pipeline is one of the largest Pan-European energy projects (See **Attachment № 9 - a detailed map and basic facts about the project**). It will cross the territory of Turkey, Bulgaria, Romania, Hungary and Austria. In the autumn of 2010 it was announced that the Republic of Macedonia was willing to join Nabucco too. Fatmir Besimi, the Macedonian Minister of Economy, stated that the country's participation in the project could enhance the energy security and diversify its natural gas imports (26).

Some Czech energy companies expressed the desire to build up a 60-mile-long connection between the southern part of the country and the Nabucco section in Austria. The following companies are to take part in the construction of the pipeline: Transgaz (Romania), Bulgargaz (Bulgaria), Botas (Turkey), OMV (Austria), MOL (Hungary) and RWE (Germany) which became the sixth participant in the project in February 2008. Gaz de France showed interest in being involved as well but Turkey opposed to its participation. The share stake for each of the six companies constituting the Nabucco Gas Pipeline International GmbH (a Vienna registered company for the implementation of the project) equals 16.67%.

The length of the pipeline is 4 042 km and its route starts from Ahiözü, Ankara Province in Turkey, crosses the territory of Bulgaria, Romania and Hungary and reaches Baumgarten an der March - a major energy hub in Austria serving as a transit center for approximately one third of the imported Russian natural gas to Western Europe.

In Ahiözü Nabucco will be connected to several other pipelines which will play the role of its feeders. Around two-thirds of its length (2 730 km) will be on Turkish territory, 412 km - in Bulgaria, 469 km - in Romania, 364 km - in Hungary and 47 km - in Austria. The pipeline is planned to carry 31 billion cubic meters of natural gas supplied from the Caspian region. According to the initial schedule the pipeline construction should have begun in 2009 and be completed by 2013 – 2014.

The proposal for the Nabucco project dates back to February 2002 when the first talks involving Austrian and Turkish companies took place. A few months later (June 2002) five of the above mentioned companies signed a protocol, followed by a cooperation agreement (October 2002). Another three years later (June 2005) the partners

concluded a joint venture agreement. The first ministerial conference on Nabucco was held in Vienna on June 26, 2006 when a common declaration was adopted.

The EU has been supporting the construction of the Nabucco pipeline since the very onset. In 2003 – 2004 the EU funded a series of feasibility studies regarding the market, economic and financial dimensions of the project. Later, the EC declared its readiness to provide financial aid for its construction. At the same time the project was given an important role in the EU energy strategy aimed at assuring safer and more diversified imports of oil and natural gas. The joint statement of the first ministerial conference in Vienna in June 2006 was signed by the then European Commissioner for Energy Andris Piebalgs.

In December 2007 the former Dutch Foreign Minister Jazias Van Aartsen was appointed by the EC as coordinator of the Nabucco project. The nomination was a follow-up of the efforts to activate the implementation of the new guidelines for Trans-European Energy Networks (TEN-E) laid down by the EU institutions in September 2006.

In its Second Strategic Energy Review published a year later (November 2008) the EC proposed an EU Energy Security and Solidarity Plan featuring the construction of a Southern Gas Corridor bringing gas from the Caspian and Middle Eastern sources. The corridor will support the EU in achieving its goal of securing further gas supplies and meeting growing energy needs (27). In February 2009 J. Van Aarsten included Nabucco among the four pipelines determined “to be of strategic importance for the EU” (28). The other three are: ITGI, White Stream and Trans Adriatic pipeline. The EU hopes that Nabucco alone will provide for around 5% of its domestic needs of natural gas (29).

Despite the EU involvement, the progress achieved in the implementation of the Nabucco project for the first 5-6 years was relatively modest. Among the main obstacles were the ongoing controversies between the participating companies and the almost insurmountable difficulty to secure the necessary quantity of natural gas for the pipeline. The latter problem turned out to be quite complex.

The countries from the Caspian region were not able to guarantee long-term supply of gas. Moreover, some of them were reluctant to cooperate due to their close affiliations

with the energy market and policy of Russia. Another problem was the increasing costs for the project - initially estimated at 4.4 billion euro, they have been subsequently corrected in an upward direction. In 2008 the costs reached 7.9 billion euro and according to the latest estimates they amount to almost 9 billion euro (30).

The crisis in the natural gas supply from Russia across the territory of Ukraine to Central Europe in January 2009 led to the necessity of speeding up the Nabucco project by the participating countries. A new ministerial conference addressing the issue was held in Budapest the same month. However, a substantial progress was made only several months later, in May 2009, when in Prague the EU and the leaders of Azerbaijan, Turkey and Georgia signed a joint declaration for accelerating the project implementation.

Under the pressure exerted by the other participants, Turkey dropped its demand to use for its own needs up to 15% of the gas quantity that will be transported by the Nabucco pipeline across its territory. On its part, the EU pledged a financial support of 200 million euro for the construction of the pipeline. A final decision on the allocation of the funds was made in March 2010, with the express condition that they will be spent for a period no longer than a year and a half, i.e. by the end of 2011.

The European Investment Bank (EIB), the European Bank for Reconstruction and Development (EBRD) and the World Bank (WB) have shown willingness to offer credits for the project too. Meanwhile, the participant countries have declared their intention to kick off the construction of the pipeline in 2011 and to complete it by 2014. An important step was the intergovernmental agreement for the implementation of the project signed on July 13, 2009 in Istanbul by the Prime Ministers of Turkey, Austria, Hungary, Romania and Bulgaria. The event was attended by the European Commission President José Manuel Barroso, the then European Commissioner for Energy A. Piebalgs, the United States Special Envoy for Eurasian Energy Richard Morningstar and the influential member of the US Senate Committee on Foreign Relations Richard Lugar.

A week prior to the signing of the agreement the Bulgarian government put the Nabucco pipeline on the list of the energy projects of national importance. Unlike the other energy projects and especially the controversial Burgas-Alexandroupoli pipeline,

the participation of the country in Nabucco was strongly promoted by both the former and present Bulgarian governments.

The pipeline is considered as one the top priority energy projects for Bulgaria. The Bulgarian Foreign Minister Nikolay Mladenov declared at his meeting in Vienna in November 2010 with the Managing Director of Nabucco Gas Pipeline International Reinhard Mitschek that the pipeline was “a priority project for Bulgaria as it will bring about a diversification of the natural gas supplies and will reduce the country’s energy dependence”. Furthermore, the Bulgarian Foreign Minister is certain that Nabucco is “a key project that will ensure safety in the gas imports to the whole continent.” (31).

The Bulgarian National Assembly ratified the agreement on the construction of the Nabucco gas pipeline on 3 February 2010. Hungary was the first participant country to ratify the agreement on 20 October 2009. Romania did so on 16 February 2010 and Turkey came in last ratifying it on 4 March 2010. In the summer R. Mitschek made the forecast that the engineering and technical preparations for the implementation of the project would start by the end of 2010. He also expressed confidence that by 2011 the pending issues of finding and financing the necessary sources of natural gas for the pipeline would be resolved. He set 2011 as a realistic start for the construction of the Nabucco southern section which should be ready in three years (32).

Despite these optimistic statements, at the end of 2010 there were still unresolved issues concerning the implementation of the project. By that time the effort to find the necessary sources of natural gas for the functioning of the pipeline has rendered only partial results. In June 2010 Turkey and Azerbaijan signed an agreement on the transit supply to Europe of 10 billion cubic meters of Azeri natural gas across the Turkish territory per year.

The source will be the newly discovered gas field "Shah Deniz 2". Yet, the agreement will come into effect no earlier than 2016 and what is worse, the negotiated annual quantity of natural gas accounts for less than one third of the capacity of Nabucco. In early September 2010 the Russian Prime Minister V. Putin described the chances of building up the pipeline as "slim". He identified the lack of sources of natural gas necessary for the operation of the tube as the main obstacle to the implementation of the project. He emphasised on an additional impediment - the ongoing territorial

dispute between Azerbaijan and Turkmenistan in the Caspian Sea - that would make the construction of the facility difficult or even impossible (33).

Later, another high ranking Russian official, the Deputy Prime Minister Igor Sechin, made a similar pessimistic forecast saying that the Nabucco pipeline had “no prospects” (34). These statements were part of the psychological propaganda led by Russia against the project whose goal is to persuade the European countries that without its participation the European energy projects are doomed. The core of the Russian propaganda strategy is that it is only Russia that has and therefore can ensure long-term and safe supplies of natural gas necessary for the operation of the major European pipelines.

The same kind of propaganda has been applied by the Russia’s competitors. The rivalry is especially intense with respect to the two biggest Pan-European gas pipeline projects – Nabucco (Russia does not participate in it) and South Stream (Russia plays a leading role in its implementation). In November 2010 the European Commissioner for Energy G. Oettinger publicly acknowledged that these two projects are competitive to each other (35).

Despite the difficulties and the delay in its implementation the Nabucco project has been progressing. The day when V. Putin made his pessimistic statement about the future of the pipeline, the shareholders in Nabucco Gas Pipeline International signed in Brussels a mandate letter with the EIB, the WB and the EBRD formalising the conditions under which the three institutions will conduct their appraisal (a cost-benefit analysis and an environmental impact assessment) of the project.

Meanwhile, R. Mitschek expressed optimism as to the early resolution of one of the most critical issues the implementation the project is faced with – availability of the necessary quantities of natural gas. In his words the negotiations with the consortium exploring the Shah Deniz gas field in Azerbaijan are advancing well and a contract for gas supply is expected to be signed in the first quarter of 2011. The Shah Deniz field will provide about 8 billion cubic meters of natural gas and approximately the same quantities are expected to come from Iraq. However, this represents just a half of the supply of gas necessary for the pipeline. The goal is for the other half to be contracted by mid-2011 (36).

A positive sign for settling the issue came from the Vice Premier of Turkmenistan (November 22, 2010) who claimed that his country could provide up to 40 billion cubic meters of natural gas per year which far exceeds the planned capacity of the pipeline (37). According to R. Mitschek the ultimate decision on the start of the pipeline construction will be made after contracting all the necessary gas supplies by the spring of 2011.

At his visit to Sofia in November 2010 the spokesman for the project company Christian Dolezal said that upon the completion of the environmental impact assessment of the Nabucco pipeline, the WB, the EIB and the EBRD would consider whether to grant loans of 4 billion euro for the construction of the facility. The remaining part of the funding is supposed to come from credit agencies and commercial banks (38).

R. Mitschek's estimations reveal that about 70% of the overall financing will be provided through loans, which in turn means that the six partners should provide the remaining 30%, or 2.4 billion euro. Apart from this, each participating country must issue a state guarantee amounting to 2 billion euro. As to Bulgaria, the government should provide for the pipeline construction on the country's territory 2.4 billion euro – 400 millions of them as direct investments and other 2 billion euro in form of bank guarantees (39). The requirement for a state bank guarantee has provoked a negative response by the Bulgarian Prime Minister who has asked the EC to exclude these costs from the current budget deficits of Bulgaria and the other states taking part in the project (40).

On this occasion B. Borisov made a critical remark at an international energy conference in Sofia saying that Bulgaria "is doing its best to speed up to the utmost the implementation of the project but all pending issues are settled very slowly"(41). This was not the first time the Bulgarian Prime Minister had criticized the way in which the project was implemented. A month earlier he expressed his dissatisfaction with the fact that the EC hadn't yet answered Bulgaria's request for a 65-million-euro aid for the construction of the Bulgarian – Turkish gas connection intended to be part of Nabucco. B. Borisov viewed this as an underestimation of Nabucco by the EC and insisted that the project "be officially included on the agenda of the EU." (42).

At the same time it has become clear that the building of the pipeline is scheduled to begin in 2012 and it is expected to be in operation in 2015 (43). This means a delay of

one year compared to the commencement and completion date of the project announced a short time ago. On November 12, 2010 it was revealed that the representatives of Nabucco Gas Pipeline International had completed the consultations with the Bulgarian regional authorities for the pipeline route. The 412-km long section of Nabucco on Bulgarian territory will go through nine districts, 24 municipalities and 112 cities. According to the spokesman for the project company C. Dolezal, the construction of Nabucco on Bulgarian territory will lead to an inflow of foreign direct investments of around 400 million euro and the creation of more than 1000 new jobs (44).

Initially Nabucco's main competitor was **the proposed gas pipeline called Blue Stream 2**. This project was based on the extension of the Blue stream pipeline already existing between Russia and Turkey. The proposal was put forth by the then Russian president V. Putin in August 2005. The Blue Stream pipeline (See **Attachment № 10 - a detailed map and basic facts about it**) is a project that was launched in 2001 and was completed two years later (February 2003) when the first supply of Russian oil was transported to Turkey. The length of the facility is 1 213 km and the costs for the works were 3.2 billion dollars. The gas pipeline was officially commissioned in November 2005. Its capacity is 16 billion cubic meters of natural gas per year.

V. Putin's proposal from August 2005 was to build up a new underwater section that would run parallel to Blue stream. The pipeline originating in Turkey had to go to Bulgaria and across Romania, Serbia and Hungary to reach Austria. Obviously the proposed Blue stream 2 was designed to have the same route as that of the Nabucco pipeline. In fact, it was a Russian alternative to Nabucco. The Russian proposal, however, was welcomed by only a few European countries. One of them was Hungary.

In June 2006 the Russian giant Gazprom and the Hungarian energy company MOL signed an agreement on carrying out a feasibility study for the project. The Hungarian company expressed an interest in becoming the main distribution center for the gas deliveries and in building up an underground gas storage facility having a capacity of up to 10 billion cubic meters of gas.

Following the lack of sufficient support from the other European countries this project was temporarily shelved before being revived almost four years later. In May 2009, the Prime Ministers of Russia, Turkey and Italy agreed to extend the Blue stream pipeline

to the Italian coast. The proposed capacity of the new pipeline was 31 billion cubic meters of natural gas annually. By the end of 2010 the project was in the exploring stage.

5 SOUTH STREAM GAS PIPELINE PROJECT

The **South Stream** pipeline is the largest project ever planned for the transportation of natural gas to Europe through the Balkans. (See **Attachment № 11 - a detailed map and basic facts about the project**). It will be implemented jointly by the Russian energy giant Gazprom, which will supply the necessary fuel, and the Italian energy company Eni SpA. The project was launched on June 23, 2007 in Rome, when high ranking representatives of both energy companies signed a Memorandum of Understanding on the construction of South Stream.

The next step was the signing in Moscow on November 22, 2007 of an agreement about the setting up of a joint project company for commissioning the pipeline. The initial task was the compilation of a marketing and technical appraisal of the project. Two months later (January 18, 2008) was registered South Stream AG with equal share stake in its capital on the part of Gazprom and Eni SpA. At the end of 2009 the French company Electricité de France expressed a desire to join the project. In the spring of 2010 it was announced that the French company will have a 20% stake in the project's capital.

The route of the South Stream pipeline starts from the Pochinki compressor station in Russia and ends in the Beregovaya compressor station near the Black Sea town of Dzhubga. From there a 900-km long underwater section goes to the Bulgarian coastal city of Varna. On the way to Varna the connection crosses the Turkish territorial waters in order to avoid the exclusive economic zone of Ukraine. From Varna the pipeline goes to the northern Bulgarian city of Pleven from where it splits in two branches. The one continues southwest towards Greece and across the Ionian Sea reaches southern Italy.

The other branch goes northwest towards Serbia, Hungary ending in the Baumgarten gas hub in Austria. Another possible route is from Serbia across Hungary and Slovenia to Baumgarten in Austria. Yet another option is a connection starting from Serbia, crossing Croatia and ending in Banja Luka and Sarajevo in Bosnia and Herzegovina. The total length of the longest pipeline section is 3 700 km, of which 1 000 km run under the Black and Adriatic Sea. The link from the city of Varna to Baumgarten is 2 700 km long. The costs for the project are estimated at 8.6 billion dollars.

In 2008 Russia signed separate agreements with Bulgaria (January 18), Serbia (January 25), Hungary (January 25) and Greece (April 29). On May 15, 2009 in Sochi the gas companies from Russia, Italy, Bulgaria, Serbia and Greece signed an agreement on the construction of the South Stream pipeline. On August 6, 2009, the Prime Ministers of Russia and Turkey signed a protocol on the passage of the pipeline across the Turkish territorial waters. On November 14, 2009 Slovenia also joined the project. The same did Croatia (March 2, 2010) and Austria (April 25, 2010).

As a response to the desire expressed by Romania to take part in the project there were held in 2009-2010 several meetings between high ranking Romanian government officials and Gazprom. In the spring of 2010 Romania presented the necessary information for conducting a techno-economic assessment of a future construction on its territory of a branch of the South Stream pipeline.

On October 13, 2010 Gazprom's CEO Aleksey Miller signed in Bucharest a memorandum for carrying out a techno-economic analysis of the possible construction of a South Stream branch to Romania, with the next step being an intergovernmental agreement between the two countries. In June 2010 the Macedonian President George Ivanov declared that Gazprom had given a positive response to his country's willingness to join the project (45). Therefore, the number of Balkan countries which are to participate in the South Stream pipeline could become eight.

In May 2009 Gazprom signed separate agreements with the Bulgarian Energy Holding (BEH), the Greek company DESFA, the Serbian state-owned company Srbijagas as well as an annex to the contract with Eni SpA. The goal was to speed up the implementation of the project. A consensus was reached that the capacity of the pipeline should be doubled - from 31 (as initially set) to 63 billion cubic meters per year. According to Gazprom's CEO A. Miller once South Stream becomes operational Europe will get around 35% of its imported natural gas through that particular pipeline (46). In October 2009 V. Putin was optimistic about the construction of South Stream saying it will start in 2011 and end by 2013. The Russian Premier even predicted that the project would be completed earlier than the Nord Stream gas pipeline which connects Russia with Germany via the Baltic Sea (47).

Like Nabucco, the other major Pan-European project, the implementation of South Stream also faced significant difficulties. South Stream was designed as an alternative

to Nabucco and reflected the of Russia's ambitions to maintain its dominant position on the European energy market. However, the competition between the leading participants in the two projects created tension which affected the completion of both pipelines.

Although the EU does not oppose the South Stream project, Brussels openly leans in favour of the Nabucco pipeline. The main reason is that by constructing Nabucco the EU expects to reduce its high degree of dependence on the imports of natural gas from Russian. That dependence could become even greater without an alternative to both South Stream and Nord Stream.

On the other hand, the simultaneous implementation of all the three projects may as well lead to oversupply of natural gas on the European market and therefore to a real danger of the non-viability of the pipelines. Precisely such concerns underpinned the statement of Eni SpA's CEO Paolo Scaroni who proposed in March 2010 that the Nabucco and South Stream projects should be merged. He explained that such a move would reduce the huge investment costs and significantly increase the total financial revenues from the gas transportation (48).

His statement provoked public allegations on the part of Stanislav Tzigankov, International Relations Director at Gazprom, who said that Eni SpA didn't fulfill its obligations under the project terms and caused disruption in the preparatory works on the pipeline maritime route. Meanwhile, in the Russian edition of the authoritative **Newsweek** magazine there appeared a forecast that South Stream could be even dropped off (49).

In September 2010 Joschka Fischer, the former German Foreign Minister, presently a consultant to the Nabucco project, declared that from a political point of view South Stream was not in Europe's interest and was economically pointless(50). Later on, in early November 2010, Stefan Yudich from the German energy company RWE declared that "they (Gazprom and other companies involved in South Stream) have no concept as to the supply, financing and even the route of the pipeline." (51).

Those statements were part of the propaganda campaign led by some representatives, including even the Russian Prime Minister V. Putin, of the competing projects. The

truth is that despite the difficulties and the delay, in 2010 there was achieved a significant progress in the preparation for the implementation of South Stream.

In the spring of 2010 Gazprom and Eni SpA announced they had overcome the controversies, declared their "total commitment" to the project and promised to speed it up. In September the Executive Board of Gazprom made it clear that the implementation of the South Stream project was going according to schedule, the techno-economic appraisal would be ready by February 2011 and the pipeline would come in operation by December 2015 (52).

In 2010 there was achieved progress regarding Bulgaria's participation in South Stream. Until the autumn there has been some uncertainty about the country's involvement which affected the preparatory works. In fact, Bulgaria has a crucial position in the already approved route of the pipeline. The Black Sea port of Varna will be a starting point for the European section of the pipeline which will be divided into two branches - to the northwest and to the southwest. Provided that Romania joins the project, the port of Varna could serve as a transit center for the third pipeline branch towards the north.

Bulgaria was the first country that signed an agreement with Russia for taking part in South stream. The agreement was ratified by the Bulgarian National Assembly six months later (July 25, 2008). But unlike the previous Bulgarian government, the present cabinet showed signs of hesitation concerning the country's participation in South Stream. In the autumn of 2009, Prime Minister B. Borisov stated that Bulgaria would send to the EC all the documentation on the key energy projects, including the South Stream pipeline, with a request to be examined by European experts (53).

In March 2009 he declared that "all the projects of the country with Russia concerning natural gas and electricity (i.e. the common energy projects, mainly the participation in South Stream and the construction of the second nuclear power plant in Belene) would go ahead only upon getting a positive feedback from the EU" (54). In the spring and early summer the Bulgarian PM made a few new statements on the issue that fueled media speculations of a possible withdrawal of Bulgaria from South Stream.

Russia's response was prompt. At his first meeting with B. Borisov in Sochi in September 2009, V. Putin declared that Russia expected Bulgaria's quick and clear

response regarding its participation in the joint energy projects, including the Burgas - Alexandroupoli and South Stream pipelines. He warned that if there was no such reply, Russia would be at liberty to seek alternative options (55).

An indication that Russia is ready to act promptly was the signing in the summer of 2009 of an agreement with Turkey on the joint construction of the Samsun - Ceyhan oil pipeline, competitive project to the Burgas – Alexandroupoli pipeline. Another step in the same direction was the protocol signed with Turkey in August 2009 for the route of South Stream across the Turkish territorial waters in the Black Sea. And last, Gazprom announced that the company had alternative options for the pipeline route if Bulgaria went back on its participation in the project.

One of the optional routes was the territory of Romania. In an interview with **the Moscow Times** the head of Gazprom A. Miller publicly admitted for the first time that the pipeline route could be altered to pass across the Romanian territory (56). In June 2010 Bulgaria's partners asked the Bulgarian government to speed up the process of corporate decision making concerning the country's participation in the project.

A change in the attitude of the Bulgarian government came in the summer of 2010. An agreement to lay out a roadmap for the implementation of the project on Bulgarian territory was reached at the meeting held in Sofia on July 6, 2010 between the first Russian Deputy Prime Minister Viktor Zubkov and the Bulgarian Prime Minister B. Borisov. The document was officially signed on July 17, 2010.

By February 2011 Bulgaria and Russia are expected to set up a joint company for the construction of the Bulgarian section of the pipeline. The costs for the works will amount to 835 million dollars and will be divided between the two countries. It was decided that the existing Bulgarian gas transmission network would be used for the transportation of nearly one third of the natural gas (17 billion cubic meters) and new pipes will be installed for the remaining volume of 46 billion cubic meters. The facility on Bulgarian territory will be owned in equal parts by both sides (57).

Meanwhile, the Bulgarian PM claimed that his government had no longer any hesitation about the participation in the project. In October and November 2010 B. Borisov described it as “extremely important for Bulgaria” and linked the construction of the pipeline with the objective to ensure long-term energy security for the country which

might otherwise be confronted with serious difficulties in this field in 2020. He also highlighted the financial benefits Bulgaria would gain as a result of its participation in the project that was described as “totally profitable”. In addition to that, the investment costs the country should paid for the pipeline construction will be “acceptable and will not exceed 400 - 500 million euro” (58).

On October 15, 2010 during the visit of Gazprom’s CEO A. Miller to Bulgaria it was decided to speed up the implementation of the Bulgarian section of the pipeline. A week later the Prime Ministers of both countries agreed to set up a joint stock company with the primary purpose of producing a technico - economic appraisal of the pipeline on Bulgarian territory. On the following day Gazprom and BEH signed a general agreement for setting up a joint stock company with equal share stake of each company. The new entity will be in charge of the design, construction and operation of the Bulgarian section of the pipeline.

The agreement was approved by the Bulgarian Council of Ministers on 10 November and was officially signed in Sofia three days later (November 13, 2010) in the presence of the Prime Ministers of Russia and Bulgaria. In Vladimir Putin’s view, the two documents – the Statutes and the Agreement between the shareholders - have actually triggered the works on the Bulgarian section of the pipeline. A month later (December 2010) the joint Bulgarian - Russian company called South Stream Bulgaria was registered in Sofia.

After the signing of the agreement the Russian Premier evaluated the future financial benefits for Bulgaria at 2.5 billion euro per year. This is a highly exaggerated figure. According to the Bulgarian Minister of Economy, Energy and Tourism T. Traykov the real benefits for the country from the participation in South Stream will amount to 400 million euro annually (59). In fact, Bulgaria could expect the annual revenues from the fees to be no more than 150 - 160 million euro annually. Other benefits could come from the lower prices of the imported Russian gas and the additional foreign investments connected with the project. As a whole, the potential gains for Bulgaria from the participation in South Stream could reach up to 700 – 800 million euro over the first few years.

Some shadow over the progress on the project was cast by Marlene Holzner, spokeswoman for the European Commissioner for Energy G. Oettinger. On behalf of

the EC she asked Bulgaria to make amendments to the agreement on the participation in South Stream signed with Russia in 2008. The reason for the request was that the claim that agreement violates the EU legislation which requires that the Bulgarian government provide equal conditions for all foreign companies willing to use the pipeline on Bulgarian territory (60).

Upon the signing of the agreement, A. Miller declared that Romania could no longer take the place of Bulgaria in the implementation of the project. This statement was an admission that Russia had been seriously considering such an option in the event that Bulgaria had decided to withdraw. On the other hand, the agreement with Bulgaria made Gazprom's CEO venture a more optimistic forecast about the future of the pipeline.

A. Miller believes that the headway gained on the issue of the Bulgarian participation would allow for the project to be completed four months ahead of schedule. Thus, instead of the already announced date, i.e. December 31, 2015, the pipeline could come into operation in the summer of 2015. Yet A. Miller refrained from specifying the exact costs for the pipeline merely saying that they would become clear in the first quarter of 2011 (61).

At the end of November 2010 Leonid Chugunov, the Head of Project Management Department at Gazprom revealed that the costs for the construction of the offshore section across the Black Sea would reach 10 billion euro, while for the whole land connection - 5.5 billion euro. This means that the overall costs for the project may amount to 15.5 billion euro and will be almost twice as high as the initially estimated costs. (62). Therefore South Stream is set to become the most expensive of all proposed Pan-European pipelines.

CONCLUSION

The oil and gas pipelines that will cross the Balkans will have an important economic and geopolitical impact on the whole region. Practically all the Balkan countries will be involved in the projects and will in the long run benefit from the exploitation of the pipelines. If all the projects are implemented, the region will radically change its status on the European energy market turning into one of the major transit corridors for the transportation of Russian and Caspian oil and gas to Central and Western Europe. Annually, about 230 million cubic meters of oil and 150 - 160 billion cubic meters of natural gas could be carried across the Balkans. It means that the energy supplies passing through the region could meet respectively about 5 – 7% of the oil and 45 - 50% of the gas needs of Europe.

The total value of the investments necessary for the implementation of all the oil and gas projects in the Balkans is roughly 10 - 15 billion euro. The sum could be considerably higher if all additional investments are taken into account - the supplementary local and foreign investments in infrastructure, in other related activities, etc. It will have a sustainable positive economic and financial effect on the overall development of the region. The construction and the exploitation of the pipelines are expected to create 40 - 50 thousand new jobs and the revenues from the energy transit fees will amount to hundreds of millions euro per year. Nabucco and White Stream pipelines will play a key role. The Balkans will become a transit area for two of the three largest new gas pipelines which are to become crucial for meeting the increasing demands of Europe for natural gas in the near future.

Both pipelines will be of vital importance for the stability and security on the European and regional energy markets. The third largest new pipeline is Nord Stream. It will transport natural gas from Russia to Germany and other countries of Central and Western Europe via the Baltic Sea. (See **the map of the three pipelines**).

Figure 3. THE ROUTES OF THE FUTURE THREE BIGGEST PAN - EUROPEAN GAS PIPELINES



The achievement of this goal will be considerably more difficult and time-consuming than it was initially expected. By and large, the implementation of practically all the projects spans over a long period of time – it usually begins with the point when they are proposed, goes through the signing of all necessary agreements and finishes with the construction itself. Most of the oil and gas pipelines across the Balkans were initially planned to start in the second half of the present decade of the century and to be over until 2010 or in the first couple of years of the new decade at the latest.

In fact, by the end of 2010 only one of these projects has been partially implemented: the Turkish - Greek section of the gas connection from Turkey via Greece to Italy. At

the end of 2010 almost all major energy projects in the Balkans were in the preparation phase and their construction had not even started. Their implementation faced numerous obstacles and challenges. The toughest challenge proved to be the creation of the necessary financial and economic potential for their successful realization on the basis of common and long-term interests of all countries involved.

A crucial issue was how to find sufficient and reliable sources of oil and natural gas for the proper functioning of the pipelines. Some of the proposed projects, especially the biggest two - Nabucco and South Stream - reflected the greatly diverging energy policies of the countries and the rivalry between Russia and some of the leading EU member states on the European energy market. In the context of the strong competition and due to the lack of the necessary financial resources a few of the proposed energy projects were to be shelved or merely dropped. A major reason for the delay of all projects was the global financial and economic crisis in 2009 – 2010 which seriously affected the Balkan countries.

At the beginning of 2011 the Balkans has not yet become a transit energy corridor for bringing Russian and Caspian oil and gas to Central and Western Europe. The countries in the region are practically in the same dependent situation - they rely heavily on Russia for oil and especially natural gas imports as they did 10 – 15 years ago. A somewhat partial exception is Turkey which is expected to play a leading role as a transit corridor and to be transformed into one of the connecting units for some of the largest Pan - European oil and gas pipelines.

This process has already begun as two large pipelines from Russia and Caspian region to the Turkish territory came into operation. Both of them will serve as important connecting links or feeders for some of the oil and gas facilities across the Balkans towards Central Europe. The first one is the **Baku - Tbilisi – Ceyhan oil pipeline** (See **Attachment № 12 - a detailed map and basic facts about the project**). Its construction started back in September 2002 and was completed in October 2005.

Energy companies from Azerbaijan, Georgia, Turkey, Greece, France and England took part in the implementation of the project. The route of the pipeline starts at Sangachay Caspian sea terminal in Azerbaijan and across Georgia reaches the Ceyhan oil terminal on the Mediterranean coast of Turkey. The facility was officially commissioned in July 2006 and has a capacity of up to 1 million barrels of crude oil per

day or approximately 50 million tons of oil per year. Its construction costs were 4 billion dollars. The exploitation of the pipeline has a positive effect on the Turkish economy as it provides increased and safer supply of oil from abroad. Furthermore, it brings about a degree of diversification of Turkey's energy imports.

Another major energy project on Turkish territory is **the Blue Stream pipeline** which transports Russian gas by an underwater connection through the Black Sea to Turkey. Although, as a result of the direct gas connection with Russia, Turkey is bound even closer to its main foreign supplier, the new pipeline has created more stability and safety in the country's energy imports. At his visit to Turkey in August 2009 the Russian Prime Minister V. Putin proposed a modified version of the Blue Stream-2 pipeline promoted four years earlier as Russia's alternative to the Nabucco gas pipeline. His proposal was accepted by his Turkish counterpart R. T. Erdogan.

The first section of the new pipeline will run parallel to the existing route of Blue Stream across the bottom of the Black Sea. Blue Stream-2 will be connected with the Samsun – Ceyhan oil pipeline on Turkish territory and will continue towards Syria, Lebanon and Cyprus. A separate underwater pipeline from Ceyhan to Ashkelon will supply natural gas to Israel. In June 2010 V. Putin stated that because of the discovery of natural gas fields in the Israeli sea shelf this country would not participate in the Blue Stream-2 project. Owing to the Turkish – Greek section of the ITGI which came into operation in November 2007, Greece was the other Balkan country which was able to partially improve the safety of its natural gas imports.

Bulgaria might be one of the most beneficial of the Balkans countries if the European oil and gas pipelines are implemented. The routes of two of the proposed projects in the oil sector – AMBO and Burgas - Alexandroupoli pipelines will go through the Bulgarian territory. The prospect for the implementation of these projects, however, is distant and rather uncertain. So in the foreseeable future Bulgaria may benefit primarily from its participation in the Nabucco and especially South Stream energy projects.

For the time being (January 2011) the almost total dependence of the country on the imports of Russian natural gas remains unchanged. As a result of the economic crisis combined with bureaucratic setbacks the Bulgarian government hasn't succeeded in making any significant progress as to the implementation of the plans at least to connect its national gas system with that of Greece and Turkey. In November 2010 it

was announced that there was a risk for Bulgaria to be foreclosed by the EC of the already allocated funding in the form of financial aid for the implementation of these projects.

A positive sign was the symbolic start in early November 2010 of the exploration of the offshore natural gas deposits near Kaliakra and Kavarna in the Varna region. The expectations are that these sources will yield about 400 million cubic meters of gas sufficient to cover 15% of the national needs (63). Yet the achievement of this objective will take years and moreover, the domestic production is just a partial solution to meeting the country's needs of natural gas.

Having in mind the existing precarious financial and economic situation in Europe, the difficulties experienced in the construction of almost all Pan-European oil and gas pipelines across the Balkans, the prospects in this field are not unconditionally optimistic. The second decade of the century will be decisive for the completion of these projects, but this process is set to encounter serious challenges. Compared to the planned oil pipelines, the natural gas projects stand relatively better chances for being implemented.

At best, the first major pipelines, including Nabucco and South Stream, could enter into operation no earlier than in 2015 – 2016. Some of the projects, especially AMBO and Burgas – Alexandroupoli oil pipelines, have no real prospects to be implemented. Due to the lack of sound economic interest, the strong competition, the insufficient funds, the impossibility to find the necessary sources for the supply and the small market demand it might be expected that different kinds of transformation of the original plans could occur necessitating merger between some of the projects. This could eventually be the fate of even Nabucco and South Stream.

ATTACHMENTS

ATTACHMENT №1

MAP OF THE OIL PIPELINE AMBO



Basic information:

Participant countries: Bulgaria, Republic of Macedonia, Albania

Route: From Burgas across the territory of Bulgaria, Republic of Macedonia and Albania to Vlore

Length: 912 km

Capacity: 35 – 40 million tons of oil annually

Phase of implementation in the end of 2010: Frozen

Date of completion: Unspecified

ATTACHMENT № 2

MAP OF THE TRANS – BALKAN OIL PIPELINE BURGAS – ALEXANDROUPOLI

**Basic information**

Participant countries: Russia, Bulgaria, Greece

Route: From Burgas accros the territory of Bulgaria and Greece to Alexandroupoli

Length: 279 km

Capacity: up to 30 million tons of oil annually

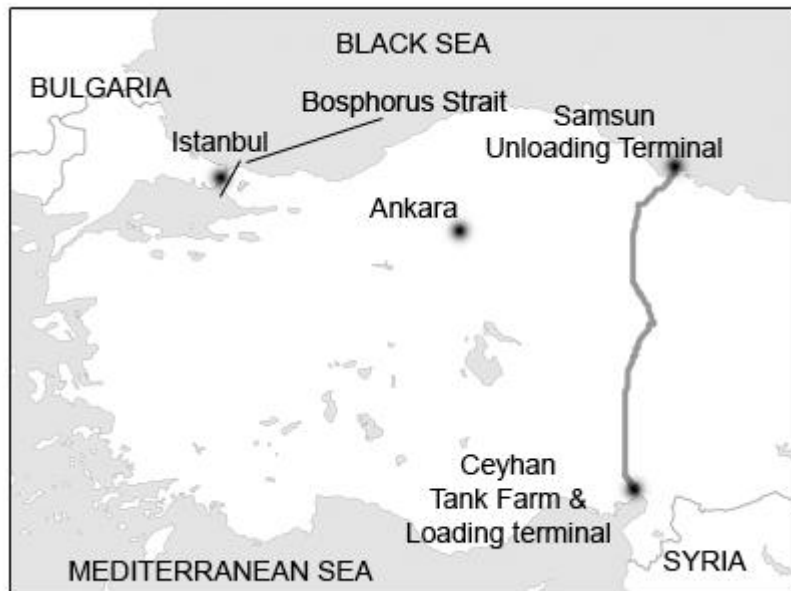
Cost: 1.5 billion euro

Phase of implementation in the end of 2010: In preparation

Date of completion: Unspecified

ATTACHMENT № 3

MAP OF THE OIL PIPELINE SAMSUN – CEYHAN

**Basic information**

Participant countries: Turkey, Russia, Italy

Route: From Samsun across the territory of Turkey to Ceyhan

Length: 550 km

Capacity: 40 – 50 million tons of oil annually

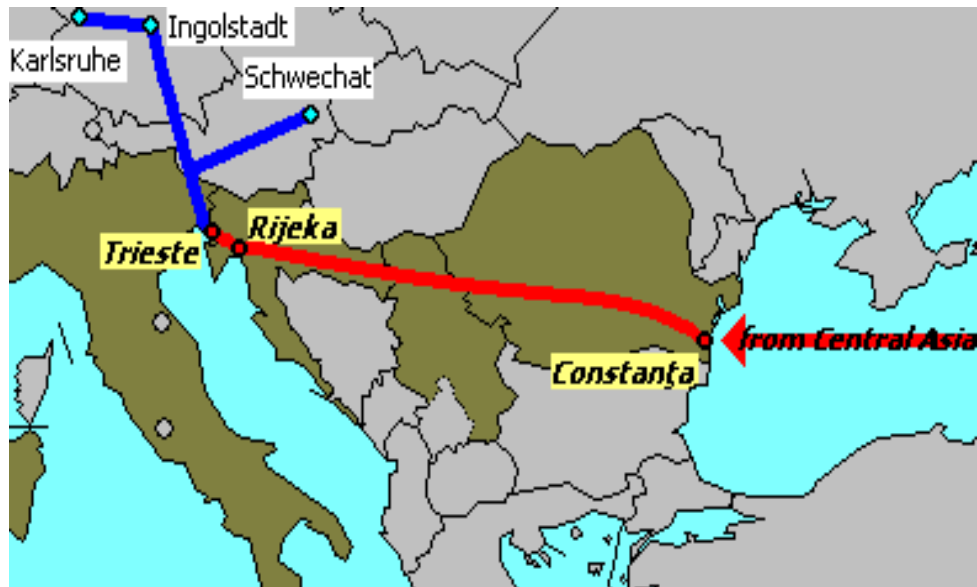
Cost: 2 billion dollars

Phase of implementation in the end of 2010: In preparation

Date of completion: 2013

ATTACHMENT № 4

MAP OF THE PAN – EUROPEAN OIL PIPELINE KONSTANTA - TRIESTE

**Basic information**

Participant countries: Romania, Serbia, Croatia, Slovenia, Italy

Route: 1 856 km

Capacity: 100 million tons of oil annually

Cost: 8 billion euro

Phase of implementation in the end of 2010: In preparation

Date of completion: 2014 – 2015

ATTACHMENT № 5

MAP OF THE GAS INTERCONNECTION TURKEY – GREECE - ITALY

**Basic information**

Participant countries: Turkey, Greece, Italy

Route: From Karacabey in Turkey via Komotini in Greece across Ionian Sea to Otranto in Italy

Length: 1 150 km

Capacity: 11.5 billion cubic meters natural gas annually

Cost: 1.2 billion euro

Phase of implementation in the end of 2010 The Turkey – Greece section entered in operation in November 2007. The Greece – Italy section is under preparation

Date of completion: 2015

ATTACHMENT № 6

MAP OF THE TRANS – ADRIATIC GAS PIPELINE FROM GREECE TO ITALY



Basic information

Participant countries: Greece, Albania, Italy, Swiss, Norway, Germany

Route: From Thessaloniki in Greece via the Albanian territory across the Adriatic Sea to Brindisi in Italy

Length: 520 km

Capacity: Up to 20 billion cubic meters of natural gas annually

Cost: 2.3 billion dollars

Phase of implementation in the end of 2010: In preparation

Date of completion: 2016

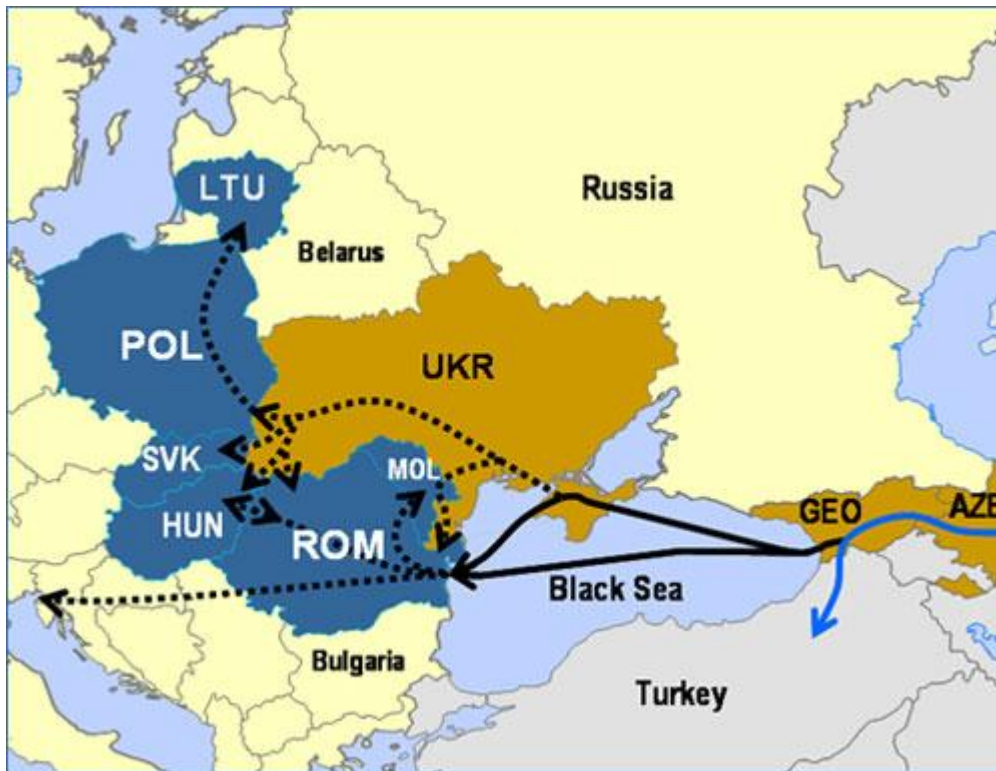
ATTACHMENT № 7

MAP OF THE IONIAN – ADRIATIC GAS PIPELINE

**Basic information****Participant countries:** Albania, Montenegro, Croatia, Swiss**Route:** From Fier in Albania across Montenegro to Ploče in Croatia**Length:** 410 km**Capacity:** 10 billion cubic meters of natural gas annually**Cost:** 230 million euro**Phase of implementation in the end of 2010:** In preparation**Date of completion:** 2015 - 2016

ATTACHMENT № 8

MAP OF THE GAS PIPELINE WHITE STREAM

**Basic information**

Participant countries: Azerbaijan, Georgia, Romania and eventually Ukraine

Route: From Azerbaijan across the Black Sea and eventually Crimea in Ukraine to Konstanta in Romania

Length: 1 105 – 1 238 km

Capacity: 32 billion cubic meters of natural gas annually

Cost: 1 – 1.5 billion dollars

Phase of implementation in the end of 2010: In preparation

Date of completion: 2015 - 2016

ATTACHMENT № 9

MAP OF THE PIPELINE NABUCCO

**Basic information**

Participant countries: Turkey, Bulgaria, Romania, Hungary, Austria, Germany

Route: From Ahiözü in Turkey across Bulgaria, Romania, Hungary to Baumgarten in Austria

Length: 4 042 km

Capacity: 31 billion cubic meters of natural gas annually

Cost: 9 billion euro

Phase of implementation in the end of 2012: In preparation

Date of completion: 2015

ATTACHMENT № 10

MAP OF THE GAS PIPELINE BLUE STREAM

**Basic information**

Participant countries: Russia, Turkey, Italy

Route: From Beregovaya compressor station in Russia across the Black Sea to Durusu terminal near Samsun in Turkey

Length: 1 213 km

Capacity: 16 billion cubic meters of natural gas annually

Cost: 3.2 billion dollars

Phase of implementation: In operation since November 2005

ATTACHMENT № 11

MAP OF THE GAS PIPELINE SOUTH STREAM

**Basic information**

Participant countries: Russia, Italy, Turkey, Bulgaria, Greece, Serbia, Hungary, Slovenia, Austria, Croatia, eventually Romania, Bosnia and Herzegovina and Republic of Macedonia.

Route: From Beregovaya compressor station in Russia across the Black Sea towards Varna and Plevna in Bulgaria. First branch from Plevna across Greece and Ionian Sea to Southern Italy. Second branch from Plevna across Serbia, Hungary, Slovenia to Baumgarten in Austria. A derivation from Serbia via Croatia and eventually to Bosnia and Herzegovina

Length: 3 700 km

Capacity: 63 billion cubic meters of natural gas annually

Cost: 15.5 billion euro

Phase of implementation in the end of 2010: In preparation

Date of completion: 2015

ATTACHMENT № 12

MAP OF THE OIL PIPELINE BAKU – TBILISI –CEYHAN

**Basic information**

Participant countries: Azerbaijan, Georgia, Turkey

Route: From Sangachai Caspian sea terminal in Azerbaijan across Georgia to the Ceyhan oil terminal on the Mediterranean coast of Turkey

Length: 1 768 km

Capacity: 50 million tons of oil annually

Cost: 4 billion dollars

Phase of implementation: In operation since July 2006

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