

DOC: GA21/EC20/REP/03

**THE TWENTY FIRST PLENARY SESSION OF THE PABSEC GENERAL ASSEMBLY
ECONOMIC, COMMERCIAL, TECHNOLOGICAL AND ENVIRONMENTAL
AFFAIRS COMMITTEE**

**REPORT ON
"COOPERATION IN THE FIELD OF ENERGY"**

RAPPORTEUR: MR. ALI ALIRZAYEV (AZERBAIJAN)

Text approved by the 21st General Assembly in Chisinau on 11 June 2003

I. INTRODUCTION

1. Energy is at the centre of economic, social and political issues around the world and the Black Sea itself. It is a factor of regional growth and socio-economic development as energy is to be found in the final products of industry and services.
2. The member countries of the BSEC differ largely in terms of their economic and energy potential, availability of energy resources, diversity of energy supply patterns and degree of development of domestic energy markets and infrastructure. At the same time they share the same concerns regarding the stability of energy markets, the reliability and growth of imports and exports, the need to modernise the energy sector, to improve energy savings and reduce greenhouse gas emissions from energy production and use.
3. The energy map of the BSEC area has been changing rapidly in the last years, as a result of major energy related projects and interconnections. The Black Sea region lies at the crossroads of major oil and gas export streams to the world energy markets, having a vital importance for transporting the oil and gas from the Caspian region. The BSEC members form however not only a vital transit route but also a potential large energy market.
4. This Report is intended to provide a basis for improving energy coordination and cooperation among the BSEC states. It draws on information from international organisations, particularly the International Energy Agency and the contributions of the national delegations of Bulgaria, Romania and Turkey.

II. REGIONAL FRAMEWORKS OF COOPERATION

5. **The BSEC Organisation.** The BSEC Council has placed energy as one of the most promising sectors of regional cooperation as emphasised in the Summit Declaration signed in Istanbul on 25 June 1992. Consequently a BSEC Working Group on Energy has been established to maintain regular collaboration. The Energy Ministers of the BSEC Member States have emphasised on the need to focus on: a) Energy Efficiency, b) Renewable Energy, c) Oil and Gas Transportation, d) Creation of a Data Bank on Energy Programs and e) Other Energy Related Projects.
 6. Energy has been identified as the first of the priorities set out in the *BSEC Economic Agenda* (April 2001) which stresses that energy production and energy consumption are both crucial to the BSEC countries. Optimisation and efficiency in the use of energy resources can be achieved through the full integration of both producers and consumers of the region to the international energy markets. In this respect, while coordinating the activities in the energy sector, it should be taken into account that environmental factors (e.g. prevention of marine pollution) are of paramount importance. The BSEC Economic Agenda urges the members to:
 - i. continue developing the projects on Interconnection of Electric Power Systems of the BSEC countries and pass as soon as possible to actual implementation
 - ii. strengthen regional collaboration and intensification of business contacts among energy organisations and companies of the BSEC Member States in order to facilitate integration to world markets and generate economic efficiency
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- iii. bridge the imbalance between the production and consumption of energy, reduce energy production costs, decrease the ecological impact by electric power entities as the foundation of a regional energy market
- iv. secure higher energy efficiency in the Member States and introduce wider energy saving technologies equipment as an important part of the BSEC energy policy.

7. The Black Sea Energy Centre. An institution that promotes energy cooperation in the region is the Black Sea Energy Centre which was jointly established in Sofia in the beginning of 1995 by all eleven BSEC countries at the initiative of the European Commission, under its SYNERGY program. The Centre aims at reinforcing the co-operation between the European Union and the Black Sea region countries in the energy sector, that will consequently strengthen political and economic stability and promote peace and greater prosperity in the region. The main objectives of the Centre are:

- Promotion of energy policy development and energy market reform with reference to the European Energy Charter.
- Promotion of investment, funding and joint ventures in the energy sector of the Black Sea region.
- Provision of easy access to interested institutions of the EU to the energy sector of the Black Sea region countries and vice-versa.
- Creation of a home of Black Sea region initiatives for social partners who wish to link-up with their European Union counterparts.
- Provision of co-ordination services, on request, for SYNERGY, PHARE and Tacis Programs for projects addressed to the Black Sea region.

8. The operations of the Centre focus on the following themes:

- The legal aspects of the energy sector related to the European Energy Charter with emphasis in investment, transit and access to the energy markets.
- The development and application of energy policies and Institutions with respect to market reform, the restructuring of the energy sector and the application of pricing policies.
- The prospects of energy interconnections and especially gas, oil and electricity networks, connecting the Black Sea region countries and the European Union.
- The political, financial and institutional aspects of the funding of energy investments in the Black Sea region and the potential for the development of joint ventures.
- The consequences to the environment from the exploration, production and transportation of the energy resources of the Black Sea region.

III. ENERGY OUTLOOK OF THE REGION

Energy Landscape

9. The countries of the Black Sea present a great diversity and this applies to their energy situation as well. Some countries possess abundant energy resources and they are net exporters - i.e. Russia and Azerbaijan (exports 17% of TPES¹)- while the others pronounce energy dependency in a higher e.g Bulgaria (70% of TPES), Georgia (80% of TPES), Greece (92% of TPES) or lower degree (e.g. Romania

¹ Total Primary Energy Supply

imports 39% of TPES). At the same time, in the field of oil, the combined oil demand of the Black Sea states (except Russia) is expected to grow by 22.5mt/year (450-7000,000 b/d) by 2010. Per capita primary energy consumption is about half of that in more developed European countries. However, consumption per unit output is two to three times the OECD-average, which illustrates the inefficient supply and use of energy. As their energy profiles indicate BSEC countries are natural partners in the energy sector. Figures in table 1 illustrate this energy interdependence which gives ground for regional cooperation in this field.

Table 1. ENERGY INDICATORS OF THE BSEC COUNTRIES (year 2000)

Country	Population (million)	GDP (billion USD, '95 prices)	Energy Production (MTOE)	Net Imports (MTOE)	Energy Supply (MTOE)	Per capita Energy Consumption (toe/capita)	Per Capita Elect. Consumption (kWh/capita)
Albania	3,41	3,07	0,81	0,82	1,63	0,48	1002
Armenia	3,80	3,71	0,63	1,43	2,06	0,54	1047
Azerbaijan	8,05	4,07	16,95	-7,35	11,70	1,45	2040
Bulgaria	8,17	12,28	10,01	8,73	16,78	2,30	3675
Georgia	5,02	2,51	0,74	2,09	2,86	0,57	1294
Greece	10,56	139,07	9,99	21,72	27,82	2,64	4694
Moldova	4,28	2,72	0,06	2,81	2,87	0,67	843
Romania	22,44	32,75	28,29	7,85	36,33	1,62	1989
Russia	145,56	357,32	966,51	-347,82	613,97	4,22	5236
Turkey	67,60	206,12	27,93	54,70	82,63	1,22	1219
Ukraine	49,50	44,35	82,33	57,26	139,59	2,82	2755
Total	328,59	807,97	1146,25	-197,76	940,24	2,66	3606

Source: Contribution of the Turkish National Delegation (Information based on *Key World Energy Statistics*, IEA, 2002)
MTOE: million tons of oil equivalent
KWh/capita: Kilowatt - hour/ capita

10. A common feature of the BSEC countries is their high energy interdependence. Most Black Sea countries rely on gas imports from Russia while at the same time taking steps of diversifying their supplies (e.g. from Norway, Iran). Romania and Ukraine are the only coastal states with significant oil and gas production, which is nonetheless insufficient to cover domestic demand. Ukraine's domestic oil production satisfies 25% of the country's domestic needs, making the country to rely on oil imports from Russia and Kazakhstan. Ukraine imports most of the natural gas from Russia as payment for transiting Russian gas to European markets. Most of Moldova's natural gas and residual oil are also imported from Russia, coal is imported from Ukraine and Romania while about one-third of Moldova's electric power is imported from Ukraine. Bulgaria, Romania and Turkey are reducing their reliance on domestic coal by increasing gas imports. Bulgaria relies almost exclusively to Russian gas imports currently which total to 3.4 bcm/annum. Armenia's main domestic resource is its nuclear power station. Albania meets its small annual demand on gas (0.03 bcm) exclusively from domestic production, which is however declining. Greece is importing gas from Russia (80% of natural gas imports) since 1997 to meet its increasing demand while Turkey is the fastest developing gas market where the state company Botas expects gas demand to rise to 55 bcm by 2010. Georgia which has been successful in establishing itself as an important transit corridor for Azeri and Kazakh 'early oil' is poorly endowed with energy resources importing almost 80% of its energy needs (TPES) mostly as oil products and gas. Hydropower is the country's main domestic energy source accounting for almost 75% of domestic energy production.

11. The vast energy resources of the Caspian basin, are not only a major, strategic asset but an unavoidable subject in bilateral and multilateral economic cooperation. The IEA considers a reasonable range of proven oil reserve estimates in Central Asian and Transcaucasia to be 15-40 billion barrels, with about 70-150 billion barrels of additional reserves possible. Estimates of the region's proven natural gas reserves are between 6.7 and 9.2 trillion metres, with 8 trillion cubic metres of additional reserves possible. This represents approximately 5% of the world's proven oil reserves and 6% of its gas reserves. The Russian Federation not only has the largest oil and natural gas reserves in the BSEC region but it is also among the biggest oil and natural gas producers in the world supplying considerable amount of the European gas demand. It contains over 1,700 trillion cubic feet (Tcf) in proven reserves of natural gas, the world's largest. The Russian Federation is followed by Azerbaijan one of the world's oldest oil producing countries. The latter has concentrated exploration activities and has gained a significant place in the world oil markets exporting in early 2000 approximately 158, 000 b/d (55% of total production) of oil. Azerbaijan has proven natural gas reserves of roughly 4.4 trillion cubic feet (Tcf) with significant potential reserves, but has no developed infrastructure to deliver gas from offshore. Romania has a significant production profile including 126,000 barrels per day of crude oil and 14 bcm of gas per annum (in 2001). Bulgaria, Romania and Ukraine have large coal deposits but all infrastructure requires modernisation while their combined refining capacity is of 90mt/year of which only one third is used.

12. There are a number of obstacles that hamper the development of the energy sector in the region which at the same time present a challenge of cooperative responses. Apart from the political problems which hinder energy cooperation, energy sector institutions are generally still state-owned entities with limited institutional capacity. Energy policies, legislation and standards need to be further developed and be brought closer to Western norms and practices. Energy trade is hampered by poor infrastructure, the disruption of traditional transport interconnections and lack of standards and agreements for a regional energy market. While improvements can be observed in certain areas, progress has been hampered by lack of energy sector reforms, relatively low tariffs and lack of investment resources. Non-payment by consumers is another obstacle hindering further development of the energy sector. At the same time many facilities are outdated and inefficient such as in the case of Ukraine, where the country has enough generating capacity to produce twice its electricity needs, but due to inefficient infrastructure reported 21% losses (via line losses) of the total amount of electricity generated in 2002. The break-up of the Soviet Union severed many distribution networks, thus making the newly independent countries more dependable on imported fuels. Given these circumstances, some were left with no choice but to forgo imports of cleaner fuels such as natural gas and resort to using lower quality fuels (such as coal with a high sulphur content) for heating and production. Meanwhile, the exploitation and transportation of oil in the area has alarmed environmentalists over possible environmental consequences such as the ones related to the Bosphorous Straits.

13. Regulatory reform has advanced at various paces. The electricity and energy industries in the Black Sea region are at present undergoing comprehensive deregulation to open up to competition. The deregulation of the energy market in the Black Sea region entails a transition from monopolies with central planning to competitive markets driven by customers. State dominance is giving way to greater privatisation and large-scale central solutions to smaller-scale decentralised

approaches. Nevertheless, state ownership of the energy sector is still widespread among Black Sea economies although governments have expressed their intention to divest their interests in the energy sector. *Bulgaria* and *Romania* have begun to privatise the refining sector and in all countries there is agreement to (partially) privatise electric utilities. *Greece* in a process of compliance with the EU Directives has partially privatised the Hellenic Petroleum (former state oil company) while 20% of its natural gas market has to be opened to competition. In February 2001, 35% of its power market was also opened to competition. On the forefront is *Georgia*, which privatised almost half of its electricity distribution already in the winter of 1998. The *Armenian* Parliament approved the privatisation program of electricity sector in July 2000. *Azerbaijan's* plans to privatise gas distribution company Azergaz and state oil company SOCAR as well as the electricity distribution entities has not been fully materialised yet. *Ukraine* has been trying to privatise its regional energy distribution companies in order to relieve the government of the heavy debt burden. The privatisation process started with the first *oblenerchos* in 1998 and is expected to be largely materialised by 2003. In *Romania*, privatisation of PETROM, the largest oil and gas company, is a priority of the government and has established specific strategies to accomplish it by next year. *Turkey* has also privatised 51% of the Petrol Ofisi Company while priority has been given to the amendment of the Petroleum Law and the deregulation of the gas sector along the liberalised line in compliance with the EU membership requirements. *Russia's* oil industry, which was largely privatized in the mid-1990s, has bounced back over the past few years, posting strong profits and healthy increases in production. The government is attempting to restructure and liberalise the energy sector. Plans to break up the monopoly positions of both Gazprom and Unified Energy Systems, the Russian natural gas and electricity monopolies, respectively, have been approved.

14. Governments regard privatisation as a means to introduce market discipline, improve efficiency, reduce the budget deficit and gain access to modern technology and management practices. However, major hurdles to attract large-scale private capital and foreign ownership include electricity tariffs that are below economic costs, poor tariff collection, economic and political instability. Privatisation should also to be accompanied by appropriate institutions to promote efficiency.

15. Some of the BSEC members are either EU member countries (*Greece*) or candidates (*Bulgaria*, *Romania* and *Turkey*) and therefore, committed to adapting to and implementing the EU legislation. This has brought about a wave of legislative measures aimed at adapting national legislation to EU standards. Reforms have been undertaken in all other countries too. The electricity sector perhaps is the one, which has undergone the most reform. *Albanian*, *Bulgarian* and *Romanian* Parliaments have passed legislation to create a modern regulatory framework for energy. A 'National Strategy for the Development of Energy Sector and Energy Efficiency by 2010', was adopted by the Bulgarian National Assembly in 1998 and a 'Medium Term National Strategy for Energy Development' for 2001-2004 was also adopted by Romania. *Armenia* and *Georgia* have enacted energy laws that include provisions for the establishment of independent regulatory bodies. *Moldova* also set up a National Energy Regulatory Agency (NERA) in 1997 to regulate the restructured electric sector. In 1999 in *Azerbaijan*, the Energy Law came into effect which covers the objectives of the state energy policy. At the same time, all BSEC Countries (but *Russia* where the Charter applies provisionally) have signed and ratified the European Energy Charter. However, the Protocol on Energy Efficiency and Related

Environmental Aspects has been ratified only by Azerbaijan, Bulgaria, Greece, Moldova and Romania.

16. Privatisation and overall energy exploration projects also open up a field of cooperation where strategic alliances are built. The energy sector in all BSEC region represents a major opportunity both for foreign investment and for export and transit revenues. In Azerbaijan the oil industry currently accounts for 70% to 80% of total foreign investment. A few examples are the following. Gazprom (Russian) became the co-owner of the national gas system in Armenia. The Turkish Petroleum Corporation (TPAO) is a shareholder of some projects being conducted with multinational participation in BSEC region. These are the exploration and production projects in Azerbaijan: 'Azeri-Chirag-Guneshli (ACG)', 'Shah Deniz' and 'Alov'. At the same time TPAO has conducted negotiations with Russian Company Varubejneftegaz in order to evaluate joint investment opportunities in the Black Sea. Russian Lukoil and CFC companies are partners in several Production Sharing Agreements in Azerbaijan.

Energy interconnection projects

17. Cooperative attitudes among the BSEC countries in the field of energy have been taking ground steadily. Until today priority has been given to the electric sector of energy with several interconnection projects supported by the BSEC Organisation going on. The electricity market in the Black Sea is a good example. Trading in electricity via cable links is increasing between the Black Sea countries, as well as between them and the rest of Europe.

18. The project of the **Interconnection of electric power systems encompassing all the member states** is a striking project under progress guided by the Ministers of Energy of the BSEC Member States. The objective is to bring about rational and more effective production and utilisation of electric power in the region. An integrated electric market would improve operations between the national power systems beyond the sporadic power exchanges that take place in case of emergency and shortages. The 'Terms of Reference' of the feasibility study are already endorsed. A Steering Committee established at the level of Deputy Ministers of Energy is charged with the follow-up of implementation of the Terms of Reference.

19. At the same time, the inter-connection of Bulgaria, Romania, Albania and Turkey with the UCTE² members is supported by the EU with the aim to set up a regional electricity market in the South Eastern Europe. The experience of Romania in the interconnection power transmission and distribution network is an illustrative example of the potential that exists in the field. Romania has had interconnections with Ukraine and Bulgaria and Moldova where electricity trade is taking place. Its CONEL system is currently operating in parallel with the power systems of Bulgaria, Greece, Albania and Turkey. Several bilateral agreements have broader regional impact such as the agreement between Ukraine and Russia in 2001 to connect their power grids or the agreement between Greece and Turkey to also connect their power grids by 2006. Interconnection in the Caucasus will allow electricity trade to resume. It has been reported that Azerbaijan could export up to 300-500 Megawatt (MW) to Turkey by 2006. The integration of power systems in the Caucasus region is also possible on the basis of the experience of the past when the three Caucasus states were part of the Trans-Caucasian Interconnected Power System. However, priority today is given on re-establishing reliable domestic supplies.

² Union for the Coordination of Transmission of Electricity

20. Oil and gas production and transportation projects. Most BSEC countries are one way or another interconnected by oil and gas production and transportation projects. The majority of oil and gas exploration and production projects are in Russia and Azerbaijan. The geopolitical positions of all BSEC countries are very important in terms of oil and gas transportation. Russia inherited a big transportation infrastructure from the former Soviet Union and either supports or conducts itself new transportation investments such as the Blue Stream and CPC Pipelines as well as upgrading of existing structures. Azerbaijan endeavours for the realisation of various oil and gas pipelines such as Baku-Tbilisi-Ceyhan (BTC) and Baku-Supsa oil pipelines and South Caucasus Natural Gas Pipeline (SCP) in order to transport its oil and gas resources to international markets.

21. There are several pipeline projects that connect countries of the BSEC region among themselves and with the rest of the world and reveal the great potential of cooperation that exists in the field. Here we mention the major ones related to transport of Caspian energy resources and involving the BSEC countries:

- i. Baku-Novorossiysk Oil Pipeline (Azerbaijan, Russia). Operational by AIOC
- ii. Baku-Tbilisi-Ceyhan (BTC) Oil Pipeline Project (Azerbaijan, Georgia and Turkey). Construction contracts out to tender. Construction completion due to early 2005.
- iii. Baku-Supsa Oil Pipeline (Azerbaijan, Georgia). Operational by AIOC.
- iv. Atyrau-Novorossiysk Oil Pipeline (Kazakhstan-Russia). Built. Project developed by CPC and now officially in testing phase.

22. The Russian gas reaches all Black Sea countries through existing infrastructure: a) along the western Black Sea shore across Ukraine, Moldova, Romania, Bulgaria to both Greece and Turkey with a capacity of 10.5 bcm/annum b) across the Caucasus mountains into Georgia, Azerbaijan and Armenia. The Trans-Caucasus line has a capacity of 13 bcm/annum. A list of the gas projects is:

- v. TransCaspian Gas Pipeline. Proposed to carry gas from Turkmenistan to Turkey.
- vi. Blue Stream Gas Pipeline (Russia, Turkey). Project ready to operate.
- vii. Tabriz-Erzurum Gas Pipeline. (Iran, Turkey). Operational
- viii. South Caspian Gas Pipeline. Proposed to run parallel to the BTC oil pipeline.
- ix. Turkey's East-West Gas Trunkline Gas Pipeline. (Iran, Turkey). Operational

23. Other oil pipelines that are part of the western routes and involve BSEC countries are:

- i. Odessa - Brodi - Gransk (Ukraine-Poland)
- ii. Constanza - Triest (Romania, Italy)
- iii. Burgas - Alexandroupolis (Bulgaria, Greece)
- iv. Burgas - Vlore (Bulgaria, Albania)
- v. Thrace - Saros Bay (Greece-Turkey)

24. Regional energy cooperation takes on a particular significance when one considers nuclear safety. Currently there are operating nuclear power plants in Ukraine, Russia,

Armenia, Bulgaria and Romania. The region has already witnessed the worst nuclear accident with the 1986 Chernobyl nuclear meltdown. Bulgaria also is in the process of complying with the EU Commission calls to decommission at the latest by 2006 all old units of the Kozloduy.

25. Meanwhile, efforts are under way around the Black Sea to enhance the role of renewable energy sources, which includes hydro, geothermal, solarthermal, tide and wind as well as solid biomass. In the field of renewable sources the introduction of new technology is of critical importance but it would allow substantial further savings in energy consumption, benefiting the environment in the process. According to IEA information the share of electricity production from renewable sources excluding hydro, was 0.8% in Greece and 0.2% in Turkey for the year 1999 in an OECD average of 1.9%.

26. Since the early 1990s, the World Bank, the EBRD, the European Investment Bank and other international organisations have assisted in the restructuring, privatisation and demonopolisation of the energy sector. They have also addressed safety and environmental concerns particularly regarding nuclear safety. There are already a number of initiatives and processes active with energy coordination (including the TRACECA and INOGATE programs). Through the EU INOGATE program, several gas projects have been encouraged such as the South European Gas Ring Project connecting Turkey and Greece and the Natural Gas Pipeline Project connecting Turkey, Bulgaria, Romania (ending to Austria).

27. The Black Sea Trade and Development Bank has identified 35 investment operations involving the energy sector with an overall project cost of 1 billion dollars. The first operation was signed in 1999 concerning the Trans-Balkan Gas Pipeline Project. The Project represents the first phase of a program aimed at the expansion of the capacity of the Trans-Balkan gas pipeline system in order to meet the obligations of Gazprom to increase delivery of natural gas to Turkey and involves the countries of Ukraine, Moldova, Romania and Bulgaria. Discussions are also held between the BSTDB and Modlova for financing reconstruction works of Modlovan Hydro-electric power station.

IV. FUTURE DIRECTION OF ENERGY DIALOGUE

28. At the national level and based on the experience of European countries in effective market reforms, policy makers in the region should consider the following priorities:

- Establishment, development and implementation of strong, well-designed energy policies and related action plans;
- Reinforcement of the role and capacities of government in driving market reforms and promoting the good governance essential to effective reform;
- Acceleration of the restructuring of state-owned energy companies to ensure transparency and accountability and improve economic, social and environmental performance;
- Enhancement of energy security by diversifying energy imports and fuels, implementing energy efficiency action plans, and building up oil and natural gas stocks and oil emergency plans;
- Establishment of a market-based energy sector to promote investment

29. In the coming years, the development of energy cooperation, in particular in the BSEC framework, will be determined by such factors as the process of liberation of

the European gas and electricity markets as well as by the increase of the energy demand of natural gas. In this sense, the importance of the Black Sea region and the need for a more cooperative patterns are becoming evident.

30. There are three broad areas where regional cooperation could be intensified by utilising the existing BSEC institutions and fora: first, the elimination of common problems hindering the development of energy cooperation second, energy interconnections (oil, gas, electricity networks) of the BSEC countries and third, the creation of a regional energy market.

31. Regional Energy Market. Taking into account the comparative advantages of the energy industries in the BSEC basin, the establishment of a 'Regional Energy Market' could naturally provide significant contribution towards ensuring increased energy production, promoting energy efficiency and optimum utilisation of resources in an open and competitive market environment in the BSEC. For an open energy market to function well there is a need for harmonised operating conditions in the various markets that are being connected. This requires cooperation between the governments in such fields as the harmonisation of energy taxes and environmental charges, construction work to remove physical limitations in the energy networks etc. The task of the parliamentarians is to create a framework for such harmonisation around the Black Sea and to ensure that conditions of competition are reasonably similar. As well to support research and development as regards new sources of energy, their introduction on the market and their compatibility with a clean environment.

32. Progress should be obtained in the field of improvement of the **legal basis** for energy production and transport, completion of the regulatory provisions for production sharing agreements and a mechanism for assisting investors in the energy sector, aimed primarily at simplifying administrative and licensing procedures, which are essential preconditions for boosting investment in the energy sector;

33. Energy infrastructure. Rehabilitation of existing energy capacities is an urgent task while a multilateral, cooperative approach with regard to the construction of new energy networks is needed. Of particular importance is the transportation networks for the Caspian oil and gas to the world markets. At the same time the development of regional energy network projects and their link-up with so-called Trans-European Networks (TENs) of the European Union remain a priority. It is important for the BSEC countries to seek joint solutions rather than individual ones and aim at the development of a Black Sea policy strategy in the EU's projects including the energy field.

34. Investments. There is a need for enormous investments for which the Black Sea countries need international support. Future investment expectations from contracts already signed in the region total over 60 billion dollars. The energy partnership should aim at improving investment opportunities in BSEC countries' energy sector in order to upgrade the infrastructure, promoting energy efficient and environmentally friendly technologies, and enhancing energy conservation within the BSEC states. On this grounds a study for attracting investment in the modernisation of the energy sector could be conducted within the BSEC framework.

35. BSEC - EU energy dialogue. The EU and PABSEC countries have a mutual interest in enhancing the overall energy security of the continent. PABSEC acknowledges that the development of the EU's internal market is building the world's largest and most integrated energy market in its immediate proximity. For this reason, the energy dialogue between the two parties should be seen not only in the light of the

establishment of an energy partnership but also as a contribution towards achieving the concept of a common economic area in accordance with the *Platform for Cooperation* adopted by the BSEC in 1999. The experience and knowledge gained through the ten years of the functioning of the BSEC and its Related Bodies is significant to this end.

36. The Energy Charter Treaty constitutes an important legal and political framework for energy cooperation between energy producer, transit and consumer countries. For this reason the few problems standing in the way of ratification of the Energy Charter Treaty and its Protocols should be resolved.

37. In order to ensure swift progress in the energy dialogue, the BSEC states should further explore the possibilities offered within the framework of the BSEC Working Group on Energy, as well as the Black Sea Energy Centre. In order to take these initiatives forward, the BSEC states should recognise the importance of participation by representatives of the energy industry, including private undertakings, international financial organisations and experts.

38. In this framework, Turkey has proposed a BSEC project of setting up of an energy management system in the industries of the countries of the BSEC region. The objective of the project is to introduce energy saving and the energy management concept to industrial engineers of the BSEC region.

V. CONCLUSIONS

39. The BSEC area has nowadays, acquired a role of strategic importance for the energy sector of Europe and the world. At the same time, BSEC countries recognise the desirability of strengthening long-term energy relations to ensure regional energy security, to maintain a regular energy dialogue. Continued successful development along the Black Sea presupposes a rich, price-efficient and environmental sound supply of energy. Energy cooperation around the Black Sea is of course not novelty. During the Soviet era, most of the Black Sea countries' energy networks were interlinked and this experience may be used today to advance regional cooperation.

40. The increasing significance of the BSEC area in the world energy market, particularly taking into account the promising oil and natural gas exploitation in the Caspian Sea basin and the development of prospective projects, require the coordination of activities in the energy sector among the BSEC Member States and, whenever possible, the formulation of common strategies.

41. The BSEC's role in this process is mainly to facilitate discussions between the parties involved in order to identify concrete elements of actions notably regarding the improvement of investment opportunities in the energy sector of the region, the promotion of energy efficient and environmentally friendly technologies and the enhancement of energy conservation.

42. Discussions on the supply of energy should be concentrated around three 'E': energy, economy and environment. In other words, to provide energy at appropriate prices to ensure industrial development and growth as well as to ensure that energy conversion takes place with the least environmental impact. There is thus considerable mutual benefit from learning about how to reconcile energy supply interests with economic development and environmental concerns.

43. The basic precondition for successful cooperation is the recognition that energy resources and infrastructure is seen as being of "common interest" for the region. Energy problems should be treated from the point of view of a regional framework.

44. In conclusion, the foundation for fruitful cooperation across the Black Sea in the energy field is now being laid, although considerable work remains to be done. Energy cooperation among many holds a major potential not only for countries that are poor on their own energy resources and which may become overly dependent on one source of energy or on one single supplier; it can be equally beneficial to energy rich countries by allowing them to share what they have with others. Cooperation in the energy field is not vital for economic development in itself, but also a bellwether for overall cooperation. Sharing energy presupposes and strengthens peaceful relations between countries.

ANNEXES

- Black Sea Regional Energy Centre, Background Paper Prepared by the International Secretariat (EC20/BP/BSREC/03)
 - INOGATE and TRACECA, Background Paper Prepared by the International Secretariat (EC20/BP/PROG/03)
 - Map 1. Black Sea Oil Transport Infrastructure
 - Map 2. Black Sea Gas Transport Infrastructure
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EC20/BP/BSREC/03

Istanbul, 28 January 2003

Black Sea Regional Energy Centre*Background Paper prepared by the International Secretariat*

1. **The Black Sea Regional Energy Centre (BSREC)** was established in February 1995 at the initiative of the European Commission (EC), under its **SYNERGY** Program, by the countries of the Black Sea region: Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Moldova, Romania, Russian Federation, Turkey and Ukraine, and the EC. Since January 1, 1999 the former Yugoslav Republic of Macedonia became a member of the Centre and since October 12, 2001 FR Yugoslavia has joined the BSREC as well.
 2. The BSREC acts as a focal point for energy related activities, aimed at developing co-operation between the Black Sea region countries and the EU in the energy field, as well as among the countries themselves. The Centre's core activity is targeted to promote the development and implementation of market oriented energy policy, encourage restructuring of the monopoly structures, liberalisation and privatisation activities, support the energy efficiency projects, assist attraction of investment and funding into the region, stimulate environmental protection measures and allow the collection and dissemination of energy sector related information at a regional level.
 3. The main objectives of the Centre are aimed at promotion of up-to-date energy policy and market reforms, with reference to EU Directives on electricity, gas and renewables, the European Energy Charter and the world-wide restructuring process; facilitation of the liaison among the different energy related initiatives in the region; organisation of meetings at different levels in the framework of the regional initiatives; information exchange on energy policy issues, including creation of a common information data bank and publication of energy related materials; provision of administration and co-ordination services for international projects addressed to the region.
 4. The following projects in which the BSREC was involved were of outmost interest for the development of energy co-operation in the Black Sea region:
 - Balkan Energy Interconnection Task Force
 - Energy Interconnections in South Eastern Europe
 - Reinforcing Energy Dialogue between Black Sea Countries and the EU
 - Harmonised Approach to Problems Associated with Exploration and Production of Oil, Gas and Coal in the Black Sea Region
 - Study on the Investment Climate in the Energy Sector in the Black Sea
 - Diversification of Gas Supply in Albania, Bulgaria, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia and Romania
 - Study on the Development of a Competitive Balkan Electricity Market
 - FEMOPET Black Sea Region (transfer of energy technology to Bulgaria and Romania)
 - Black Sea Region OPET (Organisation for Promotion of Energy Technologies) Associate
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EC20/BP/PROGR/03

Istanbul, 28 January 2003

TRACECA, INOGATE and SYNERGY Programs
Background Information prepared by the International Secretariat

1. The **TRACECA** Program was launched at a conference in Brussels in May 1993 which brought together trade and transport ministers from the original eight TRACECA countries (five Central Asian republics and three Caucasian republics), where it was agreed to implement a program of European Union (EU) funded technical assistance (TA) to develop a transport corridor on a west - east axis from Europe, across the Black Sea, through the Caucasus and the Caspian Sea to Central Asia. To date the TRACECA program has financed 39 Technical Assistance projects (57,405,000 EURO) and 14 investment projects for the rehabilitation of infrastructure (52,300,000 EURO). The project corresponds to the global EU strategy towards these countries and retains the following objectives:

- To support the political and economic independence of the republics by enhancing their capacity to access European and World markets through alternative transport routes
- To encourage further regional co-operation among the partner states
- To increasingly use TRACECA as a catalyst to attract the support of International Financial Institutions (IFIs) and private investors
- To link the TRACECA route with the Trans - European Networks (TENs)

2. **INOGATE**. The EU-funded INOGATE Program stands for Interstate Oil and Gas Transport to Europe. It's overall objective is to improve the security of Europe's energy supply by promoting the regional integration of the oil and gas pipeline systems and facilitating their transport both within the region in question and towards the export markets of Europe and the West in general, while acting as a catalyst for attracting private investors and international financial institutions to these pipeline projects. The INOGATE Program began as a program for Tacis countries and under Tacis financing, it is now open to central and eastern European countries as well as Meda countries. INOGATE provides technical assistance and in some cases, investment financing for priority interventions. It is based on 5 integrated pillars covering:

- the assessment of the existing oil and gas network,
- the possibilities for the development of new transmission systems,
- the institutional improvement of the trade and interstate transport of hydrocarbons
- urgent small-scale investment in hazardous interstate infrastructures
- transfer of know-how in resources management and pipeline operations.

3. **SYNERGY** is a co-operation program managed by the Directorate General for Energy and Transport (DG TREN) of the European Commission. It finances co-operation activities with non EU countries in the field of the formulation and implementation of energy policy to the mutual benefit of all parties concerned. The objectives of the SYNERGY program are in line with those set out in the White Paper "An energy policy for the European Union". SYNERGY should therefore improve the competitiveness of Community industries, enhance the security of supply, promote sustainable development and improve energy efficiency. The Synergy program will refocus on activities related to security of supply and implementation of the Kyoto protocol. Unlike other EU programs that are of a more general nature and include energy as one of several aims, SYNERGY is a specific energy policy program covering the external dimension of EU actions in the energy policy sector. As it is not an assistance but a cooperation program, SYNERGY's projects are carried out following action taken by European organisations and the European Commission. Examples of SYNERGY projects

are the Black Sea Regional Energy Centre, the Balkan Energy Interconnection Task Force, Study on the political risk guarantee of European investments in the energy sector in the Republics of the former Soviet Union