#### REPUBLIC OF BULGARIA

#### MINISTRY OF ENVIRONMENT AND WATER

### D E C I S I O N ON ENVIRONMENTAL IMPACT ASSESSMENT No. 1-1/2013

Pursuant to Article 99 para 2 of the Environmental Protection Act, Article 19, para 1 of the *Ordinance on the conditions and order for performance of environmental impact assessment* ("EIA Ordinance") and in conjunction with Article 31 of the Biodiversity Act and Article 39, para 12 of the *Ordinance on the conditions and order for performance of assessment of the compatibility of plans, programmes, projects and investment proposals with the subject and objectives for preservation of protected territories* (the Ordinance on Compatibility Assessment),

#### I HEREBY APPROVE

The implementation of investment proposal for "Intersystem Gas Connection Greece - Bulgaria" along the western route of the gas pipeline.

**Employer: ICGB AD** 

Seat: 16, Veslets Str., 1000, Sofia 1000

# Short description of the investment proposal:

The designation of the investment proposal "Intersystem Gas Connection Greece – Bulgaria" is the transmission of natural gas from Komotini, Greece, to Stara Zagora, Bulgaria, and will connect the transmission systems of the two countries. As per the initially drawn up pre-design study, a pipeline diameter of 28 inches (711 mm) allows the transmission of 3.0 billion t³/y without construction of compressor station and 5.0 billion t³/y after such is constructed. In the process of subsequent designing it is decided to increase the diameter to 32 inches (813 mm), in order to improve the hydraulic characteristics of the gas pipeline and augment its capacity.

The gas pipeline route for its Bulgarian section is developed in two alternatives – eastern and western route, passing across the land territory of three regions (Kardzhali, Haskovo, and Stara Zagora) and ten municipalities (Kardzhali, Dzhebel, Kirkovo, Krumovgrad, Momchilgrad, Haskovo, Dimitrovgrad, Stambolovo, Stara Zagora and Opan).

The main elements of the the intersystem gas connection are as follows:

1. Gas transmission pipeline with a diametre of 32 inches (813 mm) having a total length along the western route of 184.14 km, out of which 150.57 km on Bulgarian territory and with a total length of the eastern route of 177.24 km, out of which 145.67 km on Bulgarian territory;

- 2. Branches from the transmission gas pipeline to the towns of Kardzhali and Dimitrovgrad;
- 3. Connection to the national gas transmission infrastructure;
- 4. Startup μ receiving chambers for purifying and inspection operations (treatment facilities);
- 5. Gas measurements stations at the entry and exit of the gas pipeline;
- 6. Line valve stations (VS) a total of 11 VSs for each of the two alternatives, one of which is on Greek territory and the others on Bulgarian;
- 7. Cathodic protection stations (with external low voltage power supply);
- 8. Doubling pipe (bypass) for the passage under Studen Kladenets dam via horizontal directional drilling near Kardzhali along the western route (also proposed is an alternative for passing along the bottom of the dam), as well as under the Maritsa River, of the common route;
- 9. Optic main cable for technological and telecommunication connections of "Intersystem Gas Connection Greece Bulgaria";
- 10. External infrastructural connections for all platform-mounted elements of the gas pipeline (road, electric power supply, water and sewage, telecommunications).

A compressor station is not planned at the present stage and such has not been a part of the investment proposal, being the subject of the conducted assessment. The width of the zone for preventive regulatory protection for both alternatives is determined at 200 m on both sides of the gas pipeline. Easement rights are regulated for both alternatives for construction, service and repair of the gas pipeline and its adjoining facilities.

The gas pipeline is constructed from single pipes with a length from 12 to 18 metres, with coating executed in advance. The pipes are supplied and stored within the boundaries of the building easement. Trench is executed down to such depth that after the pipe is buried, the minimum coverage above it would be approximately 1.1 m. Upon crossing roads, railway lines, special sections and other obstacles, the depth at which the pipe is laid may be greater.

Main characteristics of the alternatives for the gas pipeline route:

#### Western alternative of the gas pipeline:

The length of the western route is 150.57 km. For performance of the building works 461.85 ha are necessary, out of which 399.92 hectares are agricultural lands, 51.79 ha are forest areas, and an area of 10.14 hectares is needed for construction of 13 permanent platforms and their servicing roads on which the aboveground facilities are to be located along the route of the gas pipeline, such as line valve stations, gas distribution stations, gas treatment and measurement facilities.

The type and size of the facilities are as follows:

- 5 platforms with valve stations having an area of 676 m<sup>2</sup> each;
- platforms c valve stations and treatment facilities (TF) with an area of 1,296 m<sup>2</sup> each;
- 1 platform with pipeline branch and automatic gas regulation station with an area of 5,751 m<sup>2</sup>;
- 1 platform with valve station, automatic gas regulation station and branch of the gas pipeline having an area of 3,111 m<sup>2</sup>;

- 1 platform gas measurement station 2 / treatment station 2 having an area of 9.025 m<sup>2</sup>;
- 1 dispatching centre and maintenance and operation base centre for operation and maintenance of the gas pipeline having an area of 9,540 m<sup>2</sup>;
- storage platform warehouse for pipes and building materials during the construction period and for future technological equipment, the necessary reserve stock of pipes, etc. during the operation period, having an area of 50 000 m<sup>2</sup>.

The pipeline is divided into technological sections having a length of up to 30 km by way of line valve stations (VS) to be constructed aboveground. The first valve station (VS1) is within Greek territory and the remaining valve stations and other aboveground facilities are described below:

- From the border to VS 2 Velikdenche km 0+00 to km 25+400;
- VS 2 Velikdenche to VS 3 Kardzhali км 25+400 to km 50+000; .
- VS 3 Kardzhali to VS 3A Mandra km 50+00 to km 79+00;
- VS 3A Mandra to VS 4 Haskovo km 79+00 to km 96+500;
- VS 4 Haskovo to Station Dimitrovgrad km 96+50 to km 116+900;
- Station Dimitrovgrad to VS 6 Trakia km 116+900 to km 129+400;
- VS 6 Trakia to ПС2 Stara Zagora км 129+400 to km 150+200.

The building easement, necessary for the implementation of the investment proposal along the western route has a width of 30 m. This width is envisaged for almost the entire route, with the exception of certain sections coordinated with the employer – a section in a forest in the region of the town of Kirkovo, where it is decreased to 20 m and a section along the north bank of the Maritsa River (in the part where the pipe is entrenched, but is doubled), the building easement is increased to 60 m.

The easement zones for servicing and repair of the gas pipeline and its adjoining facilities during the operation period are with a width of 30 m, i.e., 15 m on each side of the pipeline's axis with the exception of the region of the town of Kirkovo, where the easement is decreased to 20 m, for the purpose of protecting the old forest with valuable plant and animal species across which the route is to pass. In the region around the Maritsa River – from the north valve station VS4B/treatment station 6 to the south valve station VS 4A/treatment station 5, in the part above horizontal directional drilling (HDD) for passing under the river the easement is increased to 90 m, and in the part where the pipe is entrenched (open cut), but is doubled, the easement is increased to 60 m.

#### Eastern alternative of the gas pipeline:

The length of the eastern route is 145.67 km. For the performance of the construction activities there will be necessary 455.76 hecatres, out of which 331.6 hectares are agricultural lands, 114.44 hectares are forest areas, and an area of 10.15 hectares is necessary for the construction of 13 permanent platforms and their servicing roads, on which are to be located the aboveground facilities along the pipeline route, such as line valve stations, gas distribution stations, treatment and measurement facilities.

The type of facilities and the size of the platforms, are as follows:

• 4 platforms with valve stations having an area of 676 m<sup>2</sup> each;

- 4 platforms with valve stations and treatment facilities (TF) with an area of 1,296 m<sup>2</sup> each;
- 1 platform with automatic gas regulation station and pipeline branch having an area of 5751 m<sup>2</sup>;
- 1 platform with automatic gas regulation station and valve station with an area of 3,111 m<sup>2</sup>;
- 1 platform gas measurement station 2/treatment station 2 with an area of 9,025 m<sup>2</sup>;
- 1 dispatcher centre and maintenance and operation base centre for operation and maintenance of the gas pipeline with an area of 9540;
- Storage platform warehouse for pipes and building materials during the construction phase and for future technological equipment, the necessary reserve stock of pipes, etc., during the operation phase with an area of 50,000 m<sup>2</sup>.

The pipeline is divided into technological sections having length of up to 30 km, as follows:

- From the border to VS 2 Mamitya km 0+00 to km 24+700;
- VS 2 Mamitya to VS3 Patnikovo km 24+700 to km 59+750;
- VS 3 Patnikovo to VS 4 Stamboliysky km 59+750 to km 88+100;
- VS 4 Stamboliysky up to the merger into the western route km 88+100 to km 95+400.

The building easement, necessary for the implementation of the investment proposal has a width of 30 m. The easement zones for servicing and repair of the gas pipeline and its adjoining facilities during the operation period is with a width of 30 m.

With the *western alternative of the gas pipeline* near the town of Haskovo, the route passes across the following protected areas:

- Protected area "Eastern Rhodopes" (BG0001032);
- Protected area "Studen kladenets" (BG0002013);
- Protected area "Ostar kamak" (BG0001034).

With the *eastern alternative of the gas pipeline* near the town of Haskovo, the route passes across the following protected areas:

- Protected area "Eastern Rhodopes" (BG0001032):
- Protected area "Krumovitsa" (BG0002012);
- Protected area "Arda Bridge" (BG0002071);
- Protected area "Studen kladenets" (BG0002013);
- Protected area "Ostar kamak" (BG0001034).

After leaving the town of Haskovo, - at Uzundzhovo – *the two route alternatives* merge into one passing across the following protected areas:

- Protected area "Maritsa River" (BG0000578):
- Protected area "Martinka River" (BG0000442);
- Protected area "Sulzliyka River" (BG0000425);
- Protected area "Zlato Pole" (BG0002103) it does not pass across the protected area, but to the west of it.

The investment proposal is subject to compatibility assessment as per the provisions of Article 2, para 1, i 1 of the the Ordinance on Compatibility Assessment. On the grounds of Article 39, para 3, in conjunction with Article 39, para 5 of the Ordinance on Compatibility Assessment, the judgment of the probable degree of negative impact is that the investment proposal **is likely** to exert a significant negative impact on natural habitats, populations, and species habitats, which are subject of conservation in the protected areas. Based on the judgment and the provided directions, a report is drafted on assessment of the degree of impact on the protected areas (Compatibility Assessment Report). The expected impacts of the investment proposal on the subject and objectives of the protected areas are examined in detail in the Compatibility Assessment Report, as the results of this assessment are presented herein below.

### based on the following grounds (factual reasons):

- 1. In the report on EIA a detailed analysis is made of the probable impacts on environment from the implementation of the two alternatives routes of the pipeline. Based on the performed assessment and analysis and in compliance with the environment legislation, the authors of the EIA report recommend the approval of the implementation of the investment proposal for construction of **Intersystem gas Connection Greece Bulgaria** along the western route of the gas pipeline, as measures are additionally proposed for diminishing and where possible, eliminating the significant harmful impacts on environment, as well as a plan for implementation of these measures.
- 2. By Decision No. 452/07.06.2012 of the Council of Ministers, "Intersystem Gas Connection Greece Bulgaria" in the sections which will be constructed on the territory of the Republic of Bulgaria, is declared a national site.
- 3. The gas connection being the subject of the investment proposal, will be connected to the existing National gas transmission system (NGTS) of Bulgaria, whereby the supply of the natural gas amount planned for consumption in the country will be ensured.
- 4. The performed assessment of the investment proposal compatibility with the subject and objectives of the affected protected areas provides a possibility for adoption of decision under Article 39, para.12 of *the Ordinance on Compatibility Assessment*. The implementation of the investment proposal <u>as per the western alternative</u> is assessed as the alternative with the least negative impact on the protected areas within the network Natura 2000, as follows:
- **4.1.** The construction and operation of the gas pipeline will not exert a significant negative impact on protected areas BG0001032 "Rhodopes Eastern", BG0000425 "Salzliyka River", BG0000442 "Martinka River", BG0000576 "Maritsa River" and BG0001034 "Ostar Kamak" for conservation of the natural habitats and of the wild flora and fauna across which the pipeline is to pass, as:

#### **4.1.1.** BG0001032 Rhodopes – Eastern:

4.1.1.1. Even though fragments of natural forest habitats will be destroyed - 0,007% of 91 MO; 0,013% of 91 WO; 0,92 % of 92A0\* and 0,004 % out of 91 E0, the degree of negative impact on them is assessed as **insignificant** at the level of the protected area and on a national scale. The route does not cross any large compact forest areas, which provides the possibility to assess with the same grade the fragmentation of

forest habitats. The destruction of 1,222 m<sup>2</sup> of habitat 8230, which represents 0,004% of the area which it covers in the zone, is also determined as **insignificant**.

- 4.1.1.2. There will be a temporary harming of insignificant areas as compared to the representation of the grass habitats areas 6210\*, 6210 and 6220\* (0,098%, 5% and 0,009%), which will be able to recover naturally after the completion of the building activities, backfilling of the removed soil cover and the restoration of the traditional managing, especially of meadows.
- 4.1.1.3. The negative impacts on the **fish** species protected in the area will be expressed in the open passage of the gas pipeline across the Lozengradska River through the destruction of spawn and larvae, transient disturbance and alteration of the physicochemical properties of environment which are quickly recoverable and insignificant. The impact on the population size and abundance of their populations can be minimized by regulating the terms for the performance of construction in compliance with the biology of the species.
- 4.1.1.4. The impact in potential habitats of tortoises (Testudinidae) will appear in about 0.0278% of their area, only during the construction phase, and will be terminated after the trench backfilling. The possible mortality of single specimens during the construction phase will be avoided through the limitation of the construction period, so that it is not to have any negative effect on their population size and abundance.
- 4.1.1.5. Only during the construction phase there will be a weak in its degree, short-lived and reversible negative impact mostly on **invertebrates** larvae, which may be destroyed during the construction preparation activities due to the removal of trees or bushes as their habitats.
- 4.1.1.6. The main impact on **mammals** (otter, wolf, bear), being a subject of conservation in the area, will be disturbance which will be expressed in their temporary banishing during the construction phase, after which their permanent habitats will be occupied again.
- 4.1.1.7. In the implementation of the western alternative of the route about 72,000 m<sup>2</sup> of potential habitats of the European ground squirrel and Vormela peregusna will be directly affected, which is 0.066% of their total area in the zone. Since a field research established two colony entrances, one of which is abandoned, the expected degree of impact is determined as low and expressed only during the construction period.
- 4.1.1.8. The absence of any natural or artificial underground refuges for bats along the west alternative route of the pipeline provides grounds for assessment of a lack of impact on this group of bats. Bat species dependable on the forest habitats will be affected on an area that is 3.5 times smaller if the western alternative is implemented, in comparison with the eastern one.

#### 4.1.2. BG0001034 "Ostar Kamak":

4.1.2.1. The western alternative of the gas pipeline crosses fragments of natural habitats 91AA, 92A0\*, 6210, 6510, subject of conservation in the area, out of which there will be affected 0.025%, 0.38%, 0.34% and accordingly, 0.4% of the covered by them areas in the zone, which is determined as insignificant negative impact. The reclamation activities after the completion of construction and the subsequent traditional managing will enhance the rapid recovery of the grass habitats. The remaining types of natural habitats being protected in the area will not be influenced.

- 4.1.2.2. Since the gas pipeline route crosses an insignificant part of the habitats of terrestrial invertebrate species, the impact thereon is insignificant in its degree.
- 4.1.2.3. A negative impact will be exerted on pearl clam only during the construction period when crossing the Harmanliyska River, but it will be temporary and reversible, as well as the impact on the fish being subject of conservation in the area.
- 4.1.2.4. The construction will exert insignificant negative impact on a small part of the habitats of the amphibians and reptiles, as well as on a small number of specimens of tortoises, Elaphe quatuorlineata and the yellow-bellied Bombina bombina, the habitats of which will be recovered after the completion of the building activities, and the alterations in their populations will be eliminated by regulating the term for construction.
- 4.1.2.5. The mammals being subject of conservation in the area will not be directly influenced by the construction and operation of the gas pipeline, with the exception of 0.063 % of the potential habitats of otters, which will be fragmented, as this impact is reversible after completion of the construction. The passage of the gas pipeline across the Harmanliyska River will lead to insignificant in its degree and reversible impact only on the nutrition habitat of Myotis capaccini.

# 4.1.3. BG0000578 "Maritsa River":

- 4.1.3.1. Taking into account the method of passing of the pipeline under the Maritsa River, through horizontal directional drilling, there will not be any direct negative impact on the natural habitats, fish, invertebrates, bats and their habitats being the subject of conservation in it.
- 4.1.3.2. The construction will affect 0.11% of the total area of the habitats of the yellow and red-bellied Bombina bombina, about 0.1% of the otters' habitat and 0.01% of all potential habitats of Vormela peregusna. This insignificant degree of negative impact refers also to the probable disturbance which will be caused by the human presence in the area of the ground squirrel colony, located out of the route, at 75 m from the borehole.

# 4.1.4. BG0000442 "Martinka River":

- 4.1.4.1. Given the short stretch of 40 metres in which the gas pipeline will cross the area, respectively, the Martinka River, and the short duration within which the building activities will be performed, the negative impacts on the hydrobionts (fish and invertebrate), being protected in the area, will be of insignificant degree.
- 4.1.4.2. Direct impact will be exerted on 0.035% of the potential habitats of Triturus superspecies cristatus, Bombina bombina and the common masrh turtle, which is insignificant space as compared to their representation in the area.

### 4.1.5. BG0000425 "Salzliyka River"

- 4.1.5.1. In the construction there will be destroyed an insignificant part (0.045%) of habitat 92A0, while the remaining habitats will not be affected negatively, in a direct or indirect manner.
- 4.1.5.2. The open crossing of the Salzliyka River will lead to temporary fragmentation of fish habitats, to disturbance, banishment and possible mortality of larvae and eggs, which will be temporary and reversible, taking into consideration the construction period.
- 4.1.5.3. There will be affected 0.034% of the potential habitats of the otter, Bombina bombina and the common marsh turtle, but the size, abundance and the structure of their populations will not be distorted.

- 4.1.5.4. The investment proposal will not have any impact on the remaining species and their habitats, being subject of conservation in the area.
- 4.2. Any possible impacts on the types of natural habitats and habitats of species in the protected areas which are located in the proximity of, but are not affected by the route, will be eliminated through the compliance with the stipulated conditions and measures and through the implementation of good construction practices.
- **4.3.** The construction and operation of the gas pipeline will not have a significant negative impact on Protected area **BG0002013 Studen Kladenets**" through which the western alternative of the route passes as regards the conservation of wild birds, as:
- 4.3.1. The route across the area is 4.3 km long and affects a total of 15,670 m<sup>2</sup> (without the water surface of the dam), as a part of the affected lands are open spaces (pastures, meadows and arable lands) (0.29% of their coverage in the area), which are **hunting** habitats of species, such as pern, kite, short-toed eagle, booted eagle, Falco naumanni, white stork, etc., and which, after the completion of construction and appropriate reclamation measures will be recovered anew. The degree of impact will be insignificant also for the affected 0.29 % of the potential nesting habitats of the thick-knee, Melanocorypha calandra and Anthus campestris and other species, attached to open spaces.
- 4.3.2. The removal of 96,900 m<sup>2</sup> of forest along the route will lead to insignificant loss (0.14% of the potential **nesting** habitats in the area) or their fragmentation for a part of the species (kite, short-toed eagle, booted eagle, grey-headed woodpecker), which are subject of conservation. This impact on the other hand, will create additional appropriate conditions for species such as Caprimulgus europaeus and the forest lark, inhabiting the outskirts of the forests.
- 4.3.3. The considerable disturbance at about 1,500 metres to the southeast of the route's west alternative, of the nesting couples of black stork and Egyptian vulture will be minimized by the regulating the appropriate timing of the building activities.
- 4.3.4. The disturbance which the construction may exert in the shallow-water western parts of Studen Kladenets dam on the wintering migrating waterbirds, is of temporary and reversible nature and will be minimized by determination of the construction timing and the use in the section under the water surface of HDD technology (horizontal directional drilling).
- 4.4. The reported cumulative impact from the development of the gas pipeline on all cited protected areas, along with any past, present, and future plans, programmes, projects and investment intentions, is of temporary nature only during the construction phase it will be insignificant in degree provided that the set mitigating measures are adhered to.
- 5. According to Letter with issue No. KD-04-332/27.09.2012 of the Basin Directorate for Water Management East Aegean Region (BDWM-EAR), the investment proposal is admissible from the viewpoint of attainment of the environmental objectives and measures for achievement of good conditions of waters and their protection areas, as set forth in the River Basin Management Plan (RBMP) for the East Aegean Region based on Article 4a of the Ordinance for EIA.
- 6. The investment proposal does not affect the established 1<sup>st</sup> belt of the sanitary protection zones (SPZ) around water sources and facilities for drinking and domestic water supply, as well as those being in the process of establishment. As regards the water sources and facilities for drinking and domestic water supply without

established SPZs, statements of opinion are additionally requested from the water supply and sewage companies operating same, the related municipalities and BDWM-EAR, as a result of which a correction of the gas pipeline route has been proposed between km 8+550 and km 8+910, at the mineral water source Kirkovo. By the relocation of the route a decrease of the impact on the groundwater component is achieved, as at the same time no additional negative impact is exerted on the remaining components of environment.

- 7. In the implementation of the proposed method of horizontal directional drilling (HDD) at the crossing of the Maritsa River and Studen Kladenets Dam, no significant negative impact is exerted on the components of environment and this method is more acceptable from the viewpoint of the impacts on environment as compared to the other possible technical solutions.
- 8. By letter with issue No. 04-09-213/12.09.2012 the Ministry of Health provides a motivated statement of opinion that if all recommendations and measures specified in the EIA Report are complied with, as well as the conditions set forth in the present Decision, no arising of a risk to human health is to be expected from the implementation of the western route of the gas pipeline.
- 9. The results from the performed modeling show that the construction of the gas pipeline does not lead to deterioration in the qualities of ambient air in the surrounding settlements, including the towns of Dimitrovgrad, Haskovo and Kardzhali.
- 10. Since the investment proposal in its aggregate is implemented on the territory of two countries Republic of Greece and Republic of Bulgaria, an EIA procedure in international context is conducted.

From the Republic of Greece, as a country of origin, a notification on the investment proposal has been received as regards the Greek territory with a summary of a preliminary research concerning the environment impact for the Greek section, with the conclusion that no significant transboundary impact is expected from the development of the gas pipeline on Greek territory. By Letter with issue No. EIA-249/18.10.2012 MoEW has sent an official reply that the Republic of Bulgaria does not wish to participate in the EIA procedure, being conducted on Greek territory due to the lack of assumption for a negative impact on environment on Bulgarian territory from the implementation of the investment proposal on Greek territory.

The Republic of Bulgaria has notified the Republic of Greece as a concerned party by the investment proposal on Bulgarian territory. In reply the Greek party has expressed its wish to participate in the EIA procedure being conducted in the Republic of Bulgaria. In the course of the procedure to the Greek party there has been submitted the part "Transboundary impacts" of the EIA Report for the investment proposal on Bulgarian territory. By letter with ref. No. Y.P.E.K.A./S.E.S.oik. 203382 of 27.11.2012, the Greek Ministry of Environment and Climatic Changes has notified that it does not intend to continue its participation in the EIA procedure for the investment proposal on Bulgarian territory, taking into consideration the conclusion in the Bulgarian report that no significant transboundary impact on Greek territory is expected from the development of the gas pipeline on Bulgarian territory, which is analogical to the conclusion of the Greek party.

11. During the EIA procedure consultations have been conducted with the stakeholders. Public access has been provided to the EIA report with all the

appendices thereto and public discussion meetings have been performed in the municipalities and mayoralties determined as affected: Stara Zagora, Malko Kadievo, village of Zagore, Radnevo, village of Trakia, Opan, Dimitrovgrad, Haskovo, village of Mandra, Momchilgrad, village of Skalishte, Kardzhali, Kirkovo, Dzhebel, village of Velikdenche, Krumovgrad, and Stambolovo. At the public discussion meetings in the municipalities/mayoralties of Stara Zagora, village of Malko Kadievo, village of Zagore, Radnevo, village of Trakia, Opan, Dimitrovgrad, village of Mandra, Momchilgrad, village of Skalishte, Kardzhali and Kirkovo, no issues have been broached in respect of the impact on environment. At the public discussion meetings in the municipalities of Dzhebel, Haskovo, Krumovgrad and Stambolovo, issues have been discussed concerning the implementation of the investment proposal, recommendations and proposals have been made, which have been accepted by the employer, no objections have been raised. No written objections, written statements of opinion, and recommendations have been submitted before, during and after the public discussion meetings. The provided recommendations and proposals are reflected in an appropriate manner in this Decision.

12. By its Decision 1-1/2013 of 29.01.2013, the Supreme Expert Environmental Council sets forth a proposal for approval of the investment proposal implementation,

### and under the following conditions:

#### I. For the designing phase:

- 1. In the preparation of the technical designs, coordination is performed of the route as to the availability and exact location of any water transfer schemes and channels, pump station feeding these schemes, catchments.
- **2.** The crossing of the Maritsa River and Studen Kladenets Dam is to be implemented via the method of horizontal directional drilling (HDD).
- **3.** The fish passes (if such are developed) must meet the requirements under Appendix 7 through 13 of the River Basin Management Plans for the East Aegean Region.
- **4.** Within the boundaries of the protected areas it is allowed to establish temporary camps for staff and machinery servicing sites, platforms for temporary storage of building materials, excavated earth mass, etc., only if they are located within the scope of the building easement of the gas pipeline route.
- **5.** A design shall be prepared for technical and biological reclamation as per the requirements of *Ordinance No. 26 on reclamation of affected areas, improvement of weakly productive lands, removal and utilization of the humus layer.* In the preparation of the foresting and grassing scheme as a part of the reclamation design are to be used the species described in part 2.1.6.1. of the EIA REPORT. The affected grass and forest habitats within the boundaries of the protected areas for the habitats are to be reclaimed with species that are typical for the affected habitat.
- **6.** A plan for hydro test shall be developed while complying with the following: the water abstraction for the hydro test shall be performed in accordance with the ecological minimum if the water body; if possible, there should be envisaged a multitime use of one and the same water for testing separate sections of the gas pipeline; the discharge of the water from the hydro test is to be performed in the receiving waters from the same catchment area; if after the hydro test the water is with a

modified composition, there shall be ensured the necessary treatment of the water being discharged.

- 7. The platforms for storage of waste are to be complied with the requirements regarding platforms, as per the Ordinance under Article 43, para.1 of the Waste Management Act (WMA).
- **8.** A separate collection and haulage of building wastes shall be envisaged and no mixture of wastes is allowed.
- **9.** The waste to be generated on the site is to be classified under the procedure provided for in the Ordinance under Article 3 of the Waste Management Act.
- **10.** In respect of archeological sites (a total of 16) No. 1, No. 2, No. 9, No. 12, No. 16, No. 21, No. 25, No. 26, No. 29, No. 30, No. 31, No. 37, No. 52, No. 76, No. 77 and No. 78 (numbered as per item 3.7. of the EIA REPORT) full archaeological rescue excavations are to be conducted before the start of the excavation works under the conditions of Article 148, para 2 of the Cultural Heritage Act (CHA).
- **11.** In respect of archeological sites (a total of 13) No. 20, No. 27, No. 32, No. 33, No. 41, No. 42, No. 44, No. 50 and No. 54, No. 58; No. 66; No. 73; No. 74 archaeological drillings are to be completed in view of clarifying the thickness of cultural layering, as in the event of proving the existence of archaeological structures and finds, full archaeological rescue excavations are to be performed.

#### II. During the construction period:

- 1. Observance of the prohibitions provided for under 118a of the Water Act, as well as the prohibitions and restrictions for activities in belts II and III of the sanitary protection zones specified in Appendix No. 2 to Ordinance No. 3/16.10.2000 on the conditions and order for research, design, validation and operation of sanitary protection zones around water sources and facilities for drinking and domestic water supply and around mineral water sources used for healing, preventive, drinking and bathing purposes, and namely: activities which lead to indirect discharge of hazardous substances on the earth surface and between the earth surface and the water level.
- 2. The requirements of the Water Act are to be observed in relation to the permission regime for use of a water body in development of the linear infrastructure crossing water bodies for abstraction from water sources for the hydro test and for other purposes, for discharge of the water consumed during the hydro test, from the horizontal directional drilling, from the drainage of trenches and platforms. The authority competent for issuance of the above permissions is the Water Management Basin Directorate East Aegean Region.
- 3. Chemical toilets shall be planned for the workers during the construction period.
- 4. An emergency plan shall be prepared, including measures for decrease of the negative consequences and liquidation of emergency situations in the event of spills of fuel and lubricant materials and prevention of fires, system for removal of the effects from emergency spills in the space around the roads. The plan shall also provide for the prompt notification of the relevant competent authorities, including the Regional Inspectorates for Environment and Water (RIEW) Stara Zagora and Haskovo and the Basin Directorate for Water Management in the East Aegean Region, about any emergency spills, as well as the technical options for removal of the spills and restoration of environment.

- 5. Within the zones for special water protection under Article 119a, para 1, item 5 of the Water Act, included in section 3, item 5.1 of the RBMP outside the boundaries of the settlements and the easements of the linear transport and energy infrastructure there shall be prohibited to cut down any natural river and riparian vegetation. The felling of any natural tree vegetation along the banks and isles in the rivers shall be banned for the part of the water bodies falling within the water protection zones under Article 119a, para 1, item 5 of the *Water Act*, included in section 3, item 5.1 of RBMP:
- 6. The mineral formations, if any, shall be identified, documented and stored if such are discovered during the performance of the excavation works.
- 7. For the purpose of restricting the harming of natural habitats and habitats of species, as well as the disturbance of animals, the movement of people and machinery within the boundaries of the protected areas shall be executed only along routes determined in advance, with a maximum use of the existing roads. In the construction of temporary roads within the borders of the protected areas no passing across humid meadows and pastures is permitted.
- 8. For the purpose of removing any possible fragmentation of fish habitats and for ensuring the ecological continuity of the rivers which are affected by the construction, the weighing devices (fortification elements for the pipes of the gas pipeline in the river) within the borders of the protected areas for the habitats shall not be higher than 0.15 metres above the bottom surface. When a greater height of the barrages is necessitated, fish passes shall be designed and constructed, with parametres and design described in the addendum to the EIA Report.
- 9. In respect of archaeological sites (a total of 28) No. 3, No. 4, No. 5, No. 6, No. 7, No. 8, No. 10, No. 11, No. 15, No.17, No. 18, No. 19, No. 22, No. 23, No.24, No. 28, No. 29, No. 33, No. 34, No. 36, No. 38, No. 39, No. 40, No. 43, No. 48, No. 49, No. 51 and No. 53 there shall be performed strict archaeological observations as per Article 161, para 2 of the Cultural Heritage Act. In the event that during such observation other archaeological sites, structures and sediments are revealed, the performance of rescue excavations will be necessary under the conditions of Article 148, para 2 of CHA. Any affecting of modern cemeteries at the settlements, as described in the field journal of the terrain archeological research studies shall be avoided.
- 10. On the territory of the municipality of Dzhebel and the village of Velikdenche are not to be established any building camps for the staff constructing the site. The technical infrastructure is not to be damaged, as in the event of such damage, the infrastructure shall be restored.
- 11. A plan for proper monitoring shall be elaborated in compliance with the recommendations given to item 6.3. of the EIA Report. The plan shall be coordinated with RIEW Haskovo and RIEW Stara Zagora, and shall be submitted to the Environment Executive Agency for validation.
- 12. Any waste formed as a result of the construction at the site shall be delivered based on written contracts to entities holding the relevant document as per the procedure of the Waste Management Act, or a complex permit.
- 13. There shall be ensured separate collection and haulage of the excavated earth masses and the wastes from construction and demolition works and no mixing

between them is allowed. The storage of building wastes shall be performed only in separately set platforms.

14. The routes for haulage of building wastes to the relevant treatment plant/ facility shall be coordinated with the mayor of the respective municipality.

# III. During the operation period and at decommissioning:

1. Organization shall be set up and control shall be exercised on the collection, storage and treatment of generated waste while complying with the requirements set forth in the regulations on waste management.

### IV. Measures under Article 96, par. I item 6 of the Environmental Protection Act

No.	Measures	Period/ implementation phase	Result
1.	Relocation of the gas pipeline route at 8+550 to km 8+910 out of the mineral water source Kirkovo in northeastern direction.	Design	Protection of groundwater from pollution
2.	Prevention of spills of bentonite solution by way of bags filled with sand, or other appropriate means.	Design and construction	Prevention of any pollution of water bodies with bentonite particles
3.	Where necessary, sprinkling of the excavation mass and the used temporary roads.	Construction	Decrease of air dusting
4.	Control over the loading of trucks, measures for avoidance of spillage during the transportation of backfilling materials.	Construction	Decrease of air dusting
5.	No connection between hazardous substance reservoirs and the sewage system in the area of the platforms of the base camps.	Construction	Prevention of surface water pollution
6.	The change, storage and treatment of spent lubricant materials and oils, fuels and chemicals, as well as the storage of waste shall be performed at the locations so designated, far from any water bodies.	Construction	Protection of water from pollution
7.	All vehicles shall be equipped with kits for removal and handling of spills in water bodies.	Construction	Protection of water from pollution
8.	Bags of sands shall be placed or there shall be provided settling tanks for drainage out of the easement area and of the trench.	Construction	Prevention of surface water pollution

9.	Upon crossing of areas in which the soils have a heavy mechanical composition (mainly vertisoils)) there shall be applied appropriate measures for decrease of the degree of compaction – laying of geotextile with a gravel layer, pads for soft soils, deep ploughing.	Construction	Protection of soils from pollution and compaction
10.	No bentonite solution shall be used in drilling through rocks, allowing for penetration of bentonite in the water object above the boring.	Construction	Prevention of pollution of water bodies with bentonite particles.
11.	The removed humus and earth masses during construction shall be disposed separately and subsequently shall be used for reclamation of the affected areas.		Decrease of the losses of valuable soils, protection of soil fertility.
12.	The excavated humus layer shall be prevented from trampling, pollution and mechanical damage during the construction activities.	Construction	Decrease of the losses of valuable soils, protection of soil fertility.
13.	The backfilling of trenches in protected areas shall be executed with the humus and soil removed from the same places.	Construction	Prevention of possible transformation of habitats
14.	There shall be executed replanting of specimens of the protected and vulnerable species of Fritillaria Pontica (No. 41 19 56,82; E 25 22 10,37), discovered along the route about km 9+400, near the village of Kirkovo, which will be directly affected by the building activities. The replanting shall be executed after the end of the vegetation period of the specimens, in August, and the specimens shall be replanted at a distance of not more than 50 metres of the gas pipeline route, in a shady location along the western slope of the hill, in coordination with RIEW.	Construction	Protection of biodiversity

15.	In sections with excavation pits there shall be envisaged the placement of temporary fencing with small mesh aperture (of the type rabbit-proof fence), closely fitting to the surface and with a height of at least 0.3 metres in the zones of the habitats and 0.8 metres in the bird zone, which after the completion of backfilling of the trenches in the relevant section shall be removed.		Limitation of mortality in animals (amphibian, reptiles, small mammals, young birds)
16.	Within the limits of the protected area for birds BG0002013 "Studen Kladenets" are not to be performed any preparatory and building activities during the birds' breeding period – from 1 March to 30 August, as well as in the winter period from 1 December to 28 February, including in the territories which overlap with BG0001032 "East Rhodopes".	Construction	Decrease of the impacts on birds
17.	Within the limits of the protected area for birds BG0002013 "Studen Kladenets" under the water surface of the dam, the route shall be constructed via horizontal directional drilling (HDD technology) as the building activities shall commence from 20 July and end until 30 March.	Construction	Decrease of the impacts on birds
18.	Within the limits of the protected areas for habitats BG0001034 "Ostar Kamak", BG0000578 "Maritsa River", BG0000442 "Martinka River" and BG0000425 "Salzliyka River" the building activities shall be performed up to and after the period 1 March - 15 July.	Construction	Protection of biodiversity
19.	Within the limits of protected area BG0001032 "Rhodopes – Eastern", the construction activities shall be performed up to and after the period <b>1 March - 15 July.</b> For the stretch between points having coordinates 41° 18' 25.42"N and 25°23' 16.78"E and 41° 16' 42.37"N and 25°25' 40.19" E, there shall not to be performed any building activities also during the wintering period of tortoises – <b>15 October</b> — <b>1 April,</b> if the tortoises are not removed outside the building easement.	Construction	Protection of biodiversity, diminishing the impacts on tortoises and other reptile and amphibian species

20.	Within the limits of protected area BG0000578 "Maritsa River" the building activities for passing under Maritsa River with HDD shall be performed during the period <b>15 July - 15 October,</b> so as to lessen to a minimum the negative impacts on ground squirrels.	Construction	Decrease of the disturbance and significant impacts on ground squirrels
21.	No felling shall be performed during the breeding period and during the period of newborn bats raising (April – July), and in the sections between km 0.000 and km 4.000 and between km 82.500 and km 83.500.	Construction	Decrease of impacts on bats
22.	No building activities are to be performed at a distance of 0.5 km from the established nests of predatory birds, described in the EIA Report - from 1 April to 30 August (before that date preparatory activities are admissible if they do not require many people in the field or heavy construction machinery).		Decrease of impacts on birds
23.	Before the beginning of construction within the building easement with a width of 30 m is to be performed a relocation of tortoise specimens in the period <b>15 May – 15 September</b> for the sections of the route from km 9+000 to km 9+490, from km 17+900 to km 19+700, from km	Construction	Prevention of impacts on tortoises
	20+230 to km 22+960, from km 23+500 to km 24+838, from km 25+900 to km 27+150, from km 65+600 to km 66+200, from km 72+600 to km 73+860 and from km 131+840 to km 132+915.		
24.	Rational organization shall be ensured for the activities related to noise generation which are in the proximity of settlements – performance in definite periods coordinated with the local authorities.	Construction and operation	Prevention of noise impact on population
25.	Anti-erosion activities shall be performed as well as terrain fortification, especially in points where the gas pipeline passes across steep slopes.	Construction and operation	Decrease of the risk of erosion, landscape conservation.
26.	Clearing of dry trees, branches and other building and other wastes fallen in river beds at the points of crossing with the gas pipeline.	Operation	Prevention of erosion processes on banks, prevention of floods

This decision refers only to the investment proposal, which has been the subject of the EIA performed following the procedure provided for under the Environmental Protection Act. In case of extension or amendment of this investment proposal, the employer must promptly notify the Ministry of Environment and Water, or RIEW Haskovo and RIEW Stara Zagora at the earliest possible stage.

Pursuant to Article 99, para 8 of the Environmental Protection Act the Decision on EIA shall lose its legal effect if within a term of 5 (five) years as of the date of its issuance, the implementation of the investment proposal has not started.

Upon change of the employer, the new employer pursuant to Article 99, para. 7 of the Environmental Protection Act shall notify the Ministry of Environment and Water on a mandatory basis.

Upon establishment of any nonperformance of the conditions and measures stated in the EIA Decision, the responsible persons shall be held liable under Article 166, item. 2 of the Environmental Protection Act.

The concerned parties may appeal the decision following the procedure provided for under the Code of Administrative Procedure within a term of 14 days as of its notification.

Date: 6 February 2013

MINISTER: [illegible signature] NONA KARADZHOVA

[seal of the Ministry of Environment and Water of the Republic of Bulgaria]