

Appendix № 1

Technical specification

Public Procurement Procedure of public competition with subject matter:

“Implementation of full rescue Archaeological Studies of additionally found Archaeological Sites, located along the Route of „Gas Interconnector Greece-Bulgaria “

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1. Project description.

The project for gas interconnector Greece-Bulgaria (IGB) is a project for a new gas transmission pipeline between the Republic of Greece and the Republic of Bulgaria. The role of the project is to improve the security of supplies for the Republic of Bulgaria and the region and to connect the gas transmission networks of both countries.

The total length of the gas pipeline route is about 182 km. Its length on the territory of Bulgaria is about 151 km and operational pressure 7,5 MPa and diameter DN800. The point where the gas pipeline crosses the border between Greece and Bulgaria is about 1,2 km to the north-east of Makaza border check point. The connection of the gas interconnector with the gas ring of Bulgaria will be done to the south of the village of Malko Kadievo, Stara Zagora municipality. The gas pipeline will be laid underground and the minimum depth of laying of the gas pipeline and the casings measured up to the upper generant of the pipe is 0.8 m. Crossing of each obstacle shall be done as per an individual design.

The route of the gas pipeline passes through three districts and nine municipalities:

- the district of Kardzhali and the municipalities of Kirkovo, Dzhebel, Momchilgrad, Kardzhali;
- the district of Haskovo and the municipalities of Haskovo and Dimitrovgrad;
- the district of Stara Zagora and the municipalities of Opan, Stara Zagora and Radnevo;

The gas pipeline route provides for technological sites for:

- Linear block valve (BV2) at km 25.2 (Velikdenche village),
- AGRS Kardzhali and block valve (BV 3) at km 50.0,
- Linear block valve (BV 3a) at km 79.2 (Mandra village),
- Linear block valve (BV 4) at km 96.8,
- Dispatching centre with an Operation and maintenance base on the lands belonging to the town of Haskovo and the village of Stamboliyski;
- Linear block valve (BV 4a) at km 111.3 (Chernogorovo village),
- AGRS Dimitrovgrad - at km 117.2,
- Linear block valve (BV 5) (Golyamo Asenovo village), located on transmission gas pipeline after AGRS Dimitrovgrad connecting IGB project with a gas transmission pipeline DN500 of Bulgartransgaz EAD,
- Linear block valve (BV 6) (Trakia village) at km 129.5,
- GMS-2 (Stara Zagora) at km 150.5 connecting IGB project with a gas transmission gas pipeline DN700 of Bulgartransgaz EAD

- Linear block valve (BV 7) (Zagore village) at km 150.9, located at transmission gas pipeline DN 700 diameter after GMS-2 Stara Zagora
- 3 cathodic protection stations (CPS) with 3 power supply lines for CPS.

In connection with the investment intention of ICGB AD to construct Gas Interconnector Greece-Bulgaria in 2012 an Environmental Impact Assessment Report (EIAR) was prepared. Based on Decision №1-1/2013, the Ministry of Environment and Water (MOEW) gave a positive assessment of EIAR which is now effective. The gas pipeline route crosses the following protected areas:

- Protected areas pursuant to the Habitats directive 92/43/EEC:
 - “The Rhodopes - East” BG0001032, “Ostar kamak” BG0001034, “the Maritsa river” BG0000578, “the Martinka River” BG0000442, “the Sazliika River” BG0000425.
- - protected areas pursuant to Directive 79/409/EEC on conservation of wild birds:
- Studen Kladenets BG0002013.

Pursuant to art. 161 of the Cultural Heritage Act before implementing an investment project in territories for which there are data for existence of archeological sites, preliminary archeological studies are mandatorily done which establish whether they will not be affected or damaged. On archeological sites found during these studies and for which it has been established that they will be affected, rescue excavations are done before start of construction works. The process is monitored by archaeologists.

At the stage of environmental impact assessment for the investment proposal preliminary archeological studies have been performed pursuant to the procedure in art. 160 of the Cultural Heritage Act (CHA). In the studies performed 83 archeological sites have been identified on the confirmed west route of the gas pipeline. In its decision № 1-1/2013 on approving the environmental impact assessment MOEW confirms that for 16 archeological sites full rescue archeological excavations need to be performed before start of construction, for 13 - archeological drills and for 28 sites strict archeological supervision to be performed during construction. In its opinion outgoing № 26-00-0429/19.04.2013 the Ministry of Culture approved Decision №1-1/2013 on EIA and confirmed the measures recommended.

2. Description of the subject of service.

For the investor of the project on the territory of Republic of Bulgaria occurred need to select a contractor for the following activities: **„Implementation of full rescue archeological studies of additionally found archeological sites located along the route of gas pipeline „Gas Interconnector Greece-Bulgaria“**

Subject of archeological studies appear archeological sites, affected by the right of way of the gas pipeline, which are localized upon field studies and subsequent preliminary rescue archeological excavations up to 10% of the site area – identified as sites A13 and A14. After completion of the preliminary excavations, the results from them are approved by protocols of an Expert committee to the Ministry of culture, certified by the Minister of culture in accordance with art.158a of the Cultural heritage act. The protocols of the Expert committee order full rescue archeological excavations of part of the initial area of the archeological sites.

The characteristics of the archeological sites are as follows:

Table 1 – Archeological sites, for which are envisaged full rescue excavations

Number	Site number	Type of site	Location	Km of the gas pipeline
1.	№A13	Site from the late iron and Roman era	Land of Orlovo village, Haskovo municipality	km 84+770 – 84-950
2.	№A14	Protohistorical site	Haidar kar area, Stamboliiski village, Haskovo municipality	km 93+250 – 93+500

Archeological studies shall have to be done only for the area of the archeological site and above ground installations affected by the easement of the gas pipeline.

Appendix 1 contains decisions of the Expert committee to the Ministry of culture, certified by the Minister of culture.

Studies shall have to be performed in accordance with the requirements of: Cultural heritage Act and Ordinance № H-00-0001 dated 14.02.2011 on conducting field archeological studies.

The studies have to end with a decision of the committee, designated by the Minister of culture under art. 158a of the CHA for acceptance of the results from them.

Along the route of IGB gas pipeline easement has been established pursuant to art. 64 of the Energy Act. Compensation for damages caused to users of properties affected by archeological excavations shall be paid by the Contracting Entity. In the event of the Contractor paying compensation for lost profit to users of properties affected by archeological excavations, it will be recovered following submission of documents evidencing the costs incurred.

3. Requirements to conducting archeological studies

3.1. The Contracting Entity hereby states that the contractor nominated shall procure a permit, in accordance with the Cultural Heritage Act, and will conduct until **final completion Full rescue archeological excavations** of the registered archeological sites described in Table 1 before start of excavation works along the route of IGB gas pipeline.

3.2. The Contracting Entity determines that “**Before start of excavation works**” shall be the period before the date of opening the construction site and/or building line for a particular section of IGB gas pipeline by virtue of SDA and Ordinance № 3 of 2003 on producing acts and protocols during construction- protocol №2 and №2a.

The Contracting Entity determines that **Full rescue archeological excavations** or hereinafter referred to as **Archeological excavations** are a type of field studies in the meaning of art. 147, par.4, item 2 and par.5, item 2 of the Cultural Heritage Act and art.13 of Ordinance H-00-0001 dated 14.02.2011 on performing field archeological studies of the Ministry of culture which refers to the area of registered archeological sites in Table 1 and shall include a study within the easement (right of way) of IGB gas pipeline;

- 3.3.** B The Contracting Entity states that the obligation “**until final completion**” shall also include procuring the respective legally valid permits/protocol/ documents for accepting the completed Archeological studies such as a decision of the committee pursuant to art. 158a of CHA whereby the results of the study are accepted and the actions and measures proposed for them are approved and shall be considered effective for each part of the subject matter of the service.
- 3.4.** For final completion of **Archeological excavations** the requirement of the Contracting Entity shall be the following:
- 3.4.1. The Contractor to complete all Archeological studies for a particular site under Table №1; and
- 3.4.2. The Contracting Entity to accept implementation which is to be established with a final protocol of delivery and acceptance for each site; and
- 3.4.3. An Inspection upon completion to be performed; and
- 3.4.4. The Contractor to prepare and submit to the Contracting Entity a report along with the Official papers required for performing Archeological works, including photographs and geo detection of the archeological site so as to be factually entered in the project documentation of IGB gas pipeline, and
- 3.4.5. The Contractor to submit to the Contracting Entity for each site a protocol of the expert committee under art. 158a, par. 3, with regard to art. 158a, par. 5 of the Cultural Heritage Act approved with an order of the competent authority under art. 158a par. 6 of the Cultural Heritage Act.
- 3.5.** The Contracting Entity defines as “**Official papers on the Archeological studies performed**” all and any official papers for which it is provided to be prepared for acceptance of Archeological excavations completed pursuant to the Cultural Heritage Act and/or Ordinance H-00-0001 dated 14.02.2011 on performing field archeological studies approved by the Ministry of culture.
- 3.6.** The Contracting Entity defines as “**Inspection upon completion**” all and any checks and control including by expert Committees or by the Inspectorate to the Ministry of culture established by the effective laws in the Republic of Bulgaria and other regulations regarding completed archeological studies, regardless whether they are provided for in this contract and referred to as such. The contractor nominated shall undertake to procure and obtain a positive result of such an inspection for all archeological works performed by it.
- 3.7.** The Contracting Entity stipulates that the Contractor nominated shall have to use only such special technical equipment – machines and devices which have the respective registration and are envisaged by the law for performance of Archeological excavations.
- 3.8.** The Contracting Entity stipulates that archeological excavation shall be conducted pursuant to the scientific methodology stipulated by regulations, their purpose being to clarify the main features of archeological sites. Archeological excavations shall have to be held after the site studied is located in a coordinate system used for preparation of DSP-PP for IGB gas pipeline. In any case Archeological excavations shall have to be performed on the surface of the site downwards until a sterile layer is reached.
- 3.9.** The Contractor shall have to procure and perform archeological studies in compliance with the interest of the Contracting Entity. Compliance with the interests of the Contracting Entity shall mean performing this volume of activities which is only required for lawful implementation of the investment initiative (IGB project) causing minimum damage on

properties affected located within the easement of the gas pipeline and sites of above-ground facilities and access roads to them with the least costs and the least inconvenience, effect and interference in regular activities performed by the population, owners or other persons.

- 3.10.** The Contractor shall be obliged to prepare, maintain properly and submit to the National archive of field archeological studies at NAIM to BAS / National Archeological Institute with Museum to the Bulgarian Academy of Sciences/ and to the respective museum on whose territory the Archeological excavations have been performed field documentation on the archeological studies performed within the statutory terms.
- 3.11.** The contractor shall be liable for and shall procure the overall organization, control, security and supervision, workforce, special technical equipment, materials, temporary facilities as well as any other objects and activities of constant or temporary nature required to perform the Archeological studies and to remedy the defects in them within the terms agreed.
- 3.12.** The Contractor shall be liable and needs to procure and use for performance of the contract a scientific head and qualified staff in accordance with the requirements of the Cultural Heritage Act and the regulations to it.
- 3.13.** The Contractor undertakes and guarantees that it will provide archeological teams which will meet the following minimum requirements:
 - 3.13.1. One (1) scientific head and one (1) deputy scientific head with education and qualifications meeting the requirements of art. 150, par. 1 of the Cultural Heritage Act and archeologists who shall perform archeological excavations.
 - 3.13.2. Specialists who shall perform geo detection of archeological sites located along the route (in the section subject to study) with appropriate software and technology adapted to the specificities of the activity as well as to process digital data submitted by the Contracting Entity and received during archeological excavations.
 - 3.13.3. Technical staff performing auxiliary work.
 - 3.13.4. The head of team shall meet the requirements for obtaining a permit for field studies in accordance with the provisions of the Cultural Heritage Act.
 - 3.13.5. Each of the teams shall have available the special technical equipment required which allows the application of non-destructive methods for performing the studies and this equipment shall have to be registered in accordance with the requirements of CHA.
 - 3.13.6. The number and members of teams shall have to allow studies on all archeological sites under Table 1 to be made.
 - 3.13.7. In the event of a change of the scientific head the Contractor shall notify the Contracting Entity of this circumstance within 3 days and within this term it shall nominate a new scientific Head.

4. Drawing up and submission of field documentation

For the archeological excavations performed at each site the Contractor shall draft and maintain field documentation. Copies of the field documentation shall be mandatorily

submitted to the National archive of field archeological studies at NAIM to BAS and at the respective museum on whose territory Archeological excavations have been performed.

5. Communication with local authorities

The scientific head shall submit a copy of the permit for the respective type of Archeological works in the municipality, town council, regional directorate of MoI on the territory where the site is located. The scientific head shall submit in person the permit under the previous sentence to local authorities.

6. Simultaneous implementation of archeological studies

The Contractor shall be obliged to provide the required scientific heads and teams for simultaneous performing of archeological studies for all archeological sites under Table 1.

7. Internal control on implementation

The Contractor shall set up a system for current internal control on implementation of Archeological excavations.

8. Data for the sites

8.1. The Contracting Entity hereby encloses to the present Technical specification data for the archeological sites, obtained during initial studies. Excerpt from Detailed site development plan-parcel plan shall be submitted to the contractor after execution of the contract for implementation of the services. Procurement of any additional information required for performing the work shall be part of the obligations of the Contractor.

8.2. The Contractor is considered to have reviewed the data submitted by the Contracting Entity and based on them has studied the route of IGB gas pipeline as well as the sites, their peculiarities and other available information and to have been satisfied (to the extent possible, in view of the time and means available) before submitting the Tender in terms of :

- ✓ The shape and nature of the sites along the route of IGB gas pipeline, incl. field peculiarities;
- ✓ Hydrogeological and weather conditions;
- ✓ Volume of archeological studies and special equipment required for their implementation;

8.3. The Contractor shall be considered to have received all the information required with respect to foreseeable risks, contingencies and other circumstances which may affect implementation.

9. Temporary facilities

The Contractor shall bear all costs and fees for installation and respectively disassembly of any temporary facilities which it shall need to perform Archeological studies. The Contractor shall guarantee that the installation of all and any temporary facilities shall be in accordance with the law.

10. Other obligations of the Contractor

10.1. The Contractor shall procure the overall control and supervision, workforce, special technical equipment, materials, temporary facilities as well as any other objects and activities of constant or temporary nature required to perform the Archeological studies.

- 10.2.** The Contractor shall undertake to procure advisability and safety of all activities, completion of archeological sites and all methods used in performing archeological studies regardless of the availability or not of the approval or consent of the Contracting Entity or its representatives.
- 10.3.** The Contractor shall be obliged to perform and shall be responsible for the overall administration, management and control on implementation of archeological studies in accordance with the requirements of the contract, the Cultural Heritage Act and the ordinances to it as well as to comply with established or common technical and technological requirements to their implementation.
- 10.4.** The Contractor shall be obliged to also comply with the regulations of control bodies supervising archeological studies in accordance with laws and sub-legislative normative acts.
- 10.5.** The contractor shall undertake to procure at its expense the involvement of all the staff and workers required providing their remuneration, business trips costs, transportation, occupational safety, etc.
- 10.6.** The Contractor shall interact and be responsible for interaction with the expert committee appointed by the Minister of culture for accepting the results of the archeological studies performed and drafting and signing the protocols required for this as well as interaction with other state authorities competent in the field of cultural heritage preservation. Interaction with the latter shall be upon notification of the Contracting Entity.

11. Implementation terms. Priority studies

Archeological studies have to be performed in a period taking into account the construction schedule of IGB gas pipeline. The maximum deadline for completion of each individual site in accordance with Table № 1 shall be 4 (four) months following provision of access to the site.

- 11.1.** The terms proposed shall include the time required to obtain permits to perform field studies pursuant to the procedure stipulated in CHA.
- 11.2.** As initial date for starting field archeological studies for each individual archeological site shall be considered the date of receipt of notification on behalf of the Contracting Entity that for a particular site is provided an access and the work can start.
- 11.3.** As a final date of completion of the field archeological studies under Table № 1 shall be considered the date of handing the protocol for the results from a study (according to the provisions of art. 158a of the CHA) at the Ministry of culture.
- 11.4.** The date the Contractor submits to the Contracting Entity a protocol of the expert committee under art. 158a, par. 3, with regard to art. 158a, par. 5 of the Cultural Heritage Act approved with an order of the competent authority under art. 158a par. 6 of the Cultural Heritage Act shall be regarded as date of completion for each particular site.
- 11.5.** The Contractor may request extension of the deadlines only in the following cases defined in the Contract:
- 11.5.1.** The term for delivery of each particular site shall be extended by the days with bad weather conditions - including all days during which the minimum temperature for 24 hours is below +10°C as per data of the Central meteorological office and a report issued by the National meteorology and hydrology institute (NMHI) to BAS for all days with downpours,

all days with snowfalls, soaked earth and/or floods preventing activities under the contract to be performed.

12. Special technical equipment. Use of special technical equipment

15.1. 11.1. The Contractor shall procure at their expense all special technical equipment required to perform the Archeological excavations. The Contractor shall use on sites only special technical equipment stipulated in the respective permit for conducting Archeological works. The Contractor shall not have the right to remove from the archeological site any of the special technical equipment without the consent of The Contracting Entity.

15.2. 11.2. All special technical equipment and materials that will be delivered to the archeological site have to be used with a proper, qualified and diligent approach and in accordance with the established professional standards. Earth-removing machinery and mechanization may be used only if it is stipulated in the archeological excavations study.

16. Safety measures

Upon installment of the technical equipment and the operations performed on the archeological site the Contractor shall be obliged to take into account all applicable safety regulations and provide appropriate safety measures.

The Contractor shall be liable to protect the life and health of the persons admitted to the sites subject to study.

17. Security and signs

In the course of performing the Archeological excavations the Contractor shall be obliged to procure at their expense fences and/or signs, lighting, security and surveillance of the site in the security areas set in the archeological excavations permit.

18. Environment protection

The Contractor shall be obliged to take all measures required to protect the environment both on the archeological site and around it.

19. Protection of the archeological valuables

The Contractor shall be obliged to take all measures required for protection of archeological valuables by protecting them against damage or destruction and to deliver them to a state or municipal museum or to perform their conservation (under the conditions stipulated in the law).

20. Maintenance of the archeological site

During Archeological excavations the Contractor shall have to maintain the archeological site clean from any unnecessary heaps which may be an obstacle and create a risk for the people, working there.

21. Security on the archeological site

The Contractor shall be obliged not to admit to the archeological site persons who are not directly involved in the Archeological excavations except for officials authorized to make inspections or persons authorized by the Contracting Entity to make inspections.

22. Main operations on the archeological site

The Contractor shall be obliged to perform the main operations on the archeological sites- excavation and dismantling of archeological structures- in accordance with the technology for conducting rescue archeological excavations. The Contractor shall have to limit archeological excavations only within the archeological site affected by the easement of IGB gas pipeline.

23. Supplies to the archeological site

The Contractor shall be wholly liable for procuring, transportation, receiving, unloading and safe storage of all special technical equipment and materials and the like required for completion of the archeological excavations.

24. Recovery of the appearance

The Contractor shall implement backfilling on the excavation for the archaeological site in a safe condition when the archaeological excavations will not continue and no other decision of a competent authority is available.

25. 3D localization

All established immovable and movable cultural valuables shall be localized in space via Three-dimensional localization.

26. Premises and equipment

Premises and equipment which the Applicant will use for the whole period of performance of the contract shall be procured by it and at its expense. All costs for performing the service shall be included in the price of the Candidate.

27. Correspondence.

All original documents, project documentation and original materials shall be submitted with a protocol for delivery and acceptance signed by authorized representatives of the Contractor and ICGB AD.

Copies of original documents, notifications, opinions, etc. may be sent via fax or e-mail.

The whole documentation related to archeological studies completed, including permits, protocols and other documents for delivery of the site and clearing the terrain for start of construction shall be delivered by the Contractor to the Contracting Entity in one copy, duly packaged for each individual site.

Appendices:

Appendix 1 – Protocols from conducted (sessions of) expert committees and orders for approval by the Ministry of culture for archeological sites №A13, №A14.