

CONSULTING SERVICES AGREEMENT

P-02-C-18.03-2017

On this [•], by and between:

ICGB AD, a joint-stock Contracting Authority incorporated and existing under the Bulgarian Law, registered in the Commercial register to the Registry Agency under Unified Identification Code: 201383265 with registered office in BG-1000 Sofia, District "Oborishte", 13 Veslets Str., fl. 2, duly represented herein by its Executive Directors Konstantinos Karagiannakos and Teodora Georgieva-Mileva,

(hereinafter referred to as to "the Contracting Authority")

and

SYBILLA Consulting Engineers Ltd incorporated and existing under the Greek law, registered in Athens, Greece with registered office in Ypsilandoy 16 st. Maroussi represented herein by Ioannis K. Panagopoulos

(hereinafter referred to as to "the Contractor")

The Contracting Authority and the Contractor may be referred to herein individually as a "Party" and collectively as the "Parties".

WHEREAS:

(A) ICGB or the Contracting Authority is Company incorporated with the scope of financing, developing, building, owning and operating on a long-term basis the gas interconnector between Greece and Bulgaria. It will interconnect the natural gas transmission systems of DESFA and TAP, both in Greece, with the one of BULGARTRANSGAZ in Bulgaria (referred herein after as the "IGB Project").

- (B) The IGB Project consists of two phases: the construction of the 32", 180 km pipeline between Komotini (northern Greece) and Stara Zagora (central Bulgaria) with a commercial operation date approximately established by the 2H2019.
- (C) The IGB Project is in the preparatory phase for starting the construction activities and is in process of completing the acquisition of the land rights for construction permits in Bulgaria and of following up the procedure for obtaining the construction permits in Greece.

The following is agreed and stipulated:

1

5 5 34 supp

SCOPE OF WORK

The scope of works of the Services to be performed concerns the performance of a Quantitative Risk Assessment Process for the Greek section of IGB. The Contractor shall perform the following activities:

- (i) Elaborate and prepare Quantitative Risk Assessment Study (referred hereinafter as "the Study") where the latter shall comprise of all parameters described from letters "a" to "n" following the Scope of Services and the Technical offer of the Contractor (Appendix II) representing integral part of this Agreement;
- (ii) Before or following the submission of the Study under point (i), the Contractor may be also asked to perform any required contacts with the Competent Authorities in order to provide clarifications that may be required till the final approval of the Study.

2. TIME SCHEDULE

- 2.1 The execution of the Services listed in point (i) shall start on the Execution date of this Agreement and the first draft of the Study shall be due in two (2) months of the Execution date.
- 2.2 The final draft of the Study shall be due in three (3) months of the date of the final comments submitted on the first draft by the Contracting Authority.
- 2.3 The execution of the Services listed in point (ii) shall start immediately following the final submission of the Quantitative Risk Assessment Study under point 2.2 and shall be terminated upon the approval of the Study by the competent Authority.
- 2.4 The Contractor shall provide the Services on the date and within the time limit specified in the Agreement, or as otherwise mutually agreed by the Parties.

3. ENTIRE AGREEMENT

- 3.1 The Agreement consists of the present Agreement and the attached documents listed below that are deemed to form, be read and construed as parts of it:
 - I. The present Agreement;
 - II. Appendix I Technical and Commercial Offer of the Contractor;
 - Appendix II Scope of Services;

3.2 It is mutually agreed by both Parties that by signing this Agreement, no previous documents, correspondence exchanged and any other relevant data written or orally communicated may be taken into consideration or be used in any way whatsoever for the interpretation of this Agreement.

4. CONFIDENTIALITY

- 4.1 The Contractor shall keep all the data and the results of the Services and all technical and non-technical information, data and knowledge obtained from the Contracting Authority or disclosed to the Contractor on the Contracting Authority's behalf (together herein called the "Information") confidential and shall not disclose to or place at the disposal of any third party or enable any third party to peruse, reproduce, copy or use any or all of the Information without the prior written consent of the Contracting Authority.
- 4.2 The Contractor shall not use the Information except for carrying out the Services and performances of its obligations hereunder.
- 4.3 Unless otherwise specified herein the Contractor shall return and cause its personnel to return all documents and material containing the Information received from the Contracting Authority or produced by the Contractor immediately after completion of the Services.
- 4.4 The Contractor shall ensure that only its personnel carrying out the Services shall have access to the Information and that they shall equally comply with the obligations of the previous paragraphs.
- 4.5 The Contracting Authority shall have the right to communicate and distribute the deliverables prepared by the Contractor to the following third parties: the shareholders of the Contracting Authority (Edison, Depa, Bulgarian Energy Holding) or their related companies, to the Contracting Authority's advisors, consultants and agents, as well as to any public authority, body or other person having jurisdiction and exercising governmental, provincial or local authority in Bulgaria, Greece or any other jurisdiction with respect to the IGB Project.
- 4.6 In the case of infringement of the confidentiality obligation by the Contractor or by a person for whom the Contractor is responsible, the Contractor shall pay the Contracting Authority equivalent of all associated damages and losses.

5. CONTRACTOR'S MAIN OBLIGATIONS

- 5.1 The Contractor shall perform and complete the Services:
 - a) in accordance with the Agreement;
 - b) in compliance with all applicable laws;
 - c) in an efficient, safe, courteous, ethical and businesslike manner in line with the industry practice.
- 5.2. The Contractor shall perform all activities with the help of specific purpose software including the calculation of the consequences (radiation/explosion effects) from the possible accidents in the performance of IGB Project.
- 5.3. The Study shall be elaborated in accordance with the Greek Technical Regulation for the Natural Gas Transportation Systems and the applicable legislation.
- 5.4. The Study shall be considered completed upon approval of the Competent Authority following the provisions of article 8.

1

The pull

5.5. The Contractor undertakes to release the Contracting Authority from and protect it against any liabilities and responsibilities of any kind deriving from Contractor's breach of laws, decrees, regulations and central and/or local government issues.

DUTIES AND TAXES

- 6.1 All direct and indirect taxes and duties in connection with the performance of the Services by the Contractor, including any fines and surcharges for the same, and generally all and every tax duty imposed by any applicable law shall be borne by the Contractor.
- 6.2 The Contract Price is deemed to include all taxes and duties as referred to in Art.6.1, excluding Value Added Tax, and the Contractor shall be responsible for the payment of its own tax (including income or withholding tax) and of any other taxes levied or assessed in lieu against the Contractor by the Greek State or any other competent authority.
- 6.3 In the event that the Contracting Authority is obliged to withhold or deduct any Bulgarian tax on any amount payable to the Contractor hereunder, the Contracting Authority shall pay such withheld and/or deducted tax to the proper Bulgarian authorities on behalf of the Contractor. In such a case, the Contracting Authority shall provide the Contractor with any evidence of such payment provided by the relevant Bulgarian authorities.
- 6.4 The Contractor shall indemnify and hold harmless the Contracting Authority from any and all claims, losses, costs, damages and expenses (including payment of attorney's fees and other litigation costs) arising out of or in connection with any failure by the Contractor to fulfil all its obligations under this Art.6.

7. WARRANTIES

- 7.1 The Contractor warrants it is, and shall at all times be, a competent, qualified and experienced Contractor in carrying out the Services, organized, insured for the performance of the Services in an efficient, professional and timely manner and meeting all the requirements of this Agreement.
- 7.2 The Contractor shall start, execute and diligently perform the Services in accordance with this Agreement, in compliance with the applicable legislation in order to deliver to the Contracting Authority the completed Services within the time schedule.
- 7.3 The Contractor warrants that the Services shall be in accordance with this Agreement, shall be free from defects and shall conform to the good practice and generally accepted international standards. The Contracting Authority may require the Contractor to repeat, without Contracting Authority's additional cost, the defective parts of the Services.

8. ACCEPTANCE CERTIFICATE

8.1. The first draft study shall be submitted in the time limits pursuant article 2.1. Following 10 (ten) days of the submission, the Contracting Authority shall either accept the deliverable or request amendments of the draft Study. The acceptance shall be evidenced by a double signed acceptance certificate by both the Contractor and the Contracting Party. Following the signing of the acceptance certificate and the terms defined in article 10.1 "a", the Contractor shall be entitled to receive intermediary payment.

- 8.2. The final draft study shall be submitted in the time limits pursuant article 2.2. Following 10 (ten) days of the submission, the Contracting Authority shall either accept the deliverable or request amendments of the study. The acceptance shall be evidenced by a double signed acceptance certificate by both the Contractor and the Contracting Party. Following the signing of the acceptance certificate and the terms defined in article 10.1 "b", the Contractor shall be entitled to receive final payment.
- 8.3. The Final Study approved by the Authorities certified by the respective decision shall be ground for the final payment.
- 8.4. In case the Contracting Authority does not issue a certificate for acceptance of the Services within thirty (30) calendar days from the receipt of Contractor's written request and submission of the deliverable, the Contractor shall be informed in writing, within the above-mentioned time period, of the reasons for which the Contractor's Services cannot be accepted. In the latter case the Contractor shall take all necessary corrective actions for making good its Services, and shall request again in writing their acceptance, following the above-mentioned procedure.

9. LIABILITY

- 9.1 The Contractor shall indemnify, protect and defend the Contracting Authority from and against all actions, claims and damages arising out of or resulting from the non- compliance of the Contractor with its obligations under this Agreement.
- 9.2 The Contracting Authority shall indemnify, protect and defend the Contractor from and against all actions, claims and damages arising out of or resulting from the non-compliance of the Contracting Authority with its obligations under this Agreement.
- 9.3 In case of delay of the Contractor to comply with the obligations under the present Agreement pursuant the time limits defined in article 2 with more than 50 (fifty) days following the day on which the first or the final draft of the Study is expected to be delivered, the Contractor shall owe the Contracting Authority penalty for delay in the amount of 10% of the whole sum due for payment.
- 9.4 In case that the Contractor fails to perform fully with its obligations under this Agreement by completion date even after written invitation on behalf of the Contracting Authority, the Contractor shall owe the Contracting Authority penalty for non-performance in the amount of 30 % of the whole sum of the lump sum defined in article 10.1.

10. CONTRACT PRICE AND PAYMENTS.

- 10.1 For performance of the Services in accordance with the requirements and the conditions laid down herein, the Contractor shall be remunerated with the lump sum price in the amount of €23.800,00 excluding VAT (referred hereinafter as the "Contract Price") paid in two instalments as following:
 - a) Payment in the amount of 30 % of the lump sumrepresenting first intermediary payment which shall be due in 5 (five) working days upon the acceptance of the first draft of the Study pursuant article 2.1. certified by signed certificate for acceptance by the Contracting Authority pursuant article 8.1.
 - b) Payment in the amount of 30 % of the lump sum representing second intermediary payment which shall be due in 5 (five) working days upon the acceptance of the final draft of the Study pursuant article 2.2. certified by signed certificate for acceptance by the Contracting Authority pursuant article 8.2.

#

Tap my

- c) Payment in the amount of 40 % of the lump sum representing final payment which shall be due in 5 (five) working days upon the acceptance of the Study pursuant article 2.2. by the Competent Authority upon condition that all comments are reflected or otherwise closed in a way acceptable for the Competent Authority.
- 10.2 The Contract Price and any remuneration payable to the Contractor under article 10.1 (if any) is inclusive of all Contractor's fees, costs and expenses or the performance of the Services with the exception of the VAT and all activities under Art. 1.2 above, including travel and accommodation costs for one site visit duration within three business days, home office and participation in meeting held in Athens.

11. INVARIABILITY OF PRICES

The Contract Price and any remuneration payable to the Contractor under Art. 10.1. (if any) shall remain fixed and firm throughout the duration of the Services and this Agreement.

12. INVOICING AND TERMS OF PAYMENT

- 12.1 The Contractor shall issue the invoice after the issuance of the Acceptance Certificate by the Contracting Authority pursuant article 8.
- 12.2 Once the Contracting Authority approves the invoice vie e-mail, the Contractor shall issue the original and send it to the Contracting Authority.
- 12.3 The original invoice shall be sent to the Contracting Authority to the following address:

ICGB AD

VAT Nr.:BG201383265

BG-1000 Sofia, Bulgaria

13 Veslets Str., fl. 2

- 12.4 The invoices shall be paid within thirty (30) days from the date of the invoice approval.
- 12.5 All payments shall be made by bank transfer to the account, which the Contractor shall specify on its invoice.

CHANGES

13.1 The formal change order shall be mutually agreed between the Parties and shall describe the impact, if any, in terms of time and prices of the requested change in the Services.

14. FORCE MAJEURE

- 14.1 Force Majeure means any act of war (declared or undeclared), insurrection, riot, act of terrorism or sabotage, blockade, embargo or general strike which:
 - (i) has a material and adverse effect on the ability of either Party to perform its obligations under this Agreement; and
 - (ii) is not reasonably foreseeable or which, if reasonably foreseeable, is not avoidable by the adoption by the affected Party of all reasonable precautions and through the exercise of diligence and reasonable care.
- 14.2 Neither of the Parties hereto shall be considered to be in default in the performance of its obligations to the extent such performance has been prevented by Force Majeure.
- 14.3 The Party affected by a Force Majeure event, shall notify the other Party as soon as possible.
- 14.4 In the event of Force Majeure, the obligations of the Parties hereunder (except those previously incurred and remaining capable of fulfilment) shall be suspended during the period of Force Majeure, provided, however, that the affected Party shall make every effort to remedy cause thereof.
- 14.5 If the Force Majeure situation lasts for more than sixty (60) calendar days, after its notification, either Party shall be entitled to terminate this Agreement without prejudice.
- 14.6 The change shall be implemented by the Contractor as soon as possible after it has received from the Contracting Authority the relevant change order specifying the extent, the time schedule of the change and the relevant price adjustment as agreed by the Parties.

15. SUBCONTRACTING

- 15.1 The Contractor may subcontract the Services in accordance with the conditions proposed in the submitted Offer approved by the Contracting Authority.
- 15.2 In case the subcontracting has been approved by the Contracting Authority, such subcontracting shall not relieve the Contractor from any liability and/or responsibility under this Agreement, and the Contractor shall be responsible for the acts or defaults or neglect of any of its subcontractors as if they were its own.

16. ASSIGNMENT

- 16.1 The Contractor shall not have the right to transfer or assign any of its rights or obligations under this Agreement to third parties without the prior written consent of the Contracting Authority.
- 16.2 The Contracting Authority shall not have the right to transfer or assign this Agreement to a successor, a subsidiary, or affiliate, which shall be notified to the Contractor.

1

2 State

17. TERMINATION AND RESCISSION

- 17.1 The Contracting Authority shall be entitled to terminate this Agreement in the following cases:
 - a) at any time without a cause by sending a fifteen (15) calendar days' prior written notice to the Contractor:
 - b) upon the occurrence of an event of Force Majeure in accordance with the provisions of Art. 15 above;
 - c) unilaterally in case of delay of the Contractor to provide any of the Services under article 1 point (i) pursuant the time limits defined in article 2 with more than 50 (fifty) days following the day on which either the first or the final draft of the Study is expected to be delivered.
- 17.2 In the event of termination of this Agreement as per Art.17.1, the Contracting Authority shall pay to the Contractor all outstanding amounts due for the Services performed up to the date of the termination.
- 17.3 In addition to all rights specifically set forth in this Agreement, the Contracting Authority shall be entitled to rescind this Agreement upon the occurrence of any of the following events:
 - a) the Contractor enters into voluntary or compulsory winding-up or Contracting Authority dissolution proceedings, or the Contractor is adjudged insolvent by an order that has taken effect or that is subject to immediate enforcement;
 - b) the Contractor's licenses to carry out the Services are revoked;
 - c) the Contractor is in delay in the completion of its Scope of Services and the submission of relevant deliverables as defined in Article 1 for more than 15 (fifteen) calendar days after the expiry of the three months period from the Execution date according to Article 2, and only if this delay is due to Contractor's fault.
 - d) the Contractor abandons the Services hereunder without cause;
 - e) The Contractor fails or it becomes clear that it cannot complete the Services to the satisfaction of the Contracting Authority by the completion date;
- f) the Contractor commits other material breach in respect of the performance of any of its obligations under this Agreement.
- g) The Contractor shall have the right to rescind this Agreement unilaterally if the Contracting Authority has committed a material breach of its contractual obligations. Prior to rescinding the Agreement, the Contractor shall demand in writing from the Contracting Authority to eliminate the obstacle being the ground for rescission, by defining an appropriate term thereof, which cannot be less than 45 (forty-five) calendar days, after expiration of which the Agreement shall be deemed terminated.
- 17.4 The termination or rescission of this Agreement for the reasons stated in Art.17.3. shall not prejudice the right of the Contracting Authority to damages for breach of this Agreement. It is expressly agreed that the Contractor shall be liable to the Contracting Authority for any and all damages incurred by the Contracting Authority due to Contractor's failure to perform the Services in the manner laid down herein.

18. GOVERNING LAW - SETTLEMENT OF DISPUTES

- 18.1 The validity and interpretation of this Agreement and the legal relations of the Parties shall be governed by the laws of Republic of Bulgaria. If there is a conflict between any provision of the Agreement and the applicable law, the latter shall prevail.
- 18.2 The Contracting Authority and the Contractor shall try to amicably settle any dispute arising from the Agreement. If the Parties fail to amicably resolve any dispute within a period of fifteen (15) calendar days, then any Party may refer the dispute for exclusive and final settlement before the competent Court in Sofia, Bulgaria.
- 18.3 For all unsettled issues the provisions of the Public Procurement Act and the Rules for Application of the Public Procurement Act shall apply.

19. INTELLECTUAL PROPERTY

- 19.1 The Contractor waives, and shall procure, that all subcontractors waive, the exercise against the Contracting Authority of intellectual property rights, such as patent, copyright, trademark, service mark, registered design rights, moral right, topographical rights and other like rights in connection with the Services that are or become vested in the Contractor and/or subcontractors.
- 19.2 In respect of intellectual property rights vested in third parties, the Contractor shall obtain from such third parties (at no cost and expenses to the Contracting Authority) such permission, waiver or license as may be necessary to enable the Services to be performed and completed and/or the Services used or modified by the Contracting Authority or by any person whom the Contracting Authority has authorised to use or modify the Services.
- 19.3 The Contractor shall indemnify and hold the Contracting Authority harmless against any and all claims, losses, costs, damages and expenses arising out of or in connection with any actual infringement by the Contractor of any intellectual property rights in connection with the Services. Furthermore, the Contractor shall defend and service at its cost and expense any action involving the Contracting Authority and its affiliates which (action) is based on any such infringement.
- 19.4 Without prejudice to the Contractor's aforesaid obligations, the Contractor shall immediately notify the Contracting Authority as soon as it becomes aware of any actual or alleged infringement of intellectual property rights and of the steps that it has taken or proposes to take to avoid, circumvent, overcome or minimise the effect that such actual or alleged infringement may have upon the performance of the Services and/or the use of the same by the Contracting Authority or by any person whom the Contracting Authority has authorised to use or modify the Services.

20. ETHIC RULES

The Contractor pledges to abstain from offering any commission or compensation of any other kind to the Contracting Authority's employees, or distribute presents and other forms of generosity (use of means of transport, hospitality) which exceed the limits normally considered acceptable in commercial relationships, or to undertake commercial transactions with the said employees which could create a conflict of interest with those of the Contracting Authority.

21. LANGUAGE OF THE CONTRACT

The English language shall be the official language of the Agreement and shall be used throughout all exchanges between Parties including all communications, reports, correspondence, drawings, specifications, calculations and invoices.

25 July

22. NOTICES

Any notification under this Agreement shall be well and sufficiently reserved, if made in writing and sent by fax and/or registered mail to the addresses noted below

If to the Contracting Authority:

ICGB AD

Dimitar Spassov

e-mail: dimitar.spassov@icgb.eu

and

George Kostopoulos

e-mail: g.kostopoulos @depa.gr

If to the Contractor:

Att. Ioannis K. Panagopoulos

Phone: +302108024244

Fax: .. +302106141245

Email: j.k.panagopoulos@sybilla.gr

Either Party may change its address for service at any time by giving notice of such change in writing to other Party.

A notice sent by mail shall be deemed to be received at the time when in due course of email, it would be delivered at the address to which it is sent.

IN WITNESS WHEREOF, the Parties have executed and delivered this Agreement on the dates indicated below:

For and on behalf of ICGE AL Signature: Signature: Mr. Konstantinos Karagiannakos Name: 51, Name: Mrs. Teodora Georgieva-Mileva ICGB AD Position: **Executive Director** Solition: **Executive Director** 18.05. 2014 18.05.2017 Date: O (I) W A

For and on behalf of SYBILLA Consulting Engineers Ltd

Signature:

Name: Ioannis K. Panagopoulos

Position: Managing Director

Date:

18.05.2017

ΣΥΒΙΛΛΑ ΕΠΕ Σύμβουλοι Μηχανικοί Υψηλάντου 16 - Μαρούσι Τηλ. 8024244 - Fax: 6141245 ΑΦΜ.095487874 - ΔΟΥ: Αμαρουσίου

An integral part of this Agreement are the following Appendixes:

- 1. Appendix I Contractor's Technical and Commercial Offer
- 2. Appendix II Scope of Service

ly ste

SCOPE OF SERVICES

GENERAL INFORMATION FOR THE IGB PROJECT

The IGB Project, developed by ICGB AD (50% Bulgarian Energy Holding EAD and 50% IGI Poseidon SA, IGI Poseidon is controlled on an equal basis by DEPA SA of Greece and EDISON International) includes the engineering, financing, construction and operation on a long term basis of the natural gas Interconnector onshore pipeline between Greece and Bulgaria. It will interconnect the natural gas transmission systems of DESFA and TAP, both in Greece, with the one of BULGARTRANSGAZ in Bulgaria. To this extent the IGB Project will connect the Southern corridor with the C-SEE gas markets and allow the supply of gas from multi sources (i.e. Caspian, Middle East, East Med and North Africa regions) through the existing and future interconnection of the Turkey, Greek and Italian gas networks and relevant LNG systems. Territorially the pipeline will start from the Municipality of Komotini in Greece where it will be linked to DESFA and TAP natural gas systems and will end in the Municipality of Stara Zagora in Bulgaria where it will be linked with the BULGARTRANSGAZ system.

The IGB Project consists of two phases: the construction of the 32", 180 km pipeline between Komotini (northern Greece) and Stara Zagora (central Bulgaria) with a commercial operation date approximately established by the 2H2019;

• the possible add on of a compression station in Bulgaria with a commercial operation date approximately established four years later and subject to market response.;

The first phase of the IGB Project comprises:

- A fiscal metering and pressure control station next to the 36" DESFA pipeline in Komotini.
- A receiving fiscal metering and pressure control station next to the 28"
 BULGARTRANSGAZ pipeline in Stara Zagora, Bulgaria;
- A 32", 180 km buried onshore pipeline including associated facilities;
- Associated SCADA and Telecommunication systems.

The IGB Project is now in the preparatory phase for starting the construction activities and it is completing the acquisition of the land rights for construction permits in Bulgaria and is following up the procedure for obtaining the construction permits in Greece. Among the other activities, the ICGB have recently launched the market test for completing the exemption procedure under the art. 36 of the 73/2009/EC gas directive as endorsed by the Bulgarian and Greek regulatory frameworks.

PARTICULAR SCOPE

The scope of works of the Services to be performed concerns the performance of a Quantitative Risk Assessment for the Greek section of IGB with highest quality and best practice.

The deliverable shall be in accordance with the Greek Technical Regulation for the Natural Gas Transportation Systems and the applicable legislation. Moreover, it shall satisfy the requirements of the Authority who is responsible for its approval and shall incorporate any comments that this Authority may have. The Services shall be considered as completed, upon the approval of the Risk Assessment Study by the approving Authority.

Before and following the submission of said deliverable, the Contractor shall perform any required contacts with the approving Authority, to provide clarifications that may be required, till its final approval.

The software to be used shall be suitable for the specific purpose, including the calculation of the consequences (radiation/explosion effects) from the possible accidents and the latest version produced by a reputable Engineering Company (eg the PHAST Program of DNV-GL). Any equavalent sofware having similar or same technical parameters as quoted one will be accepted based on relevant justification provided by the Tenderer.

The Study shall take also into consideration that the following parameters should be clearly described in the Study, as referred in the comments made by the Authorities to the superseded and obsolete previous Report:

- a. Technical characteristics of the Project, including construction data and applicable Codes
- b. Type of rupture (small, medium, big, disastrous), with corresponding size of holes and relevant possibility of occurrence.
- c. Basic frequency of pipeline failure per class location, rupture and holes.
- d. Probability of ignition and instant ignition (fireball or jetfire), as well as of delayed ignition (flash fire and vapor cloud explosion).
- e. Event trees, per class location, rupture and holes.
- f. Description of mortality criteria for thermal radiation, instant burning and pressure wave.
- g. Consequences of the event. In this part, the models which were used will be described, as well as the extent of the consequences, the mortal distances for various levels of mortality (LD1, LD50 και LD100), the input and output data from the relevant software for consequences evaluation. The above mentioned calculations will be performed in accordance with the predominant meteorological conditions in the area, or, if there are not relevant data, in accordance with at least two options of the Engineer (eg 2F, 5D). The above to be presented in a separate Appendix.
- h. Analytical calculation of the individual risk, by attaching the input and output data of the software which was used for the calculations. The above shall be in a separate Appendix, with a relevant Table showing the calculation of the Individual Risk assessment and Social Risk assessment at the specific point of the pipeline.
- i. Implementation of suitable mitigation measures for the individual risk (I.R.) (eg increase of the pipeline wall thickness), in order its level to remain under the limit which is set by the Technical Regulation for N.G. Transportation networks. It is reminded that the aforementioned Regulation does not provide the examination of cost-benefit, in order higher I.R. to be accepted.
- j. Examination of the wider area around the pipeline and assurance by the Contractor concerning the presence of homes, public gathering buildings, residents with vulnerable groups, as well as critical facilities within the affected area.
- k. The Report shall also make reference to the FEED Study sections regarding the active seismic faults crossing the pipeline route, the measures which were taken and the final results from the safety point of view. (We note that the seismic study will be made available to Contractor, as well as all relevant FEED Documents, concerning the pipeline route in kmz, the P& ID drawings, etc which might be referred or attached to the Study).

1

25 July

- 1. The criteria with which the width of the risk assessment zone was calculated in the Study will be referred.
- m. The risk assessment shall refer to the whole pipeline length, as well to the valve pit stations.
- n. The initiating event of "other reasons", which is referred in the 9th Report of the EGIG, shall be considered.

The deliverable shall be submitted in both Greek and English language, in four hard copies – two in Greek and two in English and two electronic files.

Note: Everywhere in the documentation name or brand shall mean 'or equivalent'.

Jul