**TECHNICAL SPECIFICATION**

**FLIGHT INSPECTION OF MAIN PIPELINE GAS LEAKS**

1. **TERMS AND ABBREVIATIONS**
   1. Contracting Entity – AB Amber Grid (hereinafter – the Contracting Entity). More information about the Contracting Entity and its activities can be found at [www.ambergrid.lt](http://www.ambergrid.lt/).
   2. Supplier – an entity – a natural person, private legal entity, public legal entity, other organisations and their divisions, or a group of such persons with whom the Contracting Entity enters into a Contract.
   3. Contract – a contract entered into between the Supplier and the Purchaser for natural gas (methane) leak measurement and reporting services.
2. **PROCUREMENT OBJECT** 
   1. Procurement object – service of natural gas (methane) leak inspection (hereinafter - gas leaks) by aircraft, detecting gas leaks from underground gas pipelines using special equipment, and submission of reports on detected gas leaks (hereinafter – the Services).
3. **SCOPE OF THE PROCUREMENT OBJECT**
   1. Preliminary scopes of the Procurement:

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Object** | **Unit of measurement** | **Preliminary quantity\*** |
| 1. | Gas leak inspection service for main gas pipelines | pc | 2 |
| 2. | Report | pc | 2 |

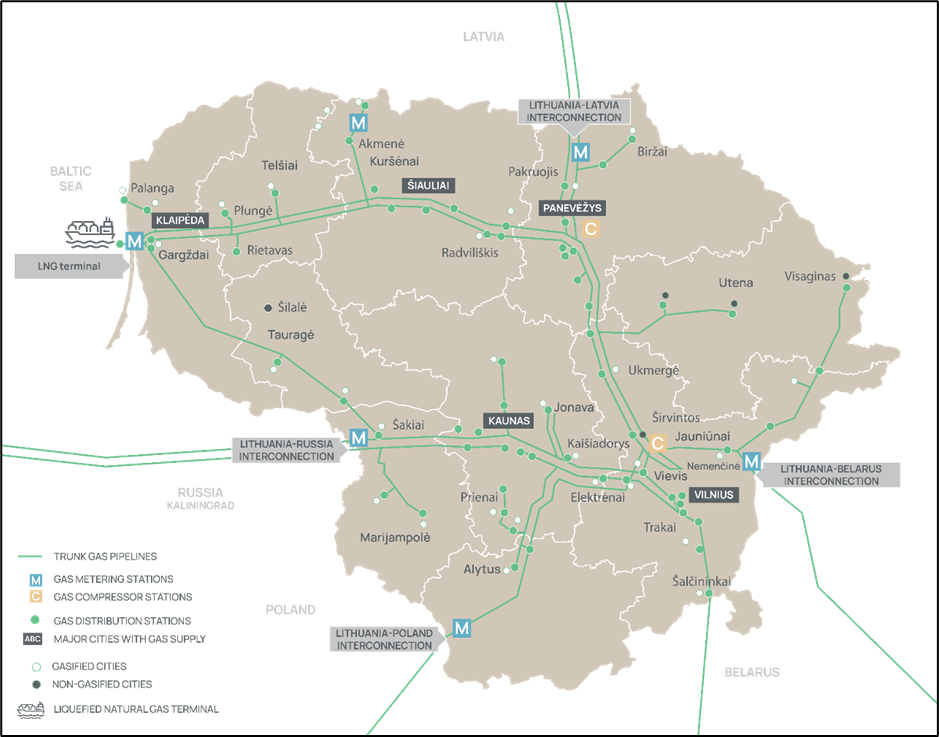
**Note:**

\*The Contracting Entity does not undertake to order the entire quantity of services specified in the “Preliminary quantity“. Orders are coordinated according to the agreed order placing procedure.

1. **PLACE OF PERFORMING CONTRACTUAL OBLIGATIONS**
   1. During the provision of services, underground gas pipelines in the territory of the Republic of Lithuania are inspected by aircraft according to routes provided in advance by the contracting entity\*\*, which are located from the border of the Republic of Belarus to the border of the Republic of Latvia, from the border of the Republic of Belarus to the border of the Kaliningrad region of the Russian Federation, from Vilnius to Visaginas, from Panevėžys to Klaipėda; from Marijampolė to Klaipėda, from Elektrėnai to the border of the Republic of Poland.
   2. The exact coordinates of the gas pipelines in ESRI Personal Geodatabase or ESRI SHP format (or equivalent) will be provided as a separate annex to the Technical Specification after signing the Contract.

**Note:**

\*\* The total length of the gas pipeline, including parallel sections, is approximately 2,288 km (see Fig. 1). During the entire term of the Contract, the length of the gas pipeline used for the provision of services may vary by up to 10%.



**Fig. 1.** Gas pipeline in the territory of the Republic of Lithuania (green))

1. **REQUIREMENTS FOR THE PROCUREMENT OBJECT**
   1. **Description of the Procurement Object** 
      1. The Supplier must perform flights in accordance with visual flight rules, and gas leak detection services must comply with DVGW Technical Rule G 501: Airborne Remote Gas Detection Methods or another equivalent document (valid in the EU).
      2. During the term of the Contract, the Supplier shall perform gas leak inspections and submit reports. These services shall be paid for in accordance with the signed service transfer and acceptance act.
      3. The Supplier shall perform gas leak detection services using its own aircraft and special gas leak detection equipment. If the Supplier uses rented equipment to perform gas leak detection services, he must provide information about the equipment supplier/manufacturer, including the company name, legal entity code, VAT identification number, company registration date, and registration address.
      4. The Supplier shall be responsible for obtaining all flight permits or other mandatory documents required for the flight.
      5. The Supplier is responsible for performing the service in full. With regard to the obstacles that have arisen, due to which the Supplier is unable to perform the service in full:

1) The Supplier shall, within 1 day of becoming aware, inform the Contracting Entity in writing, and shall provide a description of the restriction, the territory/sections (km and coordinates) and documents confirming the restriction;

2) The supplier shall provide, within 5 days, the date of the repeat flight and an alternative schedule;

3) The restricted sections must be inspected by aircraft at the earliest practicable time after the restrictions are lifted, but no later than 30 days after the end of the restrictions, if this fits within the final deadline of the Contract;

4) If the restrictions continue and make it impossible to inspect the pipeline by aircraft before the final deadline of the Contract, the Contracting Entity shall choose one of the following solutions: (i) extend the deadline of the Services for the restricted part; (ii) or reduce the scope by restricted parts (only if the Contracting Entity expressly requests so);

5) The part of the route actually inspected by aircraft is paid for in proportion to the kilometres flown (price/km), and the remaining part is paid for only after it has actually been flown and the data has been submitted. The Supplier is not entitled to demand payment for sections that have not been inspected by aircraft.

6) Final performance of the Services shall be deemed to have been achieved only when the entire route scope has been inspected by aircraft, unless the Contracting Entity opts in writing for a reduction in scope.

* + 1. In places where gas pipelines are laid parallel to each other, the Supplier must check each gas pipeline separately, unless special gas leak detection equipment is used to detect gas leaks in two parallel gas pipelines during a single flight.
    2. Upon detecting particularly large gas leaks during a flight, the Supplier must immediately, but no later than within 5 days, forward the information to the Contracting Entity. The Supplier must provide the measured gas leak extent, coordinates in the LKS-94 coordinate system, and an aerial photograph of the leak location.
    3. After inspecting gas leaks by aircraft, the Supplier must prepare a detailed report in digital format (pdf and xls format), which must include the coordinates of the detected gas leaks in the LKS-94 coordinate system, the intensity of gas leaks in ppmm or ppm and g/h (if measurement or conversion is possible), an assessment/analysis of the gas leak, wind speed (m/s), temperature parameters (oC), and an aerial photograph of the gas leak location.
    4. When preparing a detailed report, the Supplier must use gas analysers to assess the cause of the detected natural gas leaks (methane) and exclude methane of biological origin (manure fertilisation, marsh gas, animal carcasses, farms, livestock, cattle, etc.). Enclose to the report a list of locations where methane of biological origin was detected, indicating the coordinates of the locations in the LKS-94 coordinate system, the intensity of gas leaks in ppmm or ppm and g/h, and add an aerial photograph of the gas leak location.
    5. The structure (content) of the report must be agreed with the Contracting Entity prior to its preparation.
    6. The Supplier must submit the report to the Contracting Authority for approval no later than 30 calendar days after the completion of flight inspection.
    7. The Supplier must submit a detailed methodology used to prepare the report.
    8. In performing the Contract, the Supplier shall undertake to comply with the following environmental requirements: to reduce paper consumption, to refrain from unnecessary copying and printing of documents. All information and/or documents necessary for the performance of the Contract shall be provided and agreed in electronic format by electronic means.
    9. After completing the gas leak inspection by aircraft, the Supplier must prepare data files in ESRI Personal Geodatabase or ESRI *.shp* format (or equivalent), indicating the locations of detected gas leaks in the LKS-94 coordinate system, the intensity of gas leaks in ppmm, ppm or g/h, and the assessment/analysis of the gas leak.
    10. At the end of the contract, the Supplier will have to ensure the transfer of all data related to the Services, including photographs and reports, to the Contracting Entity.
    11. If the Supplier, when analysing the results of gas leaks, has performed unit conversions, he must enclose a detailed conversion methodology to the final report in order to avoid flow correlation deficiencies.
    12. The Supplier shall include the following in the price of the Services: flight costs (preparation, organization, insurance, piloting, aviation fuel, navigation, flight fees, necessary documents, obtaining permits, downtime, etc.), equipment transportation to/from Lithuania or rental costs (staff accommodation, meals, transportation, downtime, etc.).
    13. Since the Supplier will be provided with information about facilities and assets that are important for ensuring national security and that may pose a risk or threat to national security, service providers, subcontractors, economic entities whose capabilities are relied upon, manufacturers, persons performing technical or software maintenance and support, or persons controlling them, must comply with the national security requirements set out in the Republic of Lithuania Law on the Protection of Objects Critical for National Security, and the Republic of Lithuania Law on Public Procurement (Article 92(14)-(15) of the Law on Public Procurement).
    14. All data collected during the flight inspection about the object must be processed only in the European Union. All collected data must remain confidential. The data must be protected from unlawful interception or use, in accordance with EU cybersecurity rules.
    15. The Supplier shall undertake not to disclose the administered data, not to transfer it to third parties, and to ensure its high-quality protection.
    16. The Supplier shall undertake to protect all archived information from third parties during the term of the Contract.
    17. The Contracting Entity is the owner of all collected and/or created data and results. The Supplier shall undertake to export and transfer the data accumulated during the entire service provision period (measurement data, aerial photographs, data sets, reports, etc.) in a format agreed with the Contracting Entity (.xls, .csv, etc.) within 7 days of the Contracting Entity‘s request (or in the event of termination of the Contract). (measurement data, aerial photographs, data sets, reports, etc.) in a format agreed with the Contracting Entity (.xls, .csv, etc.).
    18. The Supplier shall undertake to irrevocably destroy, within 30 days of receiving a written request from the Contracting Entity, all copies of data provided by the Contracting Entity and all copies of data collected by the Supplier under the Contract (including backup copies), except for the copy of the data transferred to the Contracting Entity in accordance with clause 5.1.22. The data may only be destroyed after the Contracting Entity confirms in writing that it has received the data in accordance with clause 5.1.22. After the destruction of the data, the Supplier shall submit a signed official letter confirming the destruction of the data, specifying: 1) which copies of the data have been destroyed, 2) where they were stored (including backup copies), 3) the date of destruction, 4) the method of destruction, 5) the persons responsible. At the request of the contracting entity, the Supplier shall, within 5 days, provide reasonable technical evidence confirming the destruction (system log extracts and/or other documents) without disclosing information not related to the Contract.
    19. The Supplier must immediately inform the Purchaser of any possible cases of data misappropriation, leakage, or cyber security incidents in the Supplier‘s infrastructure and take all possible measures to control the situation.
  1. **Procedure and deadlines for fulfilling contractual obligations**
     1. The Supplier shall undertake to perform during 2026, no later than 31 December 2026, gas leak inspections by aircraft, and to detect using special equipment gas leaks from the underground gas pipeline in its entirety (2288 km) and submit a report on the detected gas leaks to the Contracting Entity.
     2. During the term of the Contract, it is planned to purchase at least 1 service of gas leak inspection by aircraft over the entirety of the gas pipeline. After completing the first gas leak inspection, the Supplier shall agree with the Contracting Entity on the performance of further services, which are expected to be performed in 2028, but no later than 31 December 2028. The Contracting Entity does not undertake to order the entire “Preliminary Quantity“ of services specified in clause 3 of the Technical Specification. Orders shall be placed in accordance with the order placement procedure agreed between the Supplier and the Contracting Entity.
     3. The Contracting Entity shall undertake to provide the Supplier with the available main gas pipeline routes in ESRI Personal Geodatabase or ESRI SHP format (or equivalent) within 10 days of signing the Contract in order for the Services of gas leak inspection by aircraft to be performed properly.
     4. The Supplier must submit and agree with the Contracting Authority on the Service Performance Schedule within 20 days of signing the contract. The schedule must be submitted with daily or weekly precision and drawn up in such a way that the Services are performed without exceeding the deadlines specified in the Technical Specification. The actions and deadlines specified in the schedule may be adjusted by the Supplier after prior written agreement with the Contracting Entity, but the final deadline for the performance of the Services may not be later than that specified in these Technical Specifications. The schedule must be prepared in digital .pdf, .xls, .docx or equivalent format.
  2. **Documentation to be submitted during the performance of the Contract**
     1. The Contracting Entity will provide the Supplier with the main gas pipeline routes in ESRI Personal Geodatabase or ESRI SHP format (or equivalent).