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1. Definitions

Unless otherwise defined herein, all capitalized terms shall bear the meanings ascribed to such terms in the Tender and the Contract.

- 1.1 **Bidder / Consultant** – the Bidder to the Tender which provided the Services.
- 1.2 **Consultant** – a Key Personnel having at least 3 years' experience in inspection of pipelines or PRMSs, according to the Tender.
- 1.3 **Senior Consultant** – a Key Personnel having at least 10 years' experience in inspection of pipelines / PRMSs, according to the Tender.
- 1.4 **Company** - The Israel Natural Gas Lines Ltd.
- 1.5 **Day** - a calendar day according to the Gregorian calendar.
- 1.6 **Key Personnel** – the professional consulting personnel proposed by the Bidder in the Tender and approved by the Company, during the Tender or at any time after the Tender, meeting the Tender Threshold requirements.
- 1.7 **PRMS** - Pressure Reduction and Metering Station and all equipment and materials ancillary to and incorporated therein.
- 1.8 **Site** - Means the area where the Services are to be executed by the Consultant in each Project.
- 1.9 **Standards** – the applicable Codes and Standard according to the Company's specifications, including the NEN 3650 Standard, EN, API, ISO, ASME etc.
The edition of each codes and standards are the updated versions at the current date of procurement (unless a specific version is clearly stated in this Specifications or in the scope of work), however as well the NEN 3650:2003 shall apply.
- 1.10 **Tender** – shall mean the Tender for providing Advisory & Inspection Services of Quality Assurance (QA) for Pipeline, Pipeline's accessories & PRMSs manufacturing according to the NEN standard (Tender/INGL/2024/54, doc. no. 477820), and all clarifications & amendments if issued during the Tender.

2. General Information

2.1 The Company's Role in the Israeli Energy Sector

- 2.1.1 The Company is a fully owned governmental company. Under its authorities according to Israeli law and government resolutions, the Company is in charge of the construction and development of the national high-pressure natural gas transmission system in the State of Israel.
- 2.1.2 The Company is also in charge of the operation of the System, including the transmission of natural gas from natural gas suppliers to consumers.
- 2.1.3 The Company's development plan for the coming years includes, inter alia, the construction of new/doubling pipeline sections of the System (in an estimation of 100km each year), and the construction of block valve stations and PRMSs (in an estimation of 4 PRMSs each year) for connecting the System to governmental and private power plants, industrial zones, plants and privately owned low-pressure natural gas distribution systems.
- 2.1.4 The suppliers and manufacturers of the equipment produced for the Company, to be inspected using the Services, are primarily located in European countries, as described in Clause 11.1 below.

2.2 The System

- 2.2.1 The System constructed and operated by the Company includes, inter-alia, on-shore and off-shore pipeline and facilities, LNG buoy, receiving terminals, block valve stations and PRMSs, spread all over the State of Israel.
- 2.2.2 The existing System, as constructed by the Company, includes approximately 800 km of high-pressure natural gas pipeline of various diameters up 36", 3 receiving terminals, 106 block valve stations, approximately 60 PRMSs and LNG buoy.
- 2.2.3 The Company shall continue to develop the System over the coming years in accordance with market demands and subject to regulatory approval granted from time to time.
- 2.2.4 Typical pipeline Projects entails the construction of dozens of km of pipeline, block valve stations along the line, civil engineering, mechanical installation works, and rehabilitation works, usually over 12 – 24 months period to each Project.

2.2.5 More about the Company and its activities can be viewed at its website:
www.ingl.co.il.

3. The Services - General

The Services to be provided by the Consultant are advisory and/or inspection services of quality assurance (QA) for high-pressure natural gas pipeline, pipeline's accessories (as defined below) and high-pressure Pressure Reduction and Metering Station ("PRMS") manufacturing or supplying, according to the best industry practice.

Natural Gas shall include as well hydrogen, as may be applicable.

4. Quality Assurance & Applicable Standards

4.1 The Services conducted with the purpose of certifying the compliance of all procured materials by the Company to be incorporated into the System (at construction and maintenance phases) - **all according to the applicable standards according to the Company's Specifications, mainly the NEN 3650 Dutch Standard** (including relevant EN, API, ISO, ASME, ASTM standards), and **the Israeli Standard IS 5664(*)** incorporating such standards.

- See Applicable documents in Clause 18 below.

4.2 The requirements of NEN 3650:2003 **supersede all other referenced codes and standards.**

In any conflict between any specification or any other specification and related data sheets, or with any applicable codes, standards and regulations, The Consultant shall inform Company in order to recommend and decide with the Company.

4.3 The Services **are not 3rd Party Inspection Services** (TPI) (such services are provided separately by certified Notified Bodies); however, the Services requires the knowledge, expertise and experience to ensure the quality assurance of the materials manufactured and supplied.

5. General Advisory

The Services include as well general advisory in the QA field, the applicable Standards, technical assistance in procurement and manufacturing matters.

6. Materials & Equipment inspected

The procured materials are mostly such as and not limited to:

High pressure natural gas Pipelines at all diameters, hot formed bends, related “**Pipeline’s accessories**” (for example: Ball & Plug valves, Fittings, Flanges, Isolating Couplings, Scraper traps, Hot taps materials such as “Split T”, Pressure & Temperature Transmitters etc.), and PRMSs (including all the PRMS’s equipment and materials ancillary to and incorporated therein).

7. Service Timeline

The Services are required during all the procurement process, manufacturing cycle, and maintenance if required, as shall be requested by the Company, such as:

- **The Procurement Phase** - writing and updating specifications, calculations review, Tender/RFQs technical assistance and quality evaluations, including the qualification of manufacturers and suppliers etc.
- **The Pre-Manufacturing Phase** - preparation, review and approvals of technical documents provided to the Company, such as drawings, MPS, ITP, raw material certificates, and attending at kick of meetings etc.
- **The Manufacturing Phase** – inspection at manufacturers’ mill or suppliers, during all or part of the manufacturing activity, including Factory Acceptance Tests (FAT), shipment preparation (such packing and loading) and reporting to the Company.
- **The Handing Over of the Materials Phase** – visual inspection and document review (such as quality documents, materials record books (MRS), drawings etc.).
- **Maintenance Phase** – technical assistance if required.

8. Main Service Activities

Without derogating from the general scope of the Services above, such Services shall include the following main activities, inter alia and not limited to:

- 8.1 Checking and confirmation that all requirements in the specifications and standards for the delivered pipelines and pipeline’s accessories and PRMSs have been met;
- 8.2 Quality assurance review during all manufacturing stages, including in the manufacturer’s facility (including at Sub-contractors) according to the NEN3650 Dutch standard, during milestones requested by the Company;

- 8.3 Review and confirm manufacturing procedures (MPSs);
- 8.4 Review and certifying Inspection Test Plans (ITPs).
- 8.5 Visual inspection and quality certificates review of steel (HRC or plates) before production start;
- 8.6 Witnessing and certifying the welding procedure and qualification tests (WPQR & WPS), including the results of the related NDT and destructive testing (during the items' manufacturing process);
- 8.7 Review of the manufacturer welders, welding inspectors and NDT personnel qualifications;
- 8.8 Witness certifying welder qualification tests;
- 8.9 Witness pipeline, pipeline's accessories and PRMSs manufacturing process at the supplier's mill.
- 8.10 Review of laboratory equipment calibration certification;
- 8.11 Visual inspection of all PRMS's parts (piping and equipment);
- 8.12 Visual inspection of pressure tests and during Final Acceptance Tests (FAT) of PRMS;
- 8.13 Review and approval of all the equipment certificates installed in the PRMS, such as, but not limited: Slam Shut Valve (SSV), Pressure Regulator Valves, pressure vessels, Pressure Safety Valves, Ball Valves, Boilers, Isolating Couplings etc.):
- 8.14 Review of laboratory NDT tests & reports;
- 8.15 Review and approval of the final pipe book (pipeline Material Record Book (MRB)) upon manufacturing completion, and pipeline's accessories quality certificates; including of PRMSs.
- 8.16 Visual inspection of the final items before shipping / upon receiving by the Company.
- 8.17 Review and recommend on the proposed 3rd party inspection company's inspectors required experience and qualifications.

- 8.18 Reporting the Company during and following visits / inspection at suppliers' premises and manufacturing process. Reports shall be detailed and include all findings. Daily basis reporting and a final close out report shall be prepared by the Consultant at the end of the inspection project.
- 8.19 Manage and summaries technical aspects of meetings with suppliers, including kick of meetings before production. The key personnel, if requested by the Company's representative, shall be present in any meeting in regarding to the relevant project.
- 8.20 General consulting relates to suppliers and procurements aspects, including review of tenders / RFQs technical documents, review and reply to technical clarifications by the Company and suppliers, assistance during suppliers' qualifications.
- 8.21 Participate during supplier's qualification processes, advise and attend suppliers' premises to recommend.
- 8.22 Monitor supplier's quality during visits at supplier's premises;
- 8.23 Provide clarifications and reply following requests sent to the Company by the Israeli Natural Gas Authority and the like.
- 8.24 Writing and updating technical specifications relate to procurement, including providing technical calculations and review of such regarding material wall thickness, grade and the like.
- 8.25 The above activities do not derogate from the full scope of work to be provided by the Consultant to the Company according to the Contract and the best industry practice in the field of the Services.

9. Consultant's Key Personnel & Contact Person

- 9.1 The Consultant shall provide the Services by one or more of the Key Personnel approved by the Company during the Tender (or any personnel approved by the Company during the Contract Period, subject to meeting the Tender's and Contract criteria).
- 9.2 The identity of the Key Personnel shall be as detailed in the Consultant's Bid and may not be replaced without the prior written approval of the Company.

9.3 The Key Personnel shall dedicate the time, efforts, and skills for carrying out the Services, until the Company's approval is received for the completion of the Services.

9.4 The Company shall determine and inform the Consultant of the quantity and the level of expertise (Senior Consultant / Consultant) of Key Personnel which are required to the specific Service / Project.

9.5 **Contact Person**

The Consultant shall nominate one of the Key Personnel to be the Contact Person managing and coordinating all aspects of the Services on behalf of the Consultant with the Company. The Contact Person shall be responsible to ensure the quality and ordinary of all products provided by the Consultant to the Company.

9.6 **Additional Key Personnel**

The Company may instruct the Consultant to provide the Services by additional Key Personnel. Within a month of Company's instruction, the Consultant shall provide for Company's approval the CV's and qualifications of such additional Key Personnel, who meet the Tender Thresholds (as a minimum requirement) and experienced in relevant projects executed in accordance with the NEN standards.

9.7 The consideration for the Consultant for any additional Key Personnel shall be in accordance with the rates provided in its quotation in the Tender. No additional or special consideration shall be paid for additional Key Personnel.

9.8 The Company may, for professional reasons and/or interpersonal reasons withhold or withdraw approval previously granted and request the replacement of any of Consultant's Personnel, and the Consultant undertakes to comply immediately with such request.

10. Service Language

The applicable language for providing the Services is English. The Consultant and each of the Key Personnel and other Consultants approved by the Company for providing the Services shall be fluent English level in writing and speaking.

11. Service Location & Inspectors quantity, Inspections Period, Availability & Prior Notice

11.1 Service Location

The Services shall be provided, mainly remotely, routinely, from the Consultant offices, while inspections relate to manufacturing and supply of pipes, PRMSs & materials shall be done at the manufacturer's / supplier premises abroad,, currently mostly in western - central European countries. Nevertheless, the Services shall be provided also elsewhere according to the Company's need while new manufactures and suppliers shall be qualified.

Attending the Company's offices / sites in Israel maybe also required (for Services provided in Israel (working days shall be according to the working days in Israel (Sunday to Friday) and the Jewish calendar).

11.2 Inspections Period & Inspectors Availability

Inspections of manufacturing process may last for a period of a day, several days or in event of inspection of full manufacturing process – weeks / months.

- The pipeline manufacturing is usually inspected during 50% - 100% of the total actual manufacturing project until completion (including pressure tests, coating and vessel's loading) which may last weeks / months.

11.2.1 The Consultant inspectors (Key Personnel) shall be able to provide the above inspection services for the full above period, if required by the Company.

11.2.2 The Company shall determine and inform the Consultant of the quantity and the level of expertise (Senior Consultant / Consultant) of Key Personnel which shall act as inspectors required in each manufacturing project.

11.2.3 The Consulted shall not replace the inspector/s allocated to a specific manufacturing inspection project until its completion, unless coordinated and approved in advance with the Company.

11.2.4 Manufacturing inspection services at the manufacturing site, which requires prolonged and continuously day by day inspection until completion of manufacturing, is usually requires one inspector per each manufacturing project (i.e. a purchase order issued by the Company to the manufacturer).

11.3 Service Time and Prior Notice by the Company

11.3.1 General – Planned Activity Coordination

11.3.1.1 The Company's procurement activity is done according to the Company's projects. Therefore, the extent of the Services required cannot be envisaged at the long term, and activities are planned yearly, while projects and procurement activities may be postponed from their initial planned time and new activities may be added.

11.3.1.2 The Consultant and the Company shall coordinate routinely, the expected inspection services needs for the following months.

11.3.2 Coordination of Manufacturing Inspection Activity – Prior Notice

11.3.2.1 Prolong Continuously Inspection Term

The Company may instruct the Consultant to provide the inspection services which require a prolonged continuously inspection term and the Consultant's inspectors' attendance at the manufacturing site day by day until completion of manufacturing - by giving the Consultant a prior notice by e-mail of at least **30 days** prior to the commencement of any specific inspection project.

Such prior notice shall be provided **once in the beginning of the specific manufacturing project only**, while the other inspection milestones for each manufacturing activity in the project shall not require such prior notice period and shall be coordinated by the Consultant and the Company according to the manufacturing timetable.

The above is usually applicable to pipeline manufacturing.

11.3.2.2 Short Inspection Term

Inspection Services which require up to 3 days of continuous inspection by the consultant's inspectors' attendance at the manufacturing site - shall require a shorter prior notice (than in Clause 11.3.2.1 above) by the Company as shall be coordinated by the Consultant and the Company at the beginning of the Contract Period.



11.3.2.3 Urgencies

Notwithstanding the above, the Consultant shall be available for any inspection service with a shorten notice in event of urgency, failures during supplier's manufacturing process etc.

11.3.2.4 Routinely Advisory Services

Other routinely Advisory Services, including document control, review of documents etc., done at the Consultant office, shall be provided by the Consultant on daily basis without prior notice by the Company. The Consultant shall Services shall be provided promptly according to the Company's needs.

12. Flights, Travel & Accommodation

The Consultant responsible to provide the Key Personnel with flights (economy class), transportation, accommodation and Per-Diem during Services outside the Consultant country of origin.

The Company shall pay the Consultant the actual costs for the above plus 10% overhead costs, in addition to the Service hourly/daily rates, subject to the Contract (See Contract Annex – Terms of Payments).

13. Permits, Visas

The Consultant shall be responsible for ensuring permits for all personnel and equipment, in a timely manner, and that entry permissions and all other legal and operational procedures are addressed by the Consultant in a manner that shall allow the Services to commence and be completed on time and without delay. The Consultant shall not be entitled for any additional consideration.

14. Sensitive or Confidential Information

The Consultant may be exposed during the Services, directly or indirectly, to a sensitive or confidential information of the Company. The Consultant shall keep confidential and shall not disclose to any 3rd party, any and all information, data and documents relate to the Company and the System, provided by the Company, or which it was exposed to.

15. No Sub-Contracting

The Consultant shall not sub-contract any of the Services provided to the Company.

16. Invoicing

Each month, until the 5th of such month, the Consultant shall provide the Company with a man hour record/s (MHR) detailing the extent of services. The hours / days shall refer separately to each of the project. Following the Company's approval of such MHR, the Consultant shall issue the Company invoice/s.

The Company and the Consultant shall coordinate the format of the MHR to efficiently and easily handling.

17. The Company's Option – Extent of Services

The Company may decide, at its sole discretion, to exercise the Company's Option to only part of the Services, taking into consideration the capabilities of the Consultant and the Company's requirements.

18. Applicable Technical Documents

The following documents applicable to the Services, however do not form the conclusive list of specifications / standard applicable to the Services. The Company's specifications are updated according to need and the updated revision shall prevail.

- All equipment/items (except of PRMS) - The List of the Company's Specifications (doc. no. 477822), is attached as **PDF file**.
- PRMS – the List of the Company's specification (doc. no. 473946), is attached as **PDF file**.
- The Israeli Standard IS 5664 (Parts 1 & 2), are attached as **PDF files**.
- The Company's Specifications shall be provided to the selected Consultant at the beginning of the Services.