Warsaw, 24-03-2017

**QUESTIONNAIRE**

**concerning the offered mobile equipment for pumping gas from / between transmission pipeline(s) of Gas Transmission Operator GAZ-SYSTEM S.A.**

**I - Participant of technical dialogue**............................................................................................................

address .....................................................................................................................................................

postal code …..…….…………. city………….…………………………… country……….…………………….……...

phone ................................................................ fax................................................................

NIP...................................................................., REGON ..........................................................................

Contact person – name, surname and email: ……………………………………………………………………………………………………………………….

**II - Parameters and preliminary delivery terms:**

**PART A- COMPRESSION UNIT:**

1. Number of cylinders:
2. Rated power of the compressor :…………………[kW], at rotational speed of …..[ rpm],
3. Compressor efficiency:.……….. [%]
4. Suction pressure range (min/max):………….[bar],
5. Minimum suction temperature:……………[°C],
6. Discharge pressure range (min/max):………….[bar],
7. Maximum discharge temperature:……………[°C] above ambient temperature,
8. Maximum compression ratio: …..
9. Number of compression stages:……….

(specify if the compressor is suitable for serial and parallel operation and is equipped with an interstage cooler for serial operation)

1. Output: …………..[Nm3/h], together with a chart showing the output depending on the suction pressure.
2. Explosive zone…………………
3. Type of compressor drive (diesel/gas engine, other)…………………………………
4. Type of fuel for compressor engine ……………………………………………………………………..
5. Specification of fuel used for the engine……………………………………………………………….
6. Fuel consumption……………………
7. Rated power of the engine :…………………[kW], at rotational speed of …..[ rpm],
8. Max. noise level at the distance of 1m:……………………………….[dB],
9. Minimum terminal suction pressure: …………..[bar],
10. Maximum discharge pressure…………………. [bar]
11. Time required to reduce gas pressure to the following values:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Diameter | Pipeline length [km] | Starting pressure [MPa] | Starting pressure [MPa] | Time [h] |
| DN 500 | 5 | 5.5 | 0.5 |  |
| DN 700 | 10 | 5.5 | 0.5 |  |
| DN 700 | 36 | 5.5 | 0.5 |  |
| DN 1000 | 10 | 8.4 | 1.0 |  |
| DN 500 | 10 | 4.0 | 2.5 |  |
| DN 500 | 10 | 2.5 | 1.0 |  |
| DN 500 | 36 | 5.5 | 0.5 |  |
|  |  |  |  |  |

For the indicated emptying times, please attach pressure drop charts and volumes of gas forced as a function of time.

1. Parameters of connection lines on the suction and discharge side (diameter, type of connection). Please indicate the applicable standard for the connections. If there are several types of connections, please indicate all available options.

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. Is the compressor equipped with an automatic gas discharge system:

**YES/NO***(please delete as applicable)*

*In case when the selected response is YES,* please indicate: diameter of bleed pipe, response time, etc.

……………………………………………………………………………………………………………………………………………………………………………………………………………………………..………………………………..

1. Container weight together with the compression system ……………………..[kg]
2. Outer diameters of the container (length, width, height) [mxmxm] ……………………
3. Are you the manufacturer or supplier of the compression system?

**Manufacturer/Supplier***(please delete as appropriate)*

*In case when the selected response is Supplier,* please indicate the manufacturer of the equipment:

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. Additional features, e.g. control panel, gas or fire detection systems, mechanically triggered extinguishing system:

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. Minimum manning requirements:

- operator …

- floor hand…

- specialist…

- ………

1. Compressor delivery lead time: ……. [months]
2. Warranty period:…..[months]

**PART B- Vehicle:**

1. Is it possible to purchase the compressor unit without a truck?

**YES/NO***(please delete as applicable)*

*In case when the response is YES,* please indicate the parameters for the trailer only.

1. Manufacturer of the truck: …………………………………..
2. Manufacturer of the trailer: …………………………………..
3. Truck type: …………………………………………..
4. Truck weight:…………………….[kg],
5. Allowable total weight of the combination of truck+trailer:………………………….[kg]
6. Maximum axle load ……………………. [kg]
7. Number of axles ................................
8. Number of driving axles ............................
9. Axle base:……………………………..[mm]
10. Fuel:…………………
11. Fuel consumption:………………..[l/100 km],
12. Does the vehicle conform to the requirements of EURO 6 standard for emission limit values (according to Regulation 2007/715/WE):

**YES/NO***(please delete as applicable)*

*In case when the selected response is NO,* please indicate the requirements complied with: EURO…..

1. Number of places in the vehicle cabin :……………………………..,
2. Turning radius of the compression unit …………………….
3. Dimensions of the compression unit (length, width, height) [m x m x m] ………………….

**PART C: SERVICE**

1. Do you offer mobile service support in the territory of Poland:

**YES/NO***(please delete as applicable)*

1. Service outlet location:……………………………,
2. Response time:……………………..[h ],
3. Warranty period for repairs: ………………….[months],
4. Is personnel training offered together with the delivery of the compression unit?

**YES/NO***(please delete as applicable)*

1. Cost of standard maintenance activities during a 5-year period ………………………..

**III - Experience in the supply of mobile compression equipment:**

1. Do you have experience, confirmed with references, in the manufacturing and supply of the mobile compression equipment described in this questionnaire?

**YES/NO** (please delete as applicable)

1. In case when the response is YES, please specify and briefly describe relevant delivered contracts.

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

**IV – Appendices:**

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………………………………………..

*Date and signature*