Annex 1
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Annex 1
CONTACT INFORMATION ON PROJECT PARTICIPANTS

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Annex 2
BASELINE INFORMATION

DYNAMICS OF ENERGY CONSUMPTION BY ENERGY SOURCES AND SECTORS IN THE ABSENCE OF THE PROJECT, TJ

Industrial sector	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*
Heavy fuel oil	288	294	300	307	314	321	328	335	342	350	358	365
Gas oil	86	88	89	91	93	95	98	100	102	104	106	109
Brown coal	6	6	6	6	6	6	7	7	7	7	7	7
Wood	0	0	0	0	0	0	0	0	0	0	0	0
LPG	10	10	10	10	11	11	11	11	12	12	12	12
Electricity	405	414	423	432	442	451	461	471	482	492	503	514
Total	**795**	**812**	**828**	**846**	**866**	**884**	**905**	**924**	**945**	**965**	**986**	**1 007**

Public and administrative sector	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*
Heavy fuel oil	13	13	14	15	15	16	17	18	19	19	20	21
Gas oil	220	231	242	254	266	279	293	307	322	338	355	372
Brown coal	6	6	7	7	7	8	8	8	9	9	10	10
LPG	17	18	19	20	21	22	23	24	25	27	28	29
Electricity	370	388	407	427	448	470	493	517	543	569	597	626
Total	**626**	**656**	**689**	**723**	**757**	**795**	**834**	**874**	**918**	**962**	**1010**	**1058**

Residential sector	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*
Gas oil	10	10	10	10	11	11	11	11	11	12	12	12
Brown coal	5	5	5	5	5	5	5	5	5	5	6	6
Black and anthracite coal	286	291	296	301	307	312	318	324	329	335	341	347
Wood	438	446	454	462	470	479	487	496	505	514	523	533
LPG	24	25	25	25	26	26	27	27	28	28	29	29
Electricity	2 016	2 052	2 089	2 126	2 165	2 204	2 243	2 284	2 325	2 367	2409	2 453
Total	**2779**	**2829**	**2879**	**2929**	**2984**	**3037**	**3091**	**3147**	**3203**	**3261**	**3320**	**3380**

DYNAMICS OF ENERGY CONSUMPTION BY SOURCES AND SECTORS WITH IMPLEMENTATION OF THE PROJECT, TJ

Industrial sector	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*
Heavy fuel oil	281	201	101	60	54	48	36	27	17	14	2	1
Gas oil	84	57	42	14	13	10	9	6	2	2	2	1
Brown coal	6	4	1	1	1	1	1	0	0	0	0	0
Wood	0	0	0	0	0	0	0	0	0	0	0	0
LPG	9	8	7	4	4	3	3	3	3	3	3	1
Electricity	395	385	382	374	374	383	407	400	400	410	432	447
Natural gas	18	147	276	368	394	411	418	456	490	503	511	519
Total	**793**	**802**	**809**	**821**	**840**	**856**	**874**	**892**	**912**	**932**	**950**	**969**

Public and administrative sector	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*
Heavy fuel oil	12	12	10	0	0	0	0	0	0	0	0	0
Gas oil	218	201	176	147	134	113	101	62	61	50	42	24
Brown coal	6	6	2	0	0	0	0	0	0	0	0	0
LPG	17	15	12	12	6	6	7	6	7	6	5	5
Electricity	370	388	400	403	414	432	457	515	540	547	577	612
Natural gas	2	33	87	157	200	240	264	282	301	351	376	407
Total	**625**	**655**	**687**	**719**	**754**	**791**	**829**	**865**	**909**	**954**	**1000**	**1048**

Households sector	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*
Gas oil	10	10	9	7	6	2	1	0	0	0	0	0
Brown coal	5	4	3	3	3	2	0	0	0	0	0	0
Black and anthracite coal	286	281	255	240	226	214	178	153	126	102	51	28
Wood	438	430	425	410	390	370	340	298	270	255	216	205
LPG	24	24	24	19	14	6	1	0	0	0	0	0
Electricity	2 016	2 051	2 052	2 045	2 034	2 016	2 012	2 009	2 005	2 002	2 045	2 066
Natural gas	0	21	94	182	276	384	496	605	706	794	871	931
Total	**2779**	**2821**	**2862**	**2906**	**2949**	**2994**	**3028**	**3065**	**3107**	**3153**	**3183**	**3230**

TYPE AND CHARACTERISTICS OF THE BOILERS IN PUBLIC AND ADMINISTRATIVE, AND INDUSTRIAL SECTORS

№	*TYPE OF BOILER*	*RATED THERMAL INPUT*	
I. WATER HEATING BOILERS		***Gcal/h***	***KW***
1	KVN-0.06	0.06	70
2	KVN-0.1	0.1	116
3	KVN-0.15	0.15	174
4	KVN-0.25	0.25	290
5	KVN-0.35	0.35	407
6	KVN-0.55	0.55	640
7	KVN-0.65	0.65	755
8	KVN-1.0	1	1163
II. STEAM HEATING BOILERS			
1	KPN-0.1	0.1	170
2	KPN-0.15	0.15	257
3	KPN-0.25	0.25	420
4	KPN-0.35	0.35	600
5	KPN-0.55	0.55	940
6	KPN-0.65	0.65	1110
7	KPN-1.0	1	1710
8	KVM-2.5	2.5	2900
9	KVM-4	4	4650
10	VKM-2.5	2.5	2900
11	VKM-4	4	4650
12	VKM-7.5	7.5	8720
13	PKN-0.4	0.4	
14	PKN-0.7	0.7	
15	PKN-1	1	
16	PKN-1.6	1.6	
17	PKN-2.0	2	
18	PKM-2.5	2.5	
19	PKM-4.0	4	
20	PKM-6.5	6.5	
21	PKM-12	12	

FUEL PRICES IN BULGARIA, AUGUST 2006

Fuel / Energy Source	*Nominal price*		*Re-assessed price*	
			BGN/KWh	*EUR/KWh*
Gas oil	1 748.46	BGN/1000litre	0.181	0.092
Heavy fuel oil 3.5% S	1 813.32	BGN/t	0.187	0.095
Diesel fuel	899.76	BGN/ 1000litre	0.081	0.041
LPG for industrial consumption	2 145.90	BGN/t	0.168	0.085
LPG for households consumption	2 481.78	BGN/t	0.194	0.099
Electric power:				
- residential needs – daily tariff	0.174	BGN/KWh	0.174	0.088
- residential needs – night tariff	0.093	BGN/KWh	0.093	0.047
- residential needs – average (60/40)	0.114	BGN/KWh	0.114	0.058
- economic and public needs (low voltage) – with one tariff	0.144	BGN/KWh	0.144	0.073
Heating				
- average for the heating plant companies	75.70	BGN/MWh	0.076	0.038
Natural gas – gas distribution network	363.54	BGN/1000 m^3	0.039	0.019
Natural gas – household consumers (average for the Overgas subsidiaries)	635.44	BGN/1000 m^3	0.068	0.034
Natural gas – public and administrative consumers (average for the Overgas subsidiaries)	542.14	BGN/1000 m^3	0.058	0.029
Natural gas – industrial consumers (average for the Overgas subsidiaries)	457.55	BGN/1000 m^3	0.049	0.025

Note:

1. The price quotations include VAT (20%).

2. The average price of the electric power for residential needs is determined bearing the proportion 60% daily tariff 40% night tariff, rendering the account for monthly consumption

2 The price in EUR/KWh is calculated at exchange rate of 1 EUR=1.95583 BGN

Concise Baseline Study of Bulgarian Electric Power System (EPS). CO_2 Baseline Emission Factor of EPS

Combined Margin Baseline Emission Factor						
Summary		***Year***	***2003***	***2004***	***2005***	***Mean Annual***
		Unit				
System Total Power Generation	Σ GENy	**GWh/a**	42 384	42 087	44 206	128 677
Ratio Build Margin PowGen V. Total System PowGen		**GWh/GWh**	21,99%	20,56%	19,51%	
Ratio Low Cost/Must run Plants V. System Total		**GWh/GWh**	60,30%	60,46%	64,17%	
Simple EF_{OM}	EF_{OM_sim}	**tCO2/MWh**	1,071	1,084	0,931	
Simple Adjusted EF_{OM}	$EF_{OM\_sim\_adj}$	**tCO2/MWh**	1,017	1,044	0,841	**0.967**
Build Margin Emission Factor	EF_{BM}	**tCO2/MWh**	0,980	0,990	0,842	**0.842**
Combined Margin Baseline Emission Factor	CM_BEF					
Combined Margin EF with Simple OM_EF	$CM\_EF_{OM\_sim}$	**tCO2/MWh**	0,956	0,963	0,886	**0,934**
Combined Margin EF with Simple Adjusted OM_EF	$CM\_EF_{OM\_sim\_adj}$	**tCO2/MWh**	0,929	0,943	0,842	**0,903**
Combined Margin EF with Average OM_EF	$CM\_EF_{AV\_OM}$	**tCO2/MWh**	0,683	0,679	0,632	**0,664**
Power Grid Baseline Emission Factor for JI Projects generating electricity		**tCO2/MWh**				**0,904**
Power Grid losses			**15,17%**	**13,26%**	**11,93%**	**13.45%**
Power Grid Baseline Emission Factor for JI Projects resulting in electricity savings		**tCO2/MWh**				**1,026**

Annex 3
MONITORING PLAN

DESCRIPTION OF THE AUTOMATIC DISPATCHER SYSTEM OVERCOMM 2.0.

The system OVERCOMM 2.0. consists of the following three main component parts:

1. Automation tools for the GDN:

- Adjusters of natural gas consumption with the following functions: calculation of gas consumption in standard units, recording emergency values of the technological parameters, 500 log books of hours, 20 log books of work shifts, 35 log books of days and 13 log books of months with entries of the consumption and technological parameters, 10 log books for emergency situations;
- Controllers of odorizing installations, which control the proportioning of odorant in the GDN and maintain records of the odorant consumption.

2. The system OVERCOMM 2.0 uses the GSM network as a carrier medium. The communications are organized in the following two flows:

- Reading of current values of technological parameters, hourly, shift, daily and monthly logbook entries by the gas consumption adjusters and the odorizing stations, as well as remote configuring of electronic devices is done following the initiative of the dispatcher centre and is carried out through a switchable connection (the DATA CALL service) between a GSM communication module mounted on the gas unit and a GSM modem at the dispatcher centre;
- The transmission of alarm signals about the above mentioned emergency situations is done following the initiative of the GSM communication module mounted on the gas unit to the dispatcher centre by means of priority SMS messages. The high priority of SMS messages is guaranteed by an agreement with the GSM operator.

3. Software for automated dispatcher system with the following main functions:

- Automatic initiation of cycles for collection of logbook data from the equipment;
- Additional data gathering;
- Processing, recording and filing of alarm SMS messages;
- Automatic notification to the operator and the emergency response group about alarms;
- Recording the actions performed by the dispatcher staff;
- Automatic generation of information and analysis from the system database;
- Information export for further processing in CSV format;
- User identification with all tools of MS Windows ’98, NT4, 2000 and XP.

Natural gas balance for identifying leakages is done on the basis of filed data about the gas consumption at the input and output points of the GDN

The variables – temperature, pressure and volume that are being monitored by OVERCOMM2.0 are the data forming the meter readings of every and-user at standard conditions /T=20^{o}C, P=1atm/. That’s why OVERCOMM2.0 system is very important and is applicable to the project.

DATA COLLECTED TO PERFORM MONITORING / TRACING THE PROJECT ACTIVITY

ID	*Data type*	*Data variable*	*Unit*	*Measured, calculated or estimated*	*Method of recording and filing*	*Recording frequency*
1	Pressure /average per hour/	P	Bar	Measured	Electronic	1 hour
2	Temperature /average per hour/	T	ºC	Measured	Electronic	1 hour
3	Unadjusted consumption /per hour/	Vb	m^3	Measured	Electronic	1 hour
4	Adjusted consumption /per hour/	Vn	Stm^3	Calculated	Electronic	1 hour
5	Lower technological alarm level of pressure	LTP	Bar	Measured	Electronic	Upon occurrence
6	Upper technological alarm level of pressure	HTP	Bar	Measured	Electronic	Upon occurrence
7	Lower technological alarm level of temperature	LTT	ºC	Measured	Electronic	Upon occurrence
8	Upper technological alarm level of temperature	HTT	ºC	Measured	Electronic	Upon occurrence
9	Lower sensor alarm level of pressure	LSP	mA	Measured	Electronic	Upon occurrence
10	Upper sensor alarm level of pressure	HSP	mA	Measured	Electronic	Upon occurrence
11	Lower sensor alarm level of temperature	LST	Ω	Measured	Electronic	Upon occurrence
12	Upper sensor alarm level of pressure	HST	Ω	Measured	Electronic	Upon occurrence
13	Availability of supply voltage at the measuring units	OFF/ON	V	Measured	Electronic	In case of change in condition (drop off/reoccurrence)

14	Alarm SMS from a consumer	ALARM C C-consumer code	Text	Measured	Electronic	When a button is pressed
15	Gas losses from the GDN	ΔV	Stm^3	Calculated	Electronic	1 hour
16	Availability of methane along the GDN route	% CH_4	ppm (VOL %)	Measured	Electronic	**Steel:** $P_{operating} \leq 0,5$ MPa – 4 years $0,5 < P_{oper} \leq 1,6$ MPa – 2 years **PE-HD:** $P_{oper} \leq 0,01$ MPa – 6 years $0,01 < P_{oper} \leq 0,1$ MPa – 4 years $0,1 < P_{oper} \leq 0,5$ MPa – 2 years $0,5 < P_{oper} \leq 1,0$ Mpa – 1 year
17	Availability of methane in the facilities	% CH_4	ppm (VOL %)	Measured	Electronic	3 months
18	Odorant concentration in the gas	C_n	mg/m^3	Measured	Electronic	1 month
19	Gas odor intensity	THT/TBM	grate	Estimated	Paper	1 month
20	Output electric current from the Cathodic Protection System (CPS)	$I_{изх}$	A	Measured	Electronic	1 month
21	Output voltage from the CPS	$U_{изх}$	V	Measured	Electronic	1 month
22	Polarization potential at a drainage contact point	$U_{пол.др.}$	V	Measured	Electronic	1 month
23	Polarization potential at check points	$U_{пол.}$	V	Measured	Electronic	1 month
24	Total potential in check points	$U_{с-з}$	V	Measured	Electronic	1 month

Methods for measurement of indicators and callibration of measurement appliances			
Measuring method	***Institution/function, which will take measurements***	***Calibration method***	***Calibration frequency***
Measuring of pressure, lower and upper technological alarm levels of pressure by means of transmitter for pressure with output 4-20mA	Gazosnabdyavane Burgas EAD	Comparison with standard pressure	1 year
Measuring of temperature, lower and upper technological alarm levels of temperature by means of platinum thermal resistance Pt100	Gazosnabdyavane Burgas EAD	Comparison with standard resistance	1 year
Measuring of non-adjusted volume of gas, by means of turbine, rotary, membrane or aperture consumption meter /to be selected depending on the consumer characteristics or the unit in the GDN	Gazosnabdyavane Burgas EAD	Comparison with standard consumption meter	*2 years – for rotary and turbine ones* 3 years – for membrane ones
Calculation of adjusted consumption by means of specialized electronic adjuster, in the configuration of which coefficients are set	P_{atm}, bar = average annual atmospheric pressure in the region; Tb=293,15 K Pb=101,325 kPa Kz – is set or calculated as per ISO 12213-2:1997 "Natural gas – calculation of compression factor. Part 2: Calculation using molar – composition analysis." Or as per document DVGW G9 "Calculation of natural gas factor /saturation factor / and the contractility factor".	Comparison with standard current signal and standard resistance /calibrator with standard current signal 4-20mA, decade with standard.	2 years
Measuring of lower and upper sensor alarm levels of pressure and temperature by means of electronic scheme included in the structure of the specialized electronic adjuster	Gazosnabdyavane Burgas EAD	Together with the adjuster calibration by means of comparison with standard current signal and standard resistance /calibrator with standard	1 year

		current signal 4-20mA, decade with standard resistances.	
Measuring the availability of input current of the measuring unit by means of electronic scheme with reserved battery supply included in the structure of the communication device, which ensures the notification by a priority alarm SMS message through the GSM network	Gazosnabdyavane Burgas EAD	Checks of the daily communication between the measuring unit and the dispatcher centre	1 day
Monitoring the condition of the alarm button by means of electronic scheme with reserved battery supply power included in the structure of the communication device, which ensures the notification by a priority alarm SMS message through the GSM network	Gazosnabdyavane Burgas EAD	Checks of the daily communication between the measuring unit and the dispatcher centre	1 day
Quantitative analysis of the contents of methane in the air by means of a specialized device with electro-chemical sensor	Gazosnabdyavane Burgas EAD	On a study punched gas pipeline, which provides controlled gas leakages within the sensitivity range of the device. It is conducted by the Gas Distribution Companies	3 months
Balance of input and output volumes for GDN and parts of the GDN – comparative analysis will be prepared	Gazosnabdyavane Burgas EAD	-	-

METHODS USED IN DETERMINING THE CONSUMPTION OF NATURAL GAS AT STANDARD CONDITIONS

The standard (or base) conditions for comparison which are used for measuring the physical parameters (volume, density, etc.) of natural gas in Bulgaria are **293.15 K and 101.325 kPa**, in compliance with Bulgarian State Standard ISO 13443:1999 "Natural gas. Standard comparison conditions" and the General Terms for Concluding Contracts for Sales of Natural Gas, approved by the State Energy Regulatory Commission (SERC).

There are two possible approaches for obtaining the volume under standard conditions:

First approach: by using specialized devices called volume adjusters.

Second approach: by multiplying the volume read on the consumption meter counter by a fixed coefficient determined depending on the meteorological characteristics of the respective geographic region.

The choice of approach depends mostly on the maximum consumption and on the absolute pressure of natural gas in the measuring line.

In both cases the volume of natural gas under standard conditions is done applying the following formula:

$$V_{st} = V_p \frac{P}{P_{st}} \frac{T_{st}}{T} \frac{Z_{st}}{Z} \ldots\ldots (m^3)$$

where:

V_{st} (m^3) - Volume of gas under standard conditions (293.15 K и 101.325 kPa), recorded by the adjuster or calculated manually by applying a coefficient;

V_P (m^3) - Volume of gas measured as per the consumption meter counter;

P (bar) - Absolute pressure of gas in the measuring line;

P_{st} (bar) - Standard pressure ($P_{st} = 1{,}01325\ bar$);

T (K) - Absolute temperature of gas in the measuring line;

T_{st} (K) - Standard temperature (for the Republic of Bulgaria $T_{st} = 293{,}15\,K$);

Z - Over contractility coefficient under working conditions;

Z_{st} - Over contractility coefficient under standard conditions;

Z and Z_{st} – are either set, or calculated as per ISO 12213-2:1997 "Natural gas – calculation of compression factor. Part 2: Calculation using molar – composition analysis", or as per document DVGW G9 "Calculation of the gas factor (saturation index) and contractility coefficient Z ".

Accounting in case of availability of adjuster in the measuring device

The reading for V_{st} in m^3 (20 °C; 1.01325 bar) is reported for directly either by the electronic adjuster, or the consumption meter counter, in case it is equipped with embedded mechanical adjuster of temperature. The reported value accounted for, after deduction of the readings from the preceding report, constitutes the adjusted volume of gas, which the consumer has used during the respective period.

In case an adjuster is missing in the measuring device

For obtaining V_{st} in m^3 (20 °C; 1.01325 bar) the following formula should be applied:

$$V_{st} = V_p \cdot K_{tp} \ldots (m^3),$$

where:

$$K_{tp} = K_t \,.\, K_p$$

$$K_t = \frac{T_{st}}{T}$$ - temperatures adjustment coefficient;

$$K_p = \frac{P}{P_{st}}$$ - pressure adjustment coefficient

K_{tp} - coefficient for bringing the consumption meter readings into compliance with standard conditions- t = 20 °C and P = 1.01325 bar;

$V_p = V_{отч} - V_{пр.отч.} \quad (m^3)$

$V_{отч}$ *and* $V_{пр.отч.}$ - consumption meter counter readings during the preceding and the current periods reported;

The value of the adjustment coefficient K_{tp} is determined depending on:

- Natural gas temperature in the measuring line;

Atmospheric pressure (altitude above sea level) in the population area;

COMPANY PROCEDURES OF OVERGAS INC. AD ENSURING THE QUALITY IN THE OPERATION, IDENTIFICATION AND REMOVAL OF UNREGULATED OUTFLOW OF NATURAL GAS AND MEASURING OF NATURAL GAS

1. INSTRUCTION for monitoring and diagnostics of the technical conditions of the Distribution
Gas Pipelines for natural gas leakages The Instruction presents a method for monitoring underground and ground gas pipelines, equipment and installations in case of any breakage and leaking of natural gas, as well as their classification, depending on their potential danger and the undertaking of measures against leakage and for damage elimination.

2. ***INSTRUCTION for measuring of the protection polarization potentials of underground metallic equipment, protected from soil corrosion by cathode and protector protection.***
This working document presents to the operational staff in the gas distribution enterprises the requirements and methods of measuring the protection polarization potentials of underground metallic pieces of equipment, protected from soil corrosion by cathodes of protector protection

3. INSTRUCTRION for technical servicing and repair of gas regulation points and boards and gas regulation and metering points and boards.
The intervals of time and the complex of operations for performing the preventive measures and repairs of the gas regulation points and boards and of gas regulators and metering points and boards are determined. The manner and the times for carrying out of inspections/calibration of metering devices used are also specified.

4. INSTRUCTION for the operation, servicing and maintenance of distribution gas pipelines and the appurtenant equipment.
It specified the activities of the operational staff for securing safe and emergency-free operation of gas pipelines and their maintenance and repairs in accordance with the Ordinance for the Structure and Safe Operation of the Transportation and Distribution Gas Pipelines of equipment, installation and apparatus for natural gas and the times for making the necessary metering.

5. INSTRUCTION for carrying out gas-risk operations
The Instruction supplies indications and determines the technical rules valid for all planned and emergency repair works on gas pipelines and pieces of equipment in the gas distribution networks which are executed in gas-containing medium or in which there is a danger of gas leakage.

6. INSTRUCTION for safety technology and fire safety in operation with SPOTLEAK 1005 deodorant.
The purpose of this Instruction is to make the operational staff of the gas distribution enterprises familiar with the requirements of safety technology and fire safety in operation with the SPOT LEAK 1005 deodorant in operation, health and environmental protection.

7. INSTRUCTION for the initial filling of the gas distribution network with natural gas.
The Instruction determines the required initial conditions, the participants and the technological sequence of works in filling the gas distribution network with natural gas.

8. INSTRUCTION for operation with repair brackets.
The Instruction shows the potentials of using and assembling repair brackets intended for temporary sealing of localized breakage and leakage in steel and polyethylene gas pipelines.

9. INSTRUCTION for operating with gripping tools for polyethylene gas pipelines.
The instruction supplies the technical rules in the operation with gripping tools (hand-screws) of polyethylene gas pipelines in operation for stopping the gas flow.

10. PLAN for the operation in case of the origination of a major production emergency in the gas transportation network in the territory of municipality
The plan includes the prevention of allowing any origination of emergency situations, prognostication of the nature and the aftermath of any emergencies in the gas distribution network, specifying the operations and the duties of the operational staff.

11. INSTRUCTION for residential users about the safe utilization of natural gas and the operation of installations and gas-employed devices.
The purpose of the Instruction is to acquaint the consumers (owners or users) with their obligations for safe work with natural gas of assembled installations and gas-using appliances in residential buildings.

12. INSTRUCTION for setting of gas regulation points and boards.
The Instruction includes instructions for the sequence and technology of operations carried out in setting the regulation and the safety equipment in the installations of the gas distribution network.

13. INSTRUCTION for putting into operation and subsequent monitoring of building gas installations of residential users.
The work document supplies the necessary instructions for the operational staff of the Distribution Enterprises in putting into operation and subsequent monitoring of the building gas installations of residential users.

14. INSTRUCTION for adjusting the reading of natural gas flow meter systems.
The purpose of this document is to give instructions about the transition to standard conditions for comparison in reading the supplied natural gas quantities to the users in the OVERGAS system.

15. COMPANY STANDARD for natural gas odoring.
The purpose of the Company Standard is to give a definition of the concept of odoring, the general requirements to means of odoring, the types of odorants, the safety measures and the inspection intervals for the determination of the odorant concentration in the Gas Distribution Network, and the odoring intensity intended to facilitate the detection of leakage in the Gas Distribution Network, the equipment, the installations and the natural gas appliances.

16. Instruction with operating guidelines during breakdowns and emergencies
These guidelines stipulate the required actions and participants in cases of breakdown and emergencies related with the gas distribution network and end users' installations.

17. Procedure for Control of Natural Gas Retail Sales
The document is applied by the staff of Natural Gas Sales Department of Overgas Inc. AD. The purpose of the document is to regulate the procedure for control of natural gas retail sales.

Annex 4
NATURAL GAS CONSUMER MARKET RESEARCH

In May 2005, an external marketing research agency named "Market Test" carried out a consumer inquiry in Burgas. The goals of the research were:

- To establish consumer habits with regards to energy sources – what do they use, how much do they pay, their preferred choice among various energy sources;
- To establish the set of measure within which consumers think, recognize and evaluate the separate energy sources;
- To establish the position of natural gas in the consumers' mind;
- To find the image rating of Overgas;
- To distribute potential consumers of natural gas in definite segments.

Summary on the market position of natural gas in Burgas

Based on the consumer inquiry in Burgas prepared by "Market Test" the following main conclusions on the market position of natural gas in Burgas are made:

- Electric power is the energy source most used by households in Burgas;
- With all other circumstances being level, the most preferred energy sources for heating would be natural gas, followed by electricity;
- The basic advantage of firewood, to other traditional energy sources, is that firewood is the cheapest energy source for households; electricity is defined as environment friendly, efficient, modern, easy and universal for use; LPG is defined as the most efficient energy source for cooking in households and as the energy source of the future;
- The attitude to natural gas is positive even at a spontaneous level, most of the people from the target group defining it as cheap, environment friendly, efficient, omni purpose, modern "energy source of the future". On the other hand, more communication is needed with respect to consumer price and safety, as part of the target group have stated that they have heard bad general opinions concerning house heating based on natural gas:
  - The percentage of persons who would like gasification in the next year (taking into account the normal statistical deviation) is relatively similar for all districts of Burgas: The Central City Area - 57%, Bratia Miladinovi - 49%, Vazrajdane - 44%, Meden Rudnik - 42%.
  - The main reasons for which people would like to be connected to the gas distribution network are the low service price and the convenient use, the most probable application expected to be heating.
- The predominant part of the interviewed would take advantage of the instalment plan for payment to switching their homes entirely to natural gas:
  - The main reason for reluctance to connect to the household gas supply grid is the opinion that prices are high and that it is not sufficiently safe;
  - 32% of the interviewed in Vazrajdane district would reject the idea of gasification of their homes because they are not sufficiently informed about the system.
- Overgas enjoys high popularity of its name, but low popularity of its activity, and only few people associate it with definite values (modern, socially engaged, etc.).

Annex 5

PLAN FOR CONSTRUCTION OF THE GAS DISTRIBUTION NETWORKS AND BRANCHES IN BURGAS MUNICIPALITY

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*	*Total*
Distribution pipelines, m	24 172	27 532	27 746	26 440	26 440	26 330	24 670	21 550	17 520	0	0	0	222 400
Gas Branches, m	2 079	5 506	5 549	5 288	5 288	5 266	4 934	4 310	3 504	0	0	0	41 724
Total GDN, m	**26 250**	**33 038**	**33 296**	**31 728**	**31 728**	**31 596**	**29 604**	**25 860**	**21 024**	**0**	**0**	**0**	**264 124**

Annex 6

PLAN FOR GASIFICATION OF THE END USERS IN BURGAS MUNICIPALITY

Sector	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*	*Total*
Industrial sector	11	93	64	14	2	1	1	1	0	0	0	0	187
Public and administrative sector	5	33	58	36	12	15	2	1	8	0	0	0	170
Residential sector	771	1 137	1 865	2 166	2 574	2 770	2 664	2 532	2 189	1 980	1 505	1 268	23 421
Total	**787**	**1 263**	**1 987**	**2 216**	**2 588**	**2 786**	**2 667**	**2 534**	**2 197**	**1 980**	**1 505**	**1 268**	**23 778**

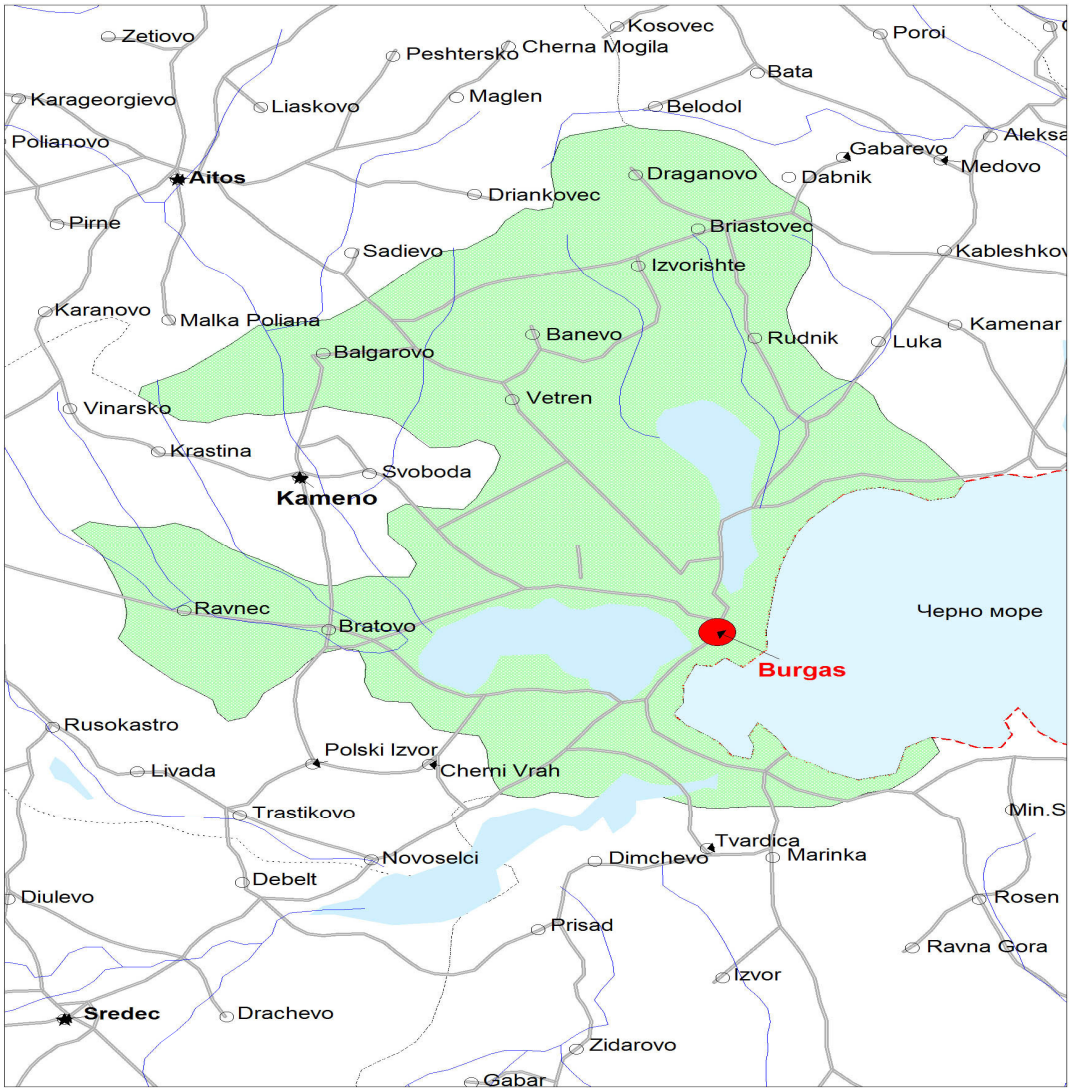
Annex 7

EXPECTED SALES OF NATURAL GAS, 1000 m^3

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*
Industrial sector	538	4 395	8 262	11 027	11 794	12 317	12 508	13 650	14 666	15 049	15 297	15 546
Public and administrative sector	57	1 000	2 600	4 700	6 000	7 200	7 900	8 450	9 000	10 500	11 250	12 200
Residential sector	0	640	2 805	5 442	8 253	11 489	14 860	18 112	21 130	23 787	26 080	27 885
Total	**595**	**6035**	**13 667**	**21 169**	**26 047**	**31 006**	**35 268**	**40 212**	**44 796**	**49 336**	**52 627**	**55 631**

Annex 8

MAP OF BURGAS MUNICIPALITY



Annex 9

LETTER OF SUPPORT

Republic of Bulgaria

MINISTRY OF ENVIRONMENT AND WATER

To Whom It May Concern:

LETTER OF SUPPORT

The Ministry of Environment and Water supports in principle the proposed project idea

Proposal number/date	26-00-1900/25.04.2006
Title	Reduction of greenhouse gases by gasification of Burgas Municipality
Location	Burgas Municipality
Supplier	"Overgas Inc." AD

and confirms that it falls within the scope of Joint Implementation projects under the Kyoto Protocol to the United Nations Framework Convention on Climate Change.

The Ministry of Environment and Water will consider granting formal approval of the Joint Implementation project according to the Bulgarian procedures, decisions of the Joint Implementation Supervisory Committee and under the following conditions:

- sufficient amount of allowances is available for electricity production and electricity demand reduction projects in the Joint Implementation set aside in the approved by the European Commission National Allocation Plan;
- positive Environmental Impact Assessment Decision;
- submission of a Project Designed Document, validated by an Independent Entity;
- the buyer of the emission reduction generated by the project is a country that has signed a Memorandum/Agreement on cooperation under Article 6 of the Kyoto Protocol to the United Nations Framework Convention on Climate Change with the Republic of Bulgaria;
- the assessment of the project by the Steering Committee established for this purpose, and according to the Bulgarian criteria is positive.

The Ministry of Environment and Water will consider the possibility to transfer emission reductions verified by an Independent Entity and generated by the project prior to 01 January 2008, if any.

20 June 2006
Sofia, Bulgaria
Jordan Dardov
Deputy Minister of Environment and Water