

# **The SERC experience in the natural gas sector quality control**

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### **Specificities of the natural gas supply system**

- 99% import from Russia

Established pipeline system and an underground natural gas storage.

Divided provisionally into the North and the South semi-rings – guarantees safety in the natural gas transmission.

The annual sales of natural gas in 1990 were 6.780 billion n.m<sup>3</sup>.

In recent years consumption has fallen several times and is about 3.2 ÷ 3.4 billion n.m<sup>3</sup>.

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### **Specificities of the natural gas supply system**

A significant part of the natural gas is used for energy purposes mainly in the heating stations;

The natural gas consumption in industry as a raw material or as fuel is dropping;

The natural gas distribution in urban areas by low pressure networks is not developed.

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## **Specificities of the natural gas supply system**

### **Main factors in the natural gas sector development**

Clear and steady energy policy

Impartial and stable regulatory regime

Pricing based on expenditures

A modern technical and legal basis

Opportunity for access to the network under conditions  
of equality

Acceptable tax environment

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## **OVERALL characteristics of the quality of the customer service**

For a long time the quality of the service has been  
outside the scope of the priorities in the activity and  
management of the natural gas distribution companies  
and the transmission company

A positive role in enhancing the quality of the customer  
service is played by the inclusion of respective  
requirements for the quality of the customer service in  
the licenses for distribution and transmission of natural  
gas issued by SERC

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## **OVERALL characteristics of the quality of the customer service**

The condition of the three aspects of the quality of the customer service has been explored:

*the quality of the natural gas in its raw state;*

*the continuous gas supply;*

*The quality of the commercial services .*

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## **OVERALL characteristics of the quality of the customer service**

The distribution companies do not make analyses /control/ of the composition of the natural gas as regards percentage content of methane, other carbohydrates, hydrogen sulphide, harmful impurities, water steam, etc.

Specific burning heat /calories/ is defined by all the distribution companies on the basis of the composition of the natural gas in the certificate issued by the transmission company

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### **OVERALL characteristics of the quality of the customer service**

Cleaning of the natural gas by filters. As a rule the filters are also installed at the port of the consumers but there are exceptions with some of the household consumers.

Odorization of the natural gas through the addition of harmless admixtures /odorants/ - Mercaptans, the degree of odorization is monitored /controlled/ regularly along an established methodology – the so-called organoleptic method

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### **OVERALL characteristics of the quality of the customer service**

The defined by the Licensee maximum working pressure does not exceed the norms : for steel pipes– 1,2 M Pa, and for PE HD pipes – up to 0,4 M Pa.

In all cases the measured at the port of the consumer natural gas working pressure provides the safe operation of the client's appliances and corresponds to the contracts

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### **OVERALL characteristics of the quality of the customer service**

No disruptions of the natural gas supply have been registered in the household sector.

There are registered disruptions in the industrial and public sectors caused by the client /unpaid natural gas consumption bill/ - service is resumed in 2 days after the removal of the cause and payment of sums due

Problems connected to the ownership over elements of the network

Rules of the operator for working in a network

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### **OVERALL characteristics of the quality of the customer service**

Whenever there is a planned disruption of the natural gas supply the consumers are notified 14 days in advance in writing or through the media; the date of the resumption of service is also announced

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## Quality of the commercial services

Commercial meters laid down in the State Register for the Approved Meters and in line with the Measurements Act  
When needed the licensee replaces the meter considering that the type of meter comply with the real natural gas consumption

The meters for industrial users are not controlled /tested/ by a licensed laboratory after the expiry of the statutory 2 year period of use because such a laboratory does not exist in Bulgaria

Under the Standardization and Meteorology Agency there is a laboratory for natural gas meters of up to 40 cubic meters/hour.

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## Quality of the commercial services

All companies inspect the meter and check the bill for the consumed natural gas after a consumer's request. The procedure is laid down in the general provisions of the supply contract.

For connecting new consumers to the network and initiation of the delivery of natural gas to the distribution network there is no set internal normative term because of the impossibility of predicting the cumbersome procedure under the Law on Spatial Planning in time. The companies have to answer within 14 days after lodging the request for connecting.

The universal telephone lines of the company which have been posted in a public place are used for telephone connection with consumers. There are indicated telephone numbers for calling during non-working hours as well as cell phone numbers – there is also a three-digit number

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## Examples

“Overgas Inc” Shareholding company

“Montana gas” Shareholding company

“Hebros gas” Shareholding company

“Gazosnabdyavane Nova Zagora”

“Prima gas” Shareholding company

“Komex” Shareholding company

“Sevlievo gas” Shareholding company

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## Examples

“Bulgargas” is a transmission company and the only  
wholesale gas importer and trader.

“Bulgargas” has registered 5 exploitation regions in the  
country through which the company carries out and  
ensures the system exploitation, the maintenance and the  
renovation.

“Bulgargas” has licenses for “natural gas transmission”;  
“natural gas storage”; “natural gas transiting” “natural gas  
distribution”.

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## Examples

The quality of the natural gas is controlled at GIS Isakcha through the installed Gas Chromatographs, which measures the composition of the natural gas delivered, including the Mercaptans content.

There are no installed facilities and odorization of the natural gas on the territory of the country in the Bulgargas system.

The content of harmful admixtures in the natural gas is controlled through measurement with Gas Chromatographs at least once annually. There have been no cases of over the norm content of harmful admixtures.

The humidity of the natural gas is controlled regularly but mostly along the transit pipeline with random selection of point along the gas pipeline / compressor points, valve assembly/.

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## Examples

Sales and Collection of Payables Department

The most recurrent problems between clients and Bulgargas are related to the measurement of the natural gas supplied.

The second major issue between clients and the company is the payment of the natural gas delivered

“Bulgargas” uses meters provided for in the State Register. This requirement is presented to the client when the client is installing their own meters.

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## Examples

### Conclusion

The natural gas companies have directed their efforts towards improving the quality of the commercial customer service.

- Rules for working with consumers;
- Rules for working on emergencies;
- The contracts with clients include the general provisions of the selling of natural gas to household users in line with the SERC requirements

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## Examples

The personnel is mainly employed in the area of developing the markets of the household gasification and the exploitation maintenance of the facilities and natural gas pipelines

The control and the reporting of the qualities of the natural gas delivered are exercised through the meters provided for in the State Register

The commercial meters are property of the natural gas distribution company

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## **SERC requirements to the quality of the natural gas supply**

The natural gas sold to consumers has to meet the Bulgarian national quality standard for natural gas BSS ISO 6976, Regulation No. 232 of 2002 on the Structure and Safe Exploitation of Natural Gas Facilities and Installations, Sectors Normal SN 0252396-86

Composition

**Harmful admixtures of the gas in urban areas**

Mechanical admixtures, resins, resin substances

**Water steam**

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## **SERC requirements to the quality of the natural gas supply**

**Odor of the natural gas /odorization/**

**Pressure**

**Specific combustion heat /calories/**

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## **SERC requirements to the quality of the natural gas supply**

### **Non-interruption of the natural gas supply**

**The licensee has to report and analyze continuously all the natural gas supply disruptions. On a quarterly basis the licensee prepares a report which includes detailed information about the emergency disruptions in the reporting period by indicating the reason for the disruption, its duration, the region and number of clients it covered. The report contains detailed information about the factual beginning and duration of the planned and emergency disruptions.**

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## **SERC requirements to the quality of the natural gas supply**

**The indicators on the quality of the commercial services are two types :**

- **individual delivery indicators**
- **average indicators for the supplier.**

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## **SERC requirements to the quality of the natural gas supply**

### **Connecting new consumers to the network and launching the delivery**

Arguments for the grounds for refusing connecting for delivering natural gas to new consumers

Responses (written) to requests, letters and information requests of consumers

Preliminary notification of consumers for the planned disruption of supply

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## **SERC requirements to the quality of the natural gas supply**

Resumption of natural gas supply after a disruption caused by the consumer :

- consumer has not paid sums due;
- consumer has damaged the meter;
- consumer has destroyed the lead seal;

Resumption of the natural gas supply after accidents in the licensee's network

Provision of a telephone number for consumers for information on disruption or lower quality of the supply.  
The messages are registered with a recording machine.

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## **SERC requirements to the quality of the natural gas supply**

**Checks about leakages because of characteristic smell -  
consumers has not paid sums due;**

Checks on lower quality of the supply after notification from  
consumers

Check of meters after request from consumers

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## **SERC requirements to the quality of the natural gas supply**

**Repair or change of the meter of a consumer**

Check of the bill of the consumed natural gas after a written  
notification from a consumer

Correcting improperly reported consumption and/or bill for  
natural gas consumed

Schedule of the visits of licensee staff to the property of  
consumers for installing, repairs, checks, maintenance  
and servicing of the licensee's facilities

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**Thank you for the attention!**

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