

Common proposal of the East-Baltic TSOs
on harmonization of the gas quality requirements

Riga-Tallinn-Vilnius, July 17, 2015

Natural gas transmission system operators of Estonia, Latvia, and Lithuania, Elering Gaas, Latvijas Gaze, Amber Grid jointly proposes the following harmonised requirements for natural gas quality:

Calorific values and Wobbe index

No.	PARAMETER	UNITS	VALUE							
			Reference conditions	°C	15/15		25/0		25/20	
					Min.	Max.	Min.	Max.	Min.	Max.
1.	Inferior calorific value	MJ/m ³	≥ 32.41	-	≥ 34.17	-	≥ 31.82	-		
		kcal/m ³	≥ 7741	-	≥ 8162	-	≥ 7600	-		
		kWh/m ³	≥ 9.00	-	≥ 9.49	-	≥ 8.83	-		
2.	Superior calorific value	MJ/m ³	≥ 35.52	-	≥ 37.48	-	≥ 34.87	-		
		kcal/m ³	≥ 8483	-	≥ 8952	-	≥ 8329	-		
		kWh/m ³	≥ 9.87	-	≥ 10.41	-	≥ 9.69	-		
3.	Wobbe index	MJ/m ³	47.89	52.94	50.48	55.84	47.02	51.98		
		kcal/m ³	11438	12645	12057	13336	11231	12415		
		kWh/m ³	13.30	14.71	14.02	15.51	13.06	14.44		

Natural gas quality parameters

No.	PARAMETER	UNITS	VALUE	NOTE
1.	Methane, CH ₄	% mol	≥ 90	EN ISO 6974 EN ISO 6975
2.	Nitrogen, N ₂	% mol	≤ 3	EN ISO 6974-1 to 6 EN ISO 6975
3.	Carbon dioxide, CO ₂	% mol	≤ 2,5	EN ISO 6974-1 to 6 EN ISO 6975
4.	Oxygen, O ₂	% mol	≤ 0,02	EN ISO 6974-3 EN ISO 6974-6 EN ISO 6975
5.	Total sulphur without odorant	g/m ³	≤ 0,03	EN ISO 6326-5 EN ISO 15970
6.	Hydrogen sulfide + Carbonyl sulfide (as sulfur), H ₂ S	g/m ³	≤ 0,007	EN ISO 6326-1 EN ISO 6326-3 EN ISO 19739
7.	Mercaptan sulfur without odorant	g/m ³	≤ 0,016	EN ISO 6326-3 EN ISO 19739
8.	Contaminants (mechanical impurities)	g/m ³	≤ 0,001	
9.	Liquid phase of water and hydrocarbons	g/m ³	Not permissible	




GET / HTTP/1.0

10.	Methane number	no unit	≥ 65	ISO 15403-1
11.	Relative density	no unit	0,55-0,7	EN ISO 6976 EN ISO 15970
12.	Hydrocarbons dew point temperature	°C	≤ -2 (0.1 – 7 MPa)	EN ISO 23874 ISO 12148
13.	Water dew point temperature	°C	≤ -10 (4 MPa)	EN ISO 6327 EN 18453 EN ISO 10101 – 1 to 3
14.	Hydrogen, H ₂	% mol	≤ 0.1	EN ISO 6974 EN ISO 6975



Notes:

1. TSOs agreed to respect and to take into account the results of discussions with market participants on the national level on the value of methane number in case these results are not in conformance with the value suggested by prEN 16726:2014.
2. TSOs agreed to review the common opinion of the TSOs on the harmonised gas quality requirements after the relevant European standard is approved.

On behalf of Amber Grid:


 Skirmantas Junevičius

 Edmas Arbačiauskas

 Aurelija Šemetulskė

On behalf of Latvijas Gaze:


 Aivars Broks

 Leonids Seleckis

On behalf of Elering Gaas:


 Oleg Baranin