

Rules for the use of the data on gas quality and calorific values for the calculation of the energy of delivered gas

Rules for the use of the data on gas quality and calorific values for the calculation of the energy of delivered gas at the transmission system exits have been determined by the applicable Transmission System Network Code and Amendments to the Transmission System Network Code ("Official gazette" nos. 50/18, 31/19 and 89/19, hereinafter MPTS).

By this document the data are publicly announced in compliance with article 106 of MPTS stipulating that the transmission system operator publishes on its website, and regularly updates the following contents concerning the use of the data on gas quality:

- a) list of all sampling locations
- b) list of all connections with associated primary and replacement relevant sampling locations
- c) rules for the use of data on gas quality and calorific values for the calculation of the energy of delivered gas, determined at sampling locations.

a) A list of all gas sampling locations on the transmission system, art. 106 (5) a) MPTS

A list of all gas sampling locations on the transmission system is in Table 1.

The table contains all sampling locations on the transmission system equipped with process gas chromatographs, regardless of whether the device belongs to the transmission system operator or the owner of the connected plant, and 3 locations on which, due to their low capacity, samples are occasionally taken manually and gas analysis is carried out in an accredited laboratory.

One chromatograph installed at one location can have several sampling locations. Sampling location code consists of location (plant) number at which the chromatograph has been installed and the sample number on the same chromatograph separated by dash. In a similar way the name of the sampling location consists of the name of the location (plant) at which a chromatograph is installed and the name of the pipeline direction on which the device for automatic sampling is installed.

Table 1 – A list of all sampling locations on the transmission system

Sampling location code	Sampling location name	Sampling location type	Operator
001-1	MRS/PČ Ivanja Reka - MRS Ivanić Grad (stream 1)	Chromatograph	Plinacro
001-2	MRS/PČ Ivanja Reka - MRS Zagreb-Istok (stream 2)	Chromatograph	Plinacro
001-3	MRS/PČ Ivanja Reka - MRS Zagreb-Zapad (stream 3)	Chromatograph	Plinacro
001-4	MRS/PČ Ivanja Reka (stream 4)	Chromatograph	Plinacro
002-1	MRČ Zabok - MRS Rogatec (stream 1)	Chromatograph	Plinacro
002-2	MRČ Zabok - MRS Zagreb-Zapad (stream 2)	Chromatograph	Plinacro
002-3	MRČ Zabok - MRČ Ludbreg (stream 3)	Chromatograph	Plinacro
003-1	MRS Straža stream 1	Chromatograph	Plinacro
004-1	MRČ Bjelovar	Chromatograph	Plinacro
005-1	MRČ Budrovac - MRS Varaždin (stream 1)	Chromatograph	Plinacro
005-2	MRČ Budrovac - MRS Ivanić Grad (stream 2)	Chromatograph	Plinacro
005-3	MRČ Budrovac - MRČ Donji Miholjac (stream 3)	Chromatograph	Plinacro
005-4	MRČ Budrovac - CPS Molve (stream 4)	Chromatograph	Plinacro
006-1	MRČ Špišić Bukovica - MRČ/MRS Kutina (stream 1)	Chromatograph	Plinacro
006-2	MRČ Špišić Bukovica - MRČ Budrovac (stream 2)	Chromatograph	Plinacro
006-3	MRČ Špišić Bukovica - MRČ Donji Miholjac (stream 3)	Chromatograph	Plinacro
007-1	MRS Đurđevac stream 1	Chromatograph	Plinacro
008-1	MRČ/MRS Kutina - MRS Virovitica (stream 1)	Chromatograph	Plinacro
008-2	MRČ/MRS Kutina - MRS Ivanić Grad (stream 2)	Chromatograph	Plinacro
008-3	MRČ/MRS Kutina - MRS Slavonski Brod (stream 3)	Chromatograph	Plinacro
008-4	MRČ/MRS Kutina - Kolektor (stream 4)	Chromatograph	Plinacro
009-1	PČ Ludina stream 1	Chromatograph	Plinacro
010-1	MRS Varaždin I stream 1	Chromatograph	Plinacro
011-1	MRS Nova Gradiška stream 1	Chromatograph	Plinacro
012-1	MRS Požega stream 1	Chromatograph	Plinacro
013-1	MRS Vinkovci stream 1	Chromatograph	Plinacro
014-1	MRČ Ludbreg - MRČ Zabok (stream 1)	Chromatograph	Plinacro
014-2	MRČ Ludbreg - DN 500 Budrovac (stream 2)	Chromatograph	Plinacro
014-3	MRČ Ludbreg - DN 300 Budrovac (stream 3)	Chromatograph	Plinacro
014-4	MRČ Ludbreg - MRS Varaždin I (stream 4)	Chromatograph	Plinacro
016-1	MRS Dobrovac stream 1	Chromatograph	Plinacro
018-1	MRS Slavonski Brod stream 1	Chromatograph	Plinacro
019-1	MRS Zagreb Zapad stream 1	Chromatograph	Plinacro
020-1	MRS Zagreb Jug stream 1	Chromatograph	Plinacro
021-1	Terminal Pula stream 1	Chromatograph	Plinacro
022-1	MRS Osijek I stream 1	Chromatograph	Plinacro
023-1	PČ / MRS Benkovac stream 1	Chromatograph	Plinacro
024-1	MRČ Donji Miholjac - MRČ Budrovac (stream 1)	Chromatograph	Plinacro
024-2	MRČ Donji Miholjac - MRS Beničanci (stream 2)	Chromatograph	Plinacro
024-3	MRČ Donji Miholjac - MRS Bokšić (stream 3)	Chromatograph	Plinacro
024-4	MRČ Donji Miholjac - MRS Osijek (stream 4)	Chromatograph	Plinacro
025-1	UIMS Donji Miholjac stream 1	Chromatograph	Plinacro
026-1	MRS Rijeka Istok stream 1	Chromatograph	Plinacro
027-1	MRS Sisak stream 1	Chromatograph	Plinacro
101-1	CPS Molve	Chromatograph	INA d.d.
102-1	UMS Etan (Ivanić Grad) stream 1	Chromatograph	INA d.d.
201-1	PSP Okoli stream 1	Chromatograph	PSP d.o.o.
12	PS Gola	Manual sampling	Laboratory
11	PS Ferdinandovac	Manual sampling	Laboratory
18	PS Hampovica	Manual sampling	Laboratory

b) A list of all connections with associated primary and replacement relevant sampling locations

A list of all exit connections of the transmission system is indicated in Table 2.

The enclosed table lists separately exits towards distribution systems and exits towards final customers connected directly to the transmission system. In the first part of the table with exits towards distribution systems joint exits to which sampling locations are not associated are marked by yellow background (MPTS, art. 32), while physical exits included in a separate joint exit are marked by green background in the table. For them, the codes of the associated sampling locations are also indicated.

Table 2 - List of all connections with associated primary and replacement relevant sampling locations, art. 106 (5) b) MPTS

Version 4, 03 January 2019

Red. br.	Šifra izlaza	Naziv izlaza	Oznake mjesta uzorkovanja (tablica 1)						
			primarni	II	III	IV	V	VI	VII
		Izlazi prema distribucijskim sustavima							
1	837	Badlješina - 3 bar - Badlješina	016-1	004-1	005-2	101-1	008-4	006-2	
2	1253	Baranja							
3	882	Beli Manastir - 3 bar - Beli Manastir	024-4	022-1	012-1	011-1	018-1	025-1	006-3
4	728	Mece - 3 bar - Mece	022-1	024-4	012-1	011-1	018-1	025-1	006-3
5	729	Bedekovčina - 3 bar - Bedekovčina	002-3	003-1	019-1	014-1	010-1		
6	781	Belišće - 2,2 bar - Valpovo	024-4	022-1	012-1	011-1	018-1	025-1	006-3
7	1292	Benkovac - 3,5 bar - Benkovac	023-1	026-1	021-1	008-3	011-1	025-1	
8	1294	Biograd - 3,5 bar - Biograd	023-1	026-1	021-1	008-3	011-1	025-1	
9	1252	Bjelovar							
10	879	Bjelovar - 3 bar - Bjelovar	004-1	005-2	101-1	016-1	008-4	001-1	
11	852	Nova Rača - 3 bar - Bjelovar	016-1	004-1	005-2	101-1	008-4	006-2	
12	803	Rovišće - 3 bar - Bjelovar	004-1	005-2	101-1	016-1	008-4	001-1	
13	833	Bokšić - 3 bar - Bokšić	024-3	022-1	012-1	011-1	018-1	025-1	006-3
14	812	Bokšić - 3 bar - Crnac	024-3	022-1	012-1	011-1	018-1	025-1	006-3
15	818	Brezine - 3 bar - Brezine	016-1	004-1	005-2	101-1	008-4	006-2	101-1
16	901	Budrovac staklenici - 2 bar - Staklenici Budrovac	007-1						
17	874	Cerje Tužno - 3 bar - Sela (IVKOM)	010-1	014-4	005-1	002-3	019-1		
18	806	Čabdin - 3,5 bar - Jastrebarsko	026-1	021-1	008-3	011-1	025-1		
19	732	Čačinci - 3 bar - Čačinci	024-3	022-1	012-1	011-1	018-1	025-1	006-3
20	915	Čađavica - 3 bar - Čađavica	024-1	022-1	012-1	011-1	018-1	025-1	006-3
21	850	Čepelovac - 2 bar - Čepelovac	005-2	004-1	006-2	101-1			
22	790	Daruvar - 3 bar - Daruvar	016-1	004-1	005-2	101-1	008-4	006-2	

Red. br.	Šifra izlaza	Naziv izlaza	Oznake mjesta uzorkovanja (tablica 1)						
			primarni	II	III	IV	V	VI	VII
23	865	Dobrovac - nova - 3 bar - Lipik	016-1	004-1	005-2	101-1	008-4	006-2	
24	819	Dobrovac - nova - 3 bar - Poljoprivreda Lipik	016-1	004-1	005-2	101-1	008-4	006-2	
25	768	Doljani - 3 bar - Doljani	016-1	004-1	005-2	101-1	008-4	006-2	
26	748	Donje Međimurje - 12 bar - Prelog	014-2	101-1	005-1	010-1	002-3	003-1	
27	824	Donje Međimurje - 3 bar - D.Dubrava	014-2	101-1	005-1	010-1	002-3	003-1	
28	783	Donji Andrijevc - 3 bar - Donji Andrijevc	013-1	018-1	012-1	022-1	024-2	025-1	011-1
29	1311	Donji Andrijevc - 3 bar - HEP	013-1	018-1	012-1	022-1	024-2	025-1	011-1
30	813	Donji Miholjac - 3 bar - Donji Miholjac	024-1	022-1	012-1	011-1	018-1	025-1	006-3
31	716	Draganac - 4 bar - Draganac	004-1	005-2	101-1	016-1	008-4		
32	1306	Drniš-3,5 bar_Drniš	023-1	026-1	021-1	008-3	011-1	025-1	
33	730	Dubrovčan - 3 bar - Dubrovčan	002-3	003-1	019-1	014-1	010-1		
34	1287	Dugo Selo							
35	900	Trstenik - 3 bar - Trstenik	001-1	020-1	019-1	019-1			
36	866	Dugo Selo - 3 bar - Dugo Selo	001-1	020-1	019-1	019-1			
37	1254	Đakovo							
38	760	Đakovo - 3 bar - Đakovo	013-1	018-1	012-1	022-1	024-2	025-1	011-1
39	834	Đakovo - 6 bar - Đakovo	013-1	018-1	012-1	022-1	024-2	025-1	011-1
40	835	Strizivojna - 3 bar - Strizivojna	013-1	018-1	012-1	022-1	024-2	025-1	011-1
41	771	Đolta - 3 bar - Sušare Đolta	006-2	005-3	024-1	101-1			
42	784	Đurđenovac - 3 bar - Đurđenovac	024-3	022-1	012-1	011-1	018-1	025-1	006-3
43	825	Đurđevac - 2 bar - Đurđevac	007-1	005-2					
44	902	Ferdinandovac - 2 bar - Ferdinandovac	007-1	005-2					
45	785	Feričanci - 3 bar - Feričanci	024-3	022-1	012-1	011-1	018-1	025-1	006-3
46	761	Ferovac - 3 bar - Pleternica	012-1	024-2	011-1	025-1	022-1		
47	867	Gaj - 3 bar - Gaj	016-1	004-1	005-2	101-1	008-4		
48	840	Garešnica - 3 bar - Garešnica	008-1	006-1	016-1				
49	799	Gola - 3 bar - Gola	12						
50	881	Gradec - 3 bar - Farma Gradec	004-1	005-2	101-1	016-1	008-4	001-1	
51	727	Gradec - 3 bar - Gradec	004-1	005-2	101-1	016-1	008-4	001-1	
52	788	Gradečki Pavlovac - 3 bar - Asfaltna baza	004-1	005-2	101-1	016-1	008-4	001-1	
53	868	Grubišno Polje - 3 bar - Grubišno Polje	016-1	004-1	005-2	101-1	008-4	006-2	
54	841	Haganj - 6 bar - Haganj	004-1	005-2	101-1	016-1	008-4	001-1	
55	722	IP Kalinovac 5 - 3 bar - Sesvete	007-1		005-2				
56	903	Ivanec - 3 bar - Ivanec	010-1	014-4	005-1	002-3	019-1		
57	1250	Ivanić Grad							
58	891	Graberje - 1,5 bar - Graberje	001-1	004-1					
59	869	Ivanić III - 3 bar - Ivanić Grad	001-1	004-1					
60	892	Kloštar Ivanić - 2 bar - Kloštar Ivanić	102-1	004-1					
61	845	Novoselec - 2 bar - Križ	001-1	004-1					
62	878	Ivankovo - 3 bar - Ivankovo	013-1	018-1	012-1	022-1	011-1		
63	807	Ivanja Reka - 6 bar - Iv. Reka, Sesvete	001-4	020-1	019-1				
64	731	Jakovlje - 3 bar - Jakovlje	002-2	019-1	003-1				
65	801	Kalinovac - 2 bar - Kalinovac	007-1	005-2	005-2				

Red. br.	Šifra izlaza	Naziv izlaza	Oznake mjesta uzorkovanja (tablica 1)						
			primarni	II	III	IV	V	VI	VII
66	777	Karlovac - 4 bar - Karlovac	026-1	021-1	008-3	011-1	025-1		
67	753	Klanjec - 3 bar - Klanjec	002-3	003-1	019-1	014-1			
68	802	Kloštar Podravski - 2 bar - Kloštar Podravski	005-3	006-2	101-1	004-1	002-3		
69	1296	Knin - 5 bar - Knin	023-1	026-1	021-1	008-3	011-1	025-1	
70	743	Končanica - 3 bar - Končanica	016-1	004-1	005-2	101-1	008-4	006-2	
71	1302	Konjščina							
72	912	Konjščina - 25 bar - Zlata Bistrica	002-3	003-1	019-1	014-1	010-1		
73	808	Konjščina - 3 bar - Konjščina	002-3	003-1	019-1	014-1	010-1		
74	904	Koprivnica II - 6 bar - Koprivnica	014-2	005-1	007-1	101-1	002-3	010-1	
75	733	Koška - 3 bar - Koška	024-3	022-1	012-1	011-1	018-1	025-1	006-3
76	778	Krapina - 3 bar - Krapina	003-1	002-1	019-1				
77	905	Križevci - 3 bar - Križevci	004-1	005-2	101-1	016-1	008-4	001-1	
78	715	Kršan - 6 bar - Potpićan	021-1	026-1	008-3	011-1	025-1		
79	893	Kukunjevac - 3 bar - Kukunjevac	016-1	004-1	005-2	101-1	008-4	006-2	
80	754	Kumrovec - 3 bar - Kumrovec	002-3	003-1	019-1	014-1	010-1		
81	1286	Kutina							
82	838	Banova Jaruga - 3 bar - Banova Jaruga	008-4	016-1	009-1				
83	820	Kutina I - 3 bar - Kutina	008-4	016-1	009-1				
84	821	Kutina II - 3 bar - Kutina	008-1	006-1	016-1				
85	871	Lipovica - 3 bar - Ludina	027-1	008-4	016-1	009-1			
86	1308	Popovača - 3 bar - Popovača	008-2	027-1	016-1	009-1			
87	1276	Labin - 4 bar - Labin	021-1	026-1	008-3	011-1	025-1		
88	750	Legrad - 3 bar - Legrad	014-2	005-4	010-1	101-1	002-3	003-1	
89	762	Magadenovac - 3 bar - Magadenovac	024-2	022-1	012-1	011-1	018-1	025-1	006-3
90	916	Marijanci - 3 bar - Marijanci	024-2	022-1	012-1	011-1	018-1	025-1	006-3
91	1259	Međimurje							
92	827	Mihovljan - 4 bar - Mihovljan	010-1	014-4	005-1	002-3	019-1		
93	906	Mursko Središće - 3 bar - Mursko Središće	010-1	014-4	005-1	002-3	019-1		
94	1184	Nedelišće - 4 bar - Čakovec, Kuršanec, Šenkovec	010-1	014-4	005-1	002-3	019-1		
95	907	Nedelišće - 4 bar - Nedelišće	010-1	014-4	005-1	002-3	019-1		
96	774	Molve selo - 2 bar - Molve	005-2	004-1	101-1	006-2			
97	872	Narta - 3 bar - Narta	004-1	005-2	101-1	016-1	008-4	001-1	
98	860	Našice grad - 3 bar - Našice	024-3	022-1	012-1	011-1	018-1	025-1	006-3
99	764	Negoslavci - 3 bar - Opatovac	013-1	018-1	012-1	011-1	018-1	025-1	006-3
100	1288	Nova Gradiška							
101	844	Lipovljani - 4 bar - Lipovljani	016-1	008-4	009-1				
102	767	Nova Gradiška - 4 bar - Nova Gradiška	011-1	008-3	025-1				
103	889	Nova Kapela - 4 bar - Nova Kapela	011-1	008-3	025-1				
104	1289	Novi Marof							
105	913	Novi Marof - 3 bar - Novi Marof	014-1	002-3	003-1	010-1			
106	757	Tuhovec - 3 bar - Tuhovec	014-1	002-3	003-1	010-1			
107	809	Podrute - 5 bar - Podrute	014-1	002-3	010-1	003-1			
108	1245	Ogulin - 3 bar - Ogulin	026-1	021-1	008-3	011-1	025-1		

Red. br.	Šifra izlaza	Naziv izlaza	Oznake mjesta uzorkovanja (tablica 1)						
			primarni	II	III	IV	V	VI	VII
109	744	Okoli - 3 bar - Okoli	201-1	009-1					
110	736	Orahovica - 3 bar - Orahovica	024-3	022-1	012-1	011-1	018-1	025-1	006-3
111	1255	Osijek							
112	782	Bizovac - 3 bar - Bizovac	022-1	024-4	012-1	011-1	018-1	025-1	006-3
113	918	Osijek I - 3 bar - Osijek	022-1	024-4	012-1	011-1	018-1	025-1	006-3
114	737	Osijek I - 3 bar - Sarvaš	022-1	024-4	012-1	011-1	018-1	025-1	006-3
115	739	Osijek III - 3 bar - Osijek	022-1	024-4	012-1	011-1	018-1	025-1	006-3
116	795	Pakrac I - 3 bar - Pakrac	016-1	004-1	005-2	101-1	008-4	006-2	
117	894	Pakračka Poljana - 3 bar - Pakračka Poljana	016-1	004-1	005-2	101-1	008-4	006-2	
118	853	Pitomača - 3 bar - Pitomača	006-2	005-3	024-1	101-1			
119	1244	Poreč - 4 bar - Poreč	021-1	026-1	008-3	011-1	025-1		
120	1256	Požega							
121	786	Ferovac - 3 bar - Ferovac	012-1	024-2	011-1	025-1	022-1	K2-1	
122	740	Požega - 3 bar - Požega	012-1	024-2	011-1	025-1	022-1	K2-1	
123	766	Pula - 12 bar - Pula	021-1	026-1	008-3	011-1	025-1		
124	1274	Rijeka Istok – 4 bar – Rijeka	026-1	021-1	008-3	011-1	025-1		
125	888	Rijeka zapad - 16 bar - Rijeka	026-1	021-1	008-3	011-1	025-1		
126	815	Rijeka zapad - 4 bar - Rijeka	026-1	021-1	008-3	011-1	025-1		
127	1243	Rovinj - 4 bar - Rovinj	021-1	026-1	008-3	011-1	025-1		
128	719	Rugvica - 4bar - BC Institut	001-1	020-1	019-1				
129	896	Sirač - 3 bar - Sirač	016-1	004-1	005-2	101-1	008-4	006-2	
130	745	Sirač - 4,5 bar - Kamenolom Sirač	016-1	004-1	005-2	101-1	008-4	006-2	
131	797	Sisak - 6 bar - Sisak	027-1	009-1	008-2				
132	1257	Slatina							
133	940	Sladojevci - 3 bar - Sladojevci	006-3	024-1	025-1	101-1	005-1	005-3	
134	887	Slatina - 3 bar - Slatina	006-3	024-1	025-1	101-1	005-1	005-3	
135	861	Slavonski Brod - 3 bar - Sl. Brod	018-1	013-1	012-1	011-1	024-2		
136	1300	Split - 3,5 bar - Split	023-1	026-1	021-1	008-3	011-1	025-1	
137	1301	Split - 12 bar - Split	023-1	026-1	021-1	008-3	011-1	025-1	
138	755	Straža - 3 bar - Pregrada	003-1	002-1	K1-1				
139	787	Strizivojna - 3 bar - Vrpolje	013-1	018-1	012-1	022-1	024-2	025-1	011-1
140	897	Stručec - 3 bar - Stručec	027-1	008-2	009-1				
141	908	Suha žbuka - 4,5 bar - Suha žbuka	007-1	005-2					
142	909	Suhopolje - 3 bar - Suhopolje	006-3	024-1	025-1	005-3	101-1		
143	756	Sv. Ivan Zelina - 3 bar - Zelina	002-3	003-1	019-1	014-1	010-1		
144	1295	Šibenik - 12 bar - Šibenik	023-1	026-1	021-1	008-3	011-1	025-1	
145	830	Tuheljske Toplice - 3 bar - Tuheljske Toplice	002-3	003-1	019-1	014-1	010-1		
146	1222	Umag - 4 bar - Umag	021-1	026-1	008-3	011-1	025-1		
147	1251	Varaždin							
148	798	Cerje Tužno - 3 bar - Cerje Tužno	010-1	014-4	005-1	002-3	019-1		
149	800	Jalžabet - 3 bar - Jalžabet	014-4	010-1	005-1	002-3			
150	773	Lepoglava - 3 bar - Lepoglava	010-1	014-4	005-1	002-3	019-1		
151	724	Ludbreg - 3 bar - Ludbreg	014-2	005-1	010-1	101-1	003-1	002-3	019-1

Red. br.	Šifra izlaza	Naziv izlaza	Oznake mjesta uzorkovanja (tablica 1)						
			primarni	II	III	IV	V	VI	VII
152	804	Varaždin I - 3 bar - Varaždin	010-1	014-4	005-1	002-3	019-1		
153	876	Varaždin II - 3 bar - Varaždin	010-1	014-4	005-1	002-3	019-1		
154	747	Veliki Grđevac - 3 bar - Veliki Grđevac	016-1	004-1	005-2	101-1	008-4	006-2	
155	725	Veliko Trojstvo - 3 bar - Veliko Trojstvo	004-1	005-2	101-1	016-1	008-4	001-1	
156	789	Viljevo - 3 bar - Viljevo	024-1	022-1	012-1	011-1	018-1	025-1	006-3
157	863	Vinkovci - 3 bar - Vinkovci i okolica	013-1	018-1	012-1	022-1	024-2	025-1	011-1
158	752	Virje - 3 bar - Novigrad	005-1	014-3	101-1				
159	726	Virje - 3 bar - Virje	005-1	014-3	101-1				
160	854	Virovitica - 6 bar - Virovitica	006-3	024-1	025-1	005-3	101-1		
161	848	Vrbovec - 6 bar - Vrbovec	004-1	005-2	101-1	016-1	008-4	001-1	
162	1285	Vukovar							
163	816	Vukovar - 3 bar - Vukovar	013-1	018-1	012-1	022-1	024-2	025-1	011-1
164	864	Vukovar - 6 bar - Borovo	013-1	018-1	012-1	022-1	024-2	025-1	011-1
165	735	Negoslavci - 3 bar - Negoslavci	013-1	018-1	012-1	011-1	018-1	025-1	011-1
166	885	Zabok - 10 bar - Donja Stubica	002-3	014-1	003-1	010-1			
167	914	Zabok - 3 bar - Zabok	002-3	014-1	003-1	010-1			
168	1241	Zadar - 5 bar - Zadar srednji tlak	023-1	026-1	021-1	008-3	011-1	025-1	
169	1249	Zagreb							
170	780	Zagreb istok - 6 bar - Zagreb	001-2	020-1	019-1				
171	858	Zagreb jug - 6 bar - Zagreb	020-1	001-3	019-1	002-2			
172	810	Zagreb zapad - 6 bar - Zagreb	019-1	002-2	020-1	014-1	003-1		
173	829	Zagreb zapad - 25 bar - Samobor	019-1	002-2	020-1	014-1	003-1		
174	884	Zagreb zapad - 3,5 bar - Sv. Nedjelja	019-1	002-2	020-1	014-1	003-1		
175	886	Zaprešić - 6 bar - Zaprešić	019-1	002-2	020-1	014-1	003-1		
176	776	Žabno - 3 bar - Žabno	004-1	005-2	101-1	016-1	008-4	001-1	
177	817	Županja - 3 bar - Gradište	013-1	018-1	012-1	022-1	024-2	025-1	011-1
178	890	Županja - 3 bar - Županja	013-1	018-1	012-1	022-1	024-2	025-1	011-1
		Izlazi prema krajnjim kupcima povezanim izravno na transportni sustav							
179	759	Belišće - 2 bar - Tvornice Belišće	024-4	022-1	012-1	011-1	018-1	025-1	006-3
180	763	Cementara Našice - 3 bar - Cementara Našice	024-3	022-1	012-1	011-1	018-1	025-1	006-3
181	849	Cerje Tužno - 3 bar - Ciglana C.Tužno	010-1	014-4	005-1	002-3	019-1		
182	944	CPS Molve, potrošnja - 13 bar - CPS Molve,	005-2	004-1	101-1	006-2			
183	839	Dobrovac - nova - 3 bar - Staklana Lipik	016-1	004-1	005-2	101-1	008-4	006-2	
184	791	Dugo Selo - 3 bar - Cinčaona D. Selo	001-1	020-1	019-1				
185	1248	Dugo Selo - 30 bar - Plin-lift	001-1	020-1	019-1				
186	769	Garešnica - 3 bar - Ciglana Garešnica	008-1	006-1					
187	792	Graberje - 1,5 bar - Ind. krug Graberje	001-1	004-1					
188	826	IP Kalinovac 5 - 2,5 bar - INA - IP Kalinovac	007-1	005-2					
189	911	Ivanja Reka - 30 bar - TE-TO Zagreb	001-4	020-1	019-1				
190	855	Konjščina - 25 bar - TE Jertovec	002-3	003-1	019-1	014-1	014-1	010-1	
191	772	Križevci - 3 bar - Ciglana Križevci	004-1	005-2	101-1	016-1	008-4	001-1	
192	946	KS Stružec - 3 bar - KS Stružec	027-1	008-2	009-1				
193	717	Kutina I - 13,3 bar - Petrokemija Kutina	008-4	016-1	009-1				

Red. br.	Šifra izlaza	Naziv izlaza	Oznake mjesta uzorkovanja (tablica 1)						
			primarni	II	III	IV	V	VI	VII
194	843	Lipovica - 3 bar - KPD Lipovica	027-1	008-4	016-1				
195	1195	Lipovljani - 18 bar - INA Lip.-Jam.	016-1	008-4	009-1				
196	859	Magadenovac - 3 bar - Farma Magadenovac	024-2	022-1	012-1	011-1	018-1	025-1	005-3
197	734	Našice grad - 3 bar - Ciglana Našice	024-3	022-1	012-1	011-1	018-1	025-1	005-3
198	945	OS Beničanci - 30 bar - OS Beničanci, plinski lift	024-2	022-1	012-1	011-1	018-1	025-1	005-3
199	738	Osijek I - 15 bar - TE-Os1	022-1	024-4	012-1	011-1	018-1	025-1	005-3
200	765	Osijek I - 15 bar - TE-Os2	022-1	024-4	012-1	011-1	018-1	025-1	005-3
201	917	Osijek I - 3 bar - HEP Kotlovnica	022-1	024-4	012-1	011-1	018-1	025-1	005-3
202	1198	Rijeka Istok - 45 bar - Rafinerija Urinj	026-1	021-1	008-3	011-1	025-1		
203	720	Sisak - 6 bar - Raf. nafte Sisak	027-1	009-1	008-2				
204	721	Sisak - 6 bar - TE Sisak	027-1	009-1	008-2				
205	846	Sisak - 6 bar - TO Sisak	027-1	009-1	008-2				
206	1297	Sisak - 31 bar - TO Sisak	027-1	009-1	008-2				
207	746	Sisak - 9 bar - Gavrilović	027-1	009-1	008-2				
208	796	Sisak - 9 bar - Željezara Sisak	027-1	009-1	008-2				
209	741	Sladojevci - 3,9 bar - Ciglana Sladojevci	006-3	024-1	025-1	101-1	005-1		
210	856	Straža - 3 bar - Staklana Straža	003-1	002-1					
211	751	Šenkovec - 3 bar - Ciglana Šenkovec	010-1	014-4	005-1	002-3	019-1		
212	910	Veliko Trojstvo - 15 bar - KS Šandrovac	004-1	005-2	101-1	016-1	008-4	001-1	
213	877	Virovitica - 6 bar - Šećerana Virovitica	006-3	024-1	025-1	005-3	101-1		
214	857	Zagreb jug - 25 bar - EL-TO Zagreb	020-1	001-3	019-1	002-2			
215	758	Zaprešić - 20 bar - Pliva	019-1	002-2	020-1	014-1	003-1		
216	836	Županja - 3 bar - Šećerana Županja	013-1	018-1	012-1	022-1	024-2	025-1	011-1

c) Rules for the use of the data on gas quality and calorific values for the calculation of the energy of delivered gas

The result of the process chromatograph operation are the data on chemical composition of gas and physical properties calculated from chemical composition of gas whereas the determining of chemical composition of natural gas is carried out in compliance with "HRN EN ISO 6974 – Natural gas – Determination of composition and associated uncertainty by gas chromatography" standard. Pursuant to the Network Code of the Transmission System, standard reference conditions for all metering and calculations of natural gas volume and energy are as follows: - for calculating the volume it is the temperature of 288.15 K (15°C) and pressure of 101.325 kPa (1.01325 bar(a)) – for calculating the calorific value, energy and Wobbe index it is the referent temperature of combustion of 288.15 K (15°C). Conversion of values to other reference conditions is carried out with conversion factors in compliance with "HRN EN ISO 13443 – Natural gas – Standard reference conditions" standard.

The calculation of delivered gas energy at the exit transmission system connections is carried out automatically in the SUKAP information system by multiplying the value of hourly measured gas volume by the average daily net calorific value for the appropriate gas day, for the appropriate sampling location. Hourly measured volume is in this case expressed in a measuring unit of standard cubic meter (Sm³) at a standard pressure (1.01325 bar (a)) and temperature of (15°C) rounded to an integer.

Net calorific value is expressed in kWh/m³, also at the same standard conditions for volume and for temperature of products of combustion of 15°C, rounded to 3 decimal places. The result of multiplying is a quantity of energy for the observed hour expressed in kWh, rounded to an integer without decimal places.

Average daily net calorific value for the sampling location for a gas day is the arithmetic mean value of the results of analyses of all individual gas samplings within the observed gas day.

For an individual connection with gas volume measuring, a relevant sampling location is a sampling location physically placed on the transmission system closest to the observed connection and the sample is taken from the same gas stream without mixing with gases from other sources.

In case of unavailability of data from an individual device, that is, a malfunction of a device, and in case of significant changes in the regime of gas flows through gas pipelines, the transmission system operator may temporarily or permanently assign another, replacement sample, to a gas volume exit metering point. The replacement sample is a sample that meets the same conditions as the primary one (the sample is taken from the same gas stream) but its distance from the connection is larger than the one of the primary relevant sample. In cases when not even the data from the replacement sample are available for use, the last valid data from the relevant sample will be used.

Note:

By introducing daily calorific values for calculations at the transmission system-level, the current practice of half-monthly manual sampling and gas analysing in an accredited laboratory has been abandoned so half-monthly reports on laboratory gas quality analyses are no longer available.

The data on the gas composition at all sampling locations are available on the web page of the transmission system operator in tabular form.

Moreover, calculated weighted net calorific values for exits from the transmission system towards distribution systems for half-monthly and monthly billing periods are published on the web page.