



**The role of Serbia in
the security of supply
in Europe**

What is the goal of security of supply?

1. Obtaining sufficient natural gas quantities to cover end-customer demand even under extreme conditions.
2. Ensuring availability of capacity and network supply in order to meet customer requirements.

EU Regulation on Security of Gas Supply

Regulation EU no. 994/2010 of November 2010 came into force on December 2, 2010 for all member states.

- Member states are obligated to establish a competent authority responsible to implement provisions under the Regulation
- Preparing a preventative action and emergency plans without jeopardizing other EU member states or the EU as a whole
- The supply standard ensuring there is enough capacity to cover gas demand in the event of the largest piece of gas infrastructure going offline, occurring with a statistical probability of once in 20 years (the 'n-1' standard)
- Enabling permanent physical bi-directional capacity on interconnectors, excluding connections to production facilities, LNG terminals or distribution networks
- Ensuring gas to 'protected customers'
- The competent authority to provide that the market players fulfill their obligations regarding security of supply without making any constraints to the competition or market operation, and that the security measures affecting more than one state are fully and efficiently implemented
- Access to the interconnections as referred to in Regulation 715/2009
- The EU Commission is authorized to revoke emergency measures imposed by the member states; Defined role of the Co-ordination Group for Gas
- Communication during an gas supply emergency
- ...

Energy Community and Serbia

Role of the Energy Community of South East Europe

The main role of the EC is to ensure security of supply through a stable regulatory and market framework, obtain diversification through investments connecting new supply sources from the Caspian region, North Africa and Middle East, together with further development of the indigenous ones.

Establishing a single borderless market in the region of South East Europe with the integral mechanism for cross-border transport and solidarity in the event of gas supply emergency.

Regulatory rules and their implementation in the Republic of Serbia

Provisions of the security of supply have been transposed into Serbian Energy Law, with some of the aspects being set out under the Law and others under relevant secondary legislation in line with the Directive 994/2010.

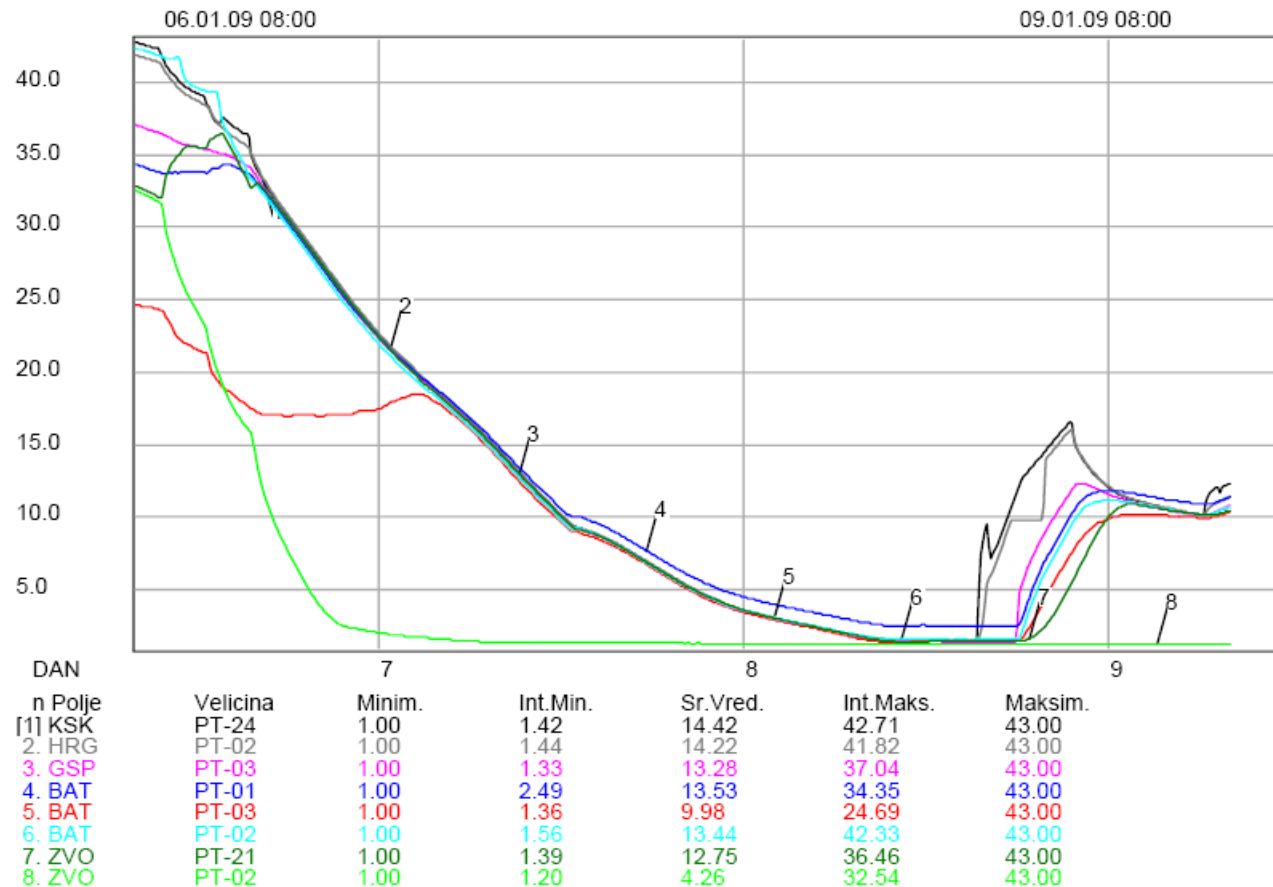
At this point Serbia is not able to fulfill all the obligations imposed by the Regulation 994/2010, since that 80 % of the supplies is provided through a single supply route with more potential supply sources, but almost 90% of the supplies from that route came from one supply source. Over the last few years, however, that situation has been gradually changing.

The Underground Gas Storage Facility contributes to security level increase, but it can not fully replace the supply route from Hungary with respect to the standard “once in 20 years”

How is Serbia solving problems with fulfilling obligations imposed by the Regulation 994/2010 ?

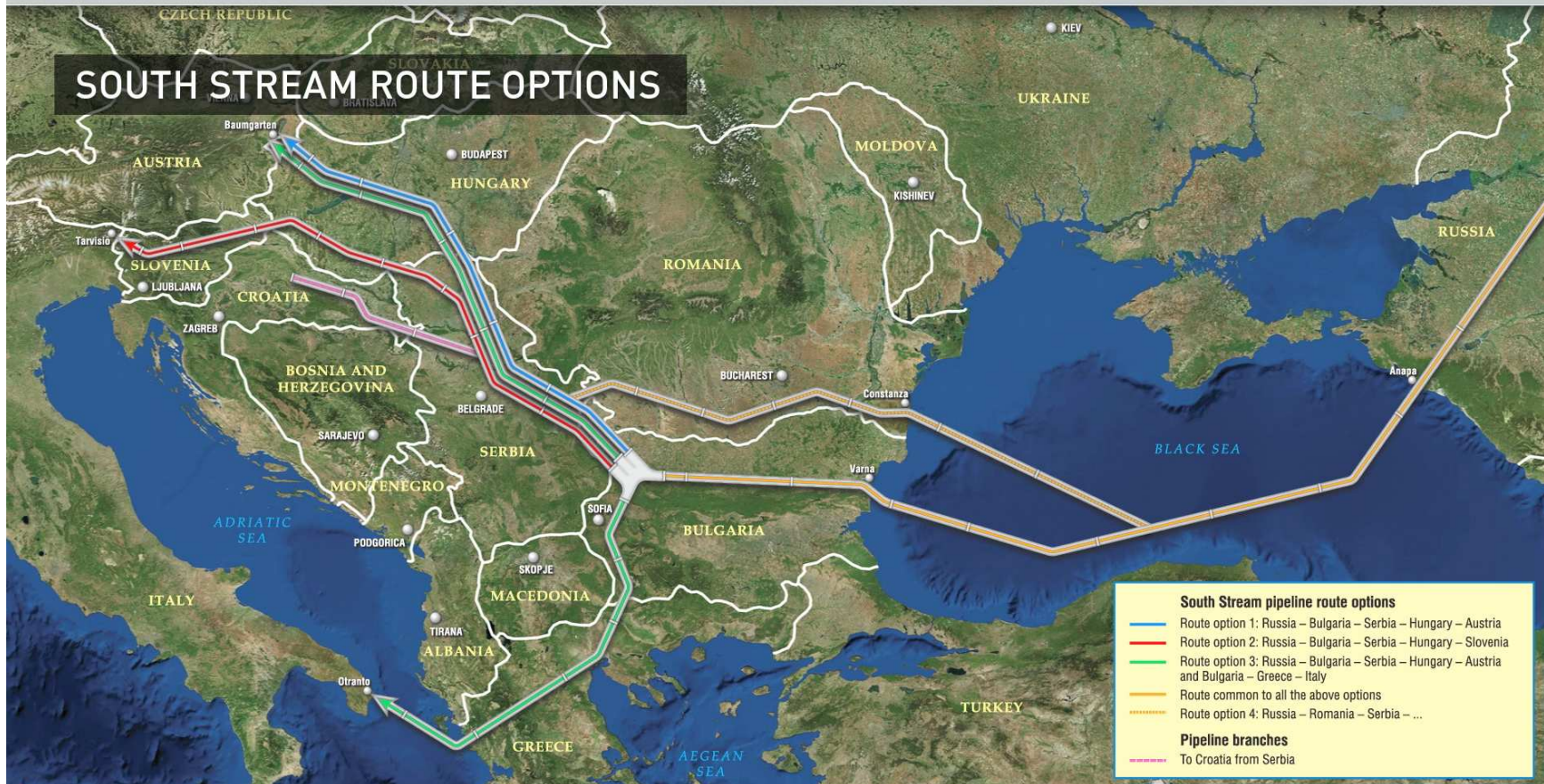
- Through meeting the requirements arising from the Energy Community Treaty
- Directly through the implementation of the relevant provisions of the Energy Law entered into force in August 2011
- By updating incident classification and management procedures
- Through development and full integration of the respective regulations into the legal system of the Republic of Serbia
- Developing secondary legislation to the Energy Law
- By making arrangements with the cooperating neighbouring countries in order to unify the procedures regarding security of supply
- Through necessary investment into the infrastructure, foremost in international gas pipeline projects, storage capacities and interconnectiona.Kroz neophodno investiranje u infrastrukturu. U prvom redu u međunarodne gasovode, skladišne kapacitete i interkonekcije
- Through its membership in the ENTSO G

Operating pressures in the system of JP Srbijagas in January 2009 (it happened once, should not happen again)



Gas Pipeline “South Stream”

South Stream
Energising Europe



Gas Pipeline “South Stream”

Tannual Transmission Capacity (in bcm)						
Ga Pipeline Transmission Capacity	Transmission through Serbia	Gas Quantities for Domestic Market	Transmission to Hungary	Transit to Bosnia and Herzegovina	Transit to Republic of Srpska	Transit to Croatia
63.0	40.5	3.9	32.5	0.7	0.5	2.7



Republic of Serbia

Existing and Planned Interconnections

Hungary

Horgoš - Kiskundorozsma

Rumania

Mokrin-Arad

Croatia

Bačka Palanka – Ilok

Bosnia and Herzegovina

Loznica-Zvornik

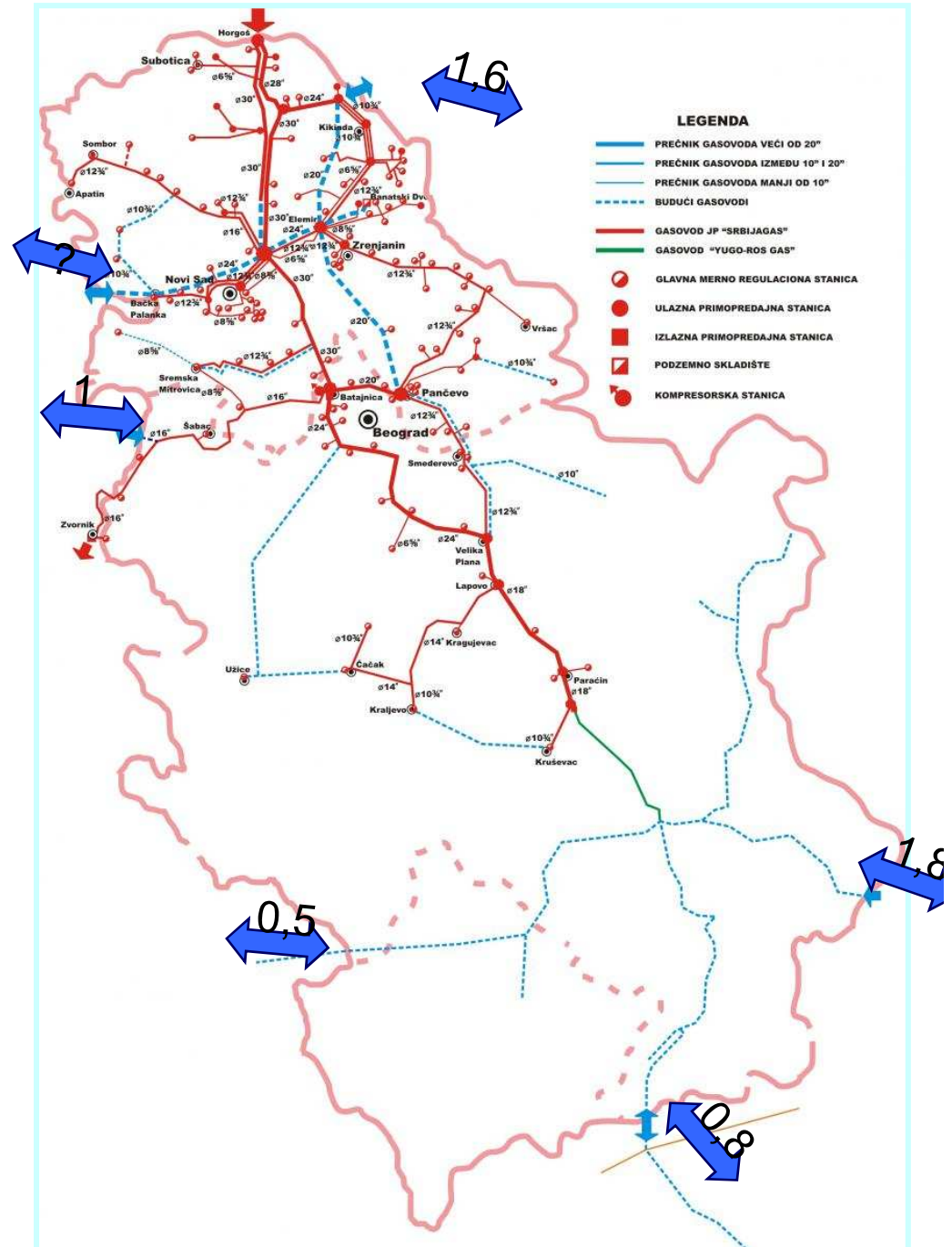
Mačvanski Prnjavor-Bijeljina

Bulgaria

Niš-Sofia (Dupnica)

Macedonia

Leskovac-Kumanovo



STRATEGIC PROJECTS OF JP SRBIJAGAS UP TO 2015 of the highest priority level

CONTRACTED PROJECTS			2.867.500.000 €
Pos.	Investment	Investment Description	Investment Costs in €
1.	Construction of the high pressure gas pipeline South Stream	DN 1400; 415 km	1.650.000.000
2.	Underground Gas Storage Facility Itebej	Capacity 1.000.000.000 m ³	75.000.000
3.	Interconnection with Bulgaria	DN 600; 109 km	60.000.000
4.	Connecting with Rumanian System	DN 600; 5 km	2.500.000
5.	Construction of gas fired thermal power plants	Novi Sad(300 MWe + 200 MWt), Belgrade (400 MWe + 260 MWt), Pančevo (60 MWe + 30 MWt), and Niš(100 MWe + 60 MWt)	1.000.000.000
6.	LNG Terminal, Port Pančevo		80.000.000

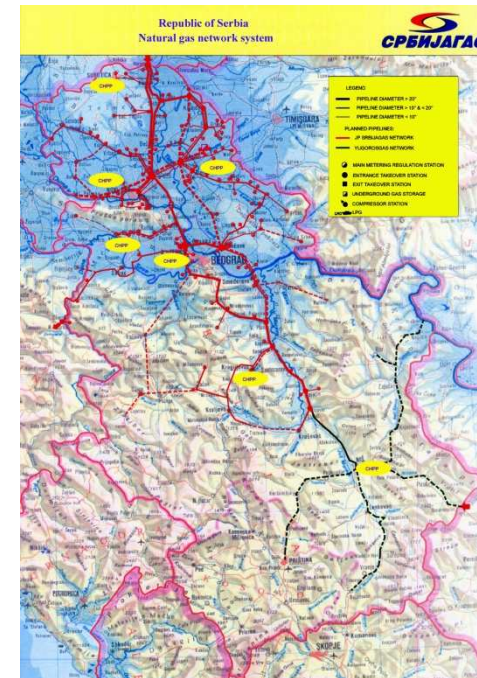
➤ There are intensive ongoing discussions with large energy companies (General Electric and Siemens) on future cooperation model and potential joint investments in the construction of CHP gas fired thermal power plants as well as the construction of LNG Terminal, Pančevo.

Gas Power Plants

According to the preliminary analysis under Republic of Serbia Long-term Energy Development Strategy, potential locations for the CCGT are:

- City of Subotica (30 MWe electric power + 40 MW basic thermal load)
- City of Novi Sad (300 MWe + 200 MWt),
- City of Zrenjanin (60 MWe + 30 MWt),
- City of Sremska Mitrovica (60 MWe + 90 MWt),
- City of Belgrade – Novi Beograd (400 MWe + 260 MWt),
- City of Kragujevac (100 MWe + 60 MWt) and
- City of Niš (100 MWe + 60 MWt).

Total: 850 MWe + 740 MWt



Summary

Serbia is willing and capable of increasing the security of natural gas supply, partially including also security of electricity supply, to a significantly higher level.

How?

- Through investment activities:

Construction of the Gas Pipeline “South Stream” (63/40,5 bcm)

Construction of interconnections with the neighbouring countries and establishing regional gas markets

Increase in natural gas storage capacity up to 6 bcm

- Through transposition of EU Directives into regulations, in line with the obligations arising from its EU candidate status and being a Signatory State to the Energy Community Treaty.