



**12:15-14:00**

**Session V: SE Europe's Expanding Natural Gas Market-  
Challenges and Opportunities**

# European Gas Pipeline System



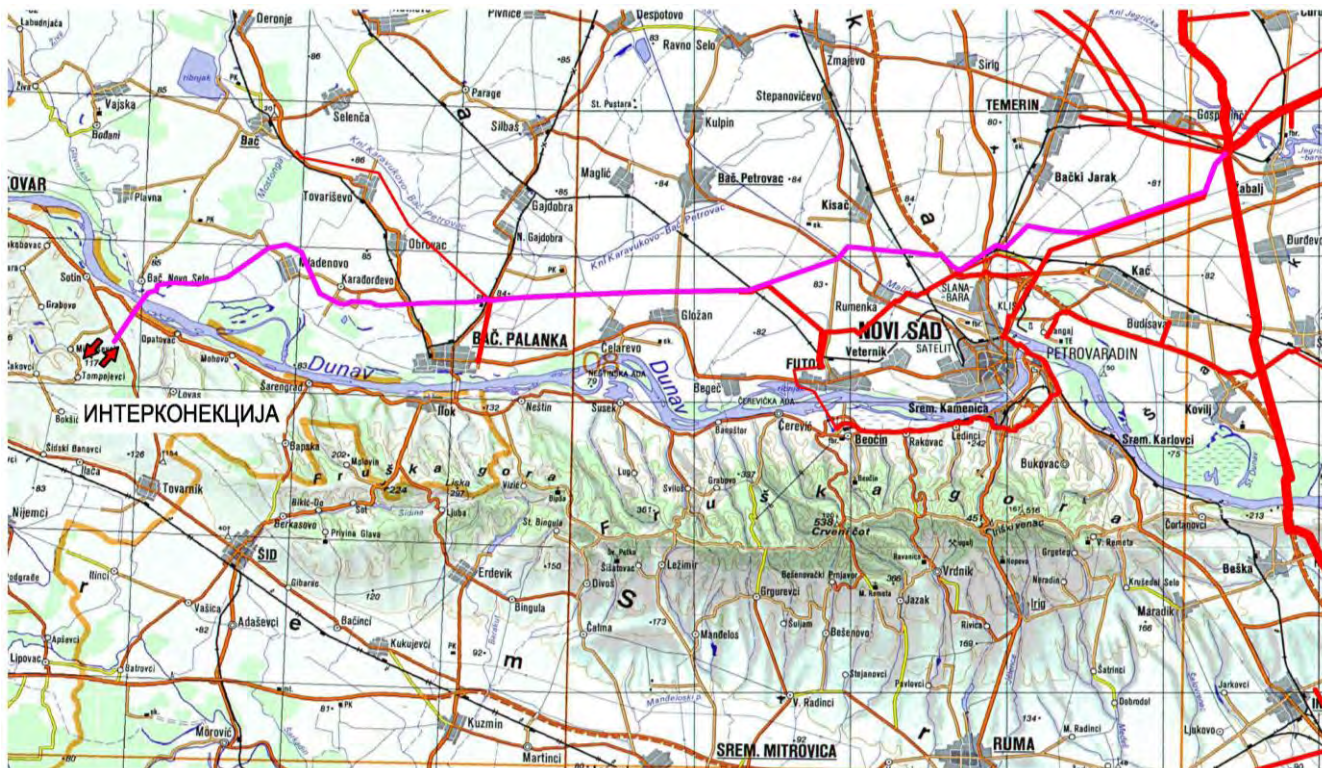
- Unlike the situation in the western European countries, there is no extensive high-pressure gas pipeline network in the Balkan Peninsula

# Balkan Gas Pipeline System



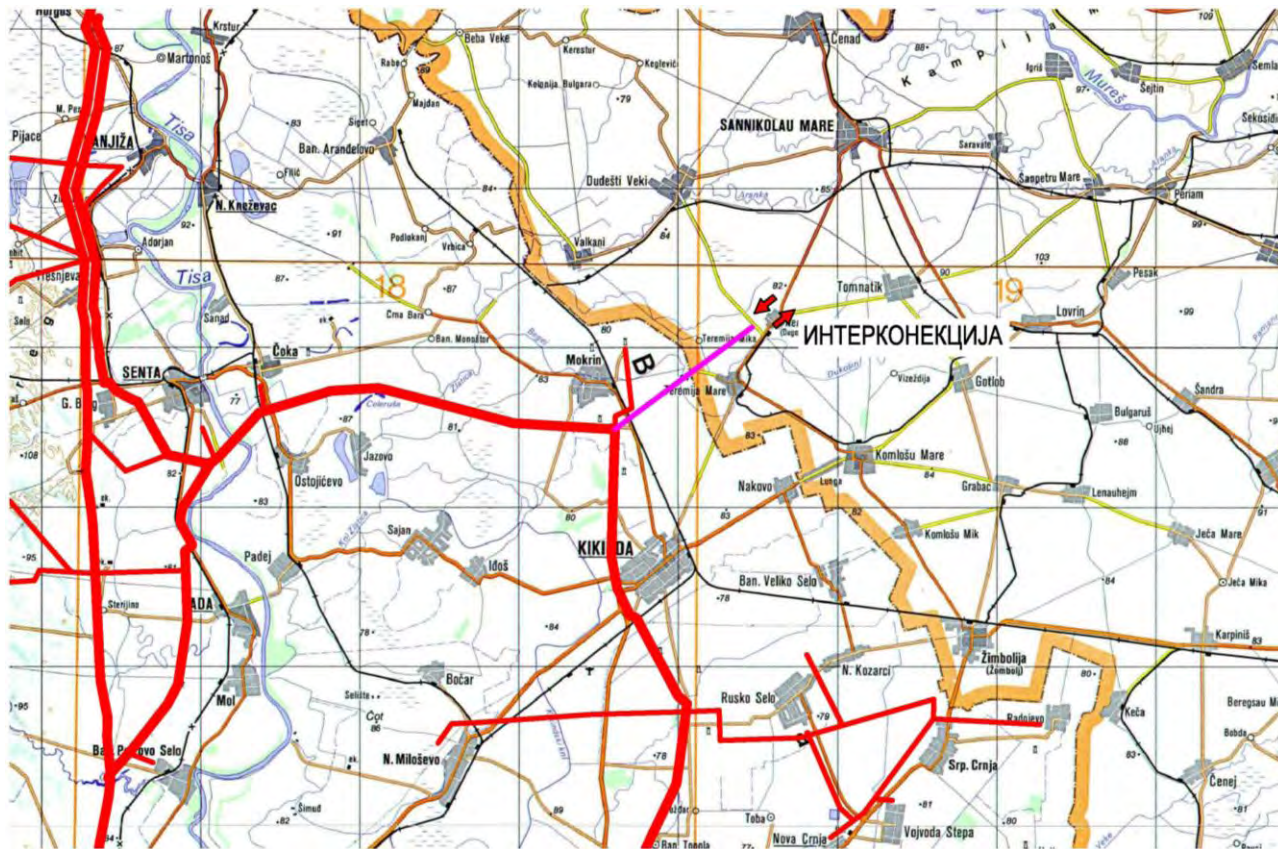
- Interconnections between the countries are poor (mostly unidirectional) or even nonexistent
- The Republic of Serbia has one entry point (Hungary) and one exit point (Bosnia and Herzegovina)

# Interconnection with Croatia (Futog – Sotin)



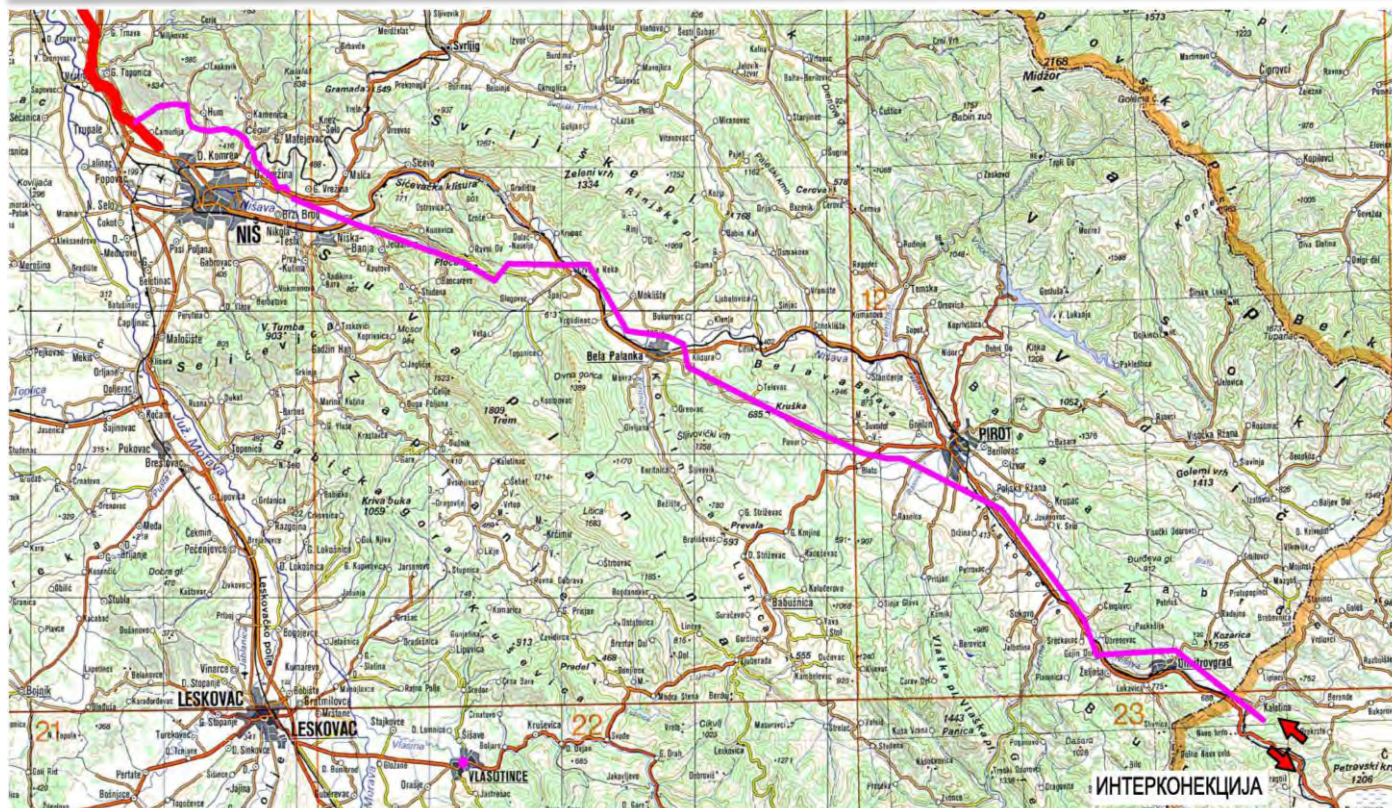
- Technical data:
  - Total length through Serbia is 58 km
  - Diameter DN600
  - Capacity 1,5 bcm
- Estimated value of the section through Serbia EUR 37,8 mio
- Potential connection to the LNG terminal Krk and Italy (Algerian gas)
- Potential connection to the Baumgarten Gas Hub
- Small capacity of the Croatian system

# Interconnection with Romania (Mokrin - Arad)



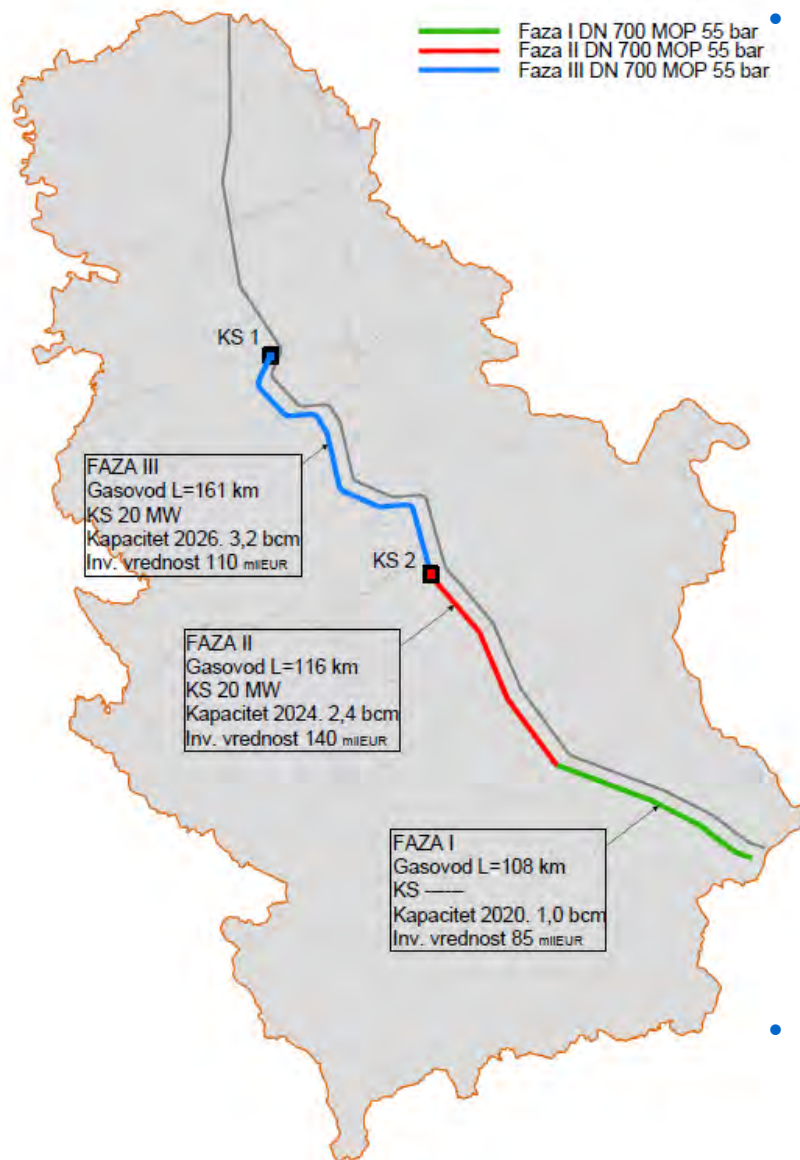
- Technical data:
  - Total length through Serbia is 6 km
  - Total length through Romania 74 km
  - Diameter DN500
  - Capacity 1 bcm
- Estimated value of the section through Serbia EUR 6 mio

# Interconnection with Bulgaria (Niš – Sofia)



- Technical data:
  - Total length through Serbia is 108 km
  - Total length through Bulgaria 63 km
  - Diameter DN700
  - Capacity 1,8 – 3.3 bcm
- Estimated value of the section through Serbia about EUR 85 (293) mio
- Preparation of the Spatial Plan for Special Purpose Zone is in progress

# Interconnection with Bulgaria (Niš – Sofia) Stages 2 and 3



Necessary development of the transmission system in order to reach its full capacity:

## - Stage 2

- Pipeline V.Orašje-Niš in the length of 161 km
- CS Batajnica power level 20MW
- Estimated value of the stage 2 is EUR 115,7 mio
- Capacity after completion of the stage 2 is 1,6 bcm from Serbia to Bulgaria and 1,8 bcm from Bulgaria to Serbia

## - Stage 3

- Pipeline Batajnica-V.Orašje in the length of 116 km
- CS Batocina power level 20MW
- Estimated value of the stage 3 is EUR 91,7 mio
- Capacity after completion of the stage 3 is 2,7 bcm from Serbia to Bulgaria and 3,2 bcm from Bulgaria to Serbia

- Total funding required for the development of the transmission system amounts to EUR 208 mio

# Storage Facilities in the Region – 2016



Country	Capacity in mcm	Withdrawal in mcm	Injection in mcm
Austria	8250	94	76
Bulgaria	550	3	3
Croatia	553	6	4
Hungary	6330	79	45
Romania	3050	27	23
Serbia	450	5	4
Slovakia	3135	45	39



# Potential Storage Facilities

## Current status UGS Banatski Dvor

- \* Withdrawal 5 mio m<sup>3</sup>/day
- \* Injection 2,9 mcm/day
- \* Capacity 450 mcm

## Stage 2 UGS Banatski Dvor

- \* Withdrawal up to 10 mio m<sup>3</sup>/day
- \* Injection up to 5 mio m<sup>3</sup>/day
- \* Capacity up to 1 bcm
- \* Investment value EUR 65 mio

## Stage 1 UGS Itebej

- \* Current gas production by NIS Gazprom njeft from the field G3 (not water-driven)
- \* Injection 3 mcm/day
- \* Withdrawal up to 5 mcm/day
- \* Capacity up to 500 mcm (total can be up to 1 bcm)
- \* Total investment in stage 1 UGS up to EUR 70 mio

## UGS Tilva

- \* Depleted gas field in the vicinity of Pancevo used by NIS
- \* Peak supply of large consumers in Pancevo and Belgrade
- \* Drowned gas field
- \* Possible capacity 200-500 mcm
- \* Withdrawal up to 5 mcm/day
- \* Total investment: including construction of the bidirectional gas pipeline cca EUR 55 mio  
including required quantities of cushion gas of 150 mcm – EUR 90 mio

## Gas pipeline UGS B.Dvor – UGS Itebej – Pancevo – Beograd

- \* Connecting gas storage facilities with the largest gas consumers
- \* Optimization of the gas pipeline system and storage facility operation
- \* Gas pipeline capacity up to 13 mcm
- \* Investment value EUR 55 mio

**Thank you for your attention**