



# **DIVERSIFICATION.**

## **OPPORTUNITIES for DIVERSIFICATION**

**Mr. Dimitar Gogov – CEO of Bulgargaz EAD**



## **OVERVIEW**

# **NATURAL GAS - BULGARIA**

**Bulgaria is a key gas transit country, with around 16 bcm of Russian gas currently passing through the Bulgarian system to Turkey, smaller flows to Greece and tiny flows to the FYR of Macedonia. It is expected that the flows from Bulgaria to Turkey will reverse in the future as Russian gas via Blue Stream plus Caspian gas plus Iranian and possibly also Iraqi and Egyptian gas flow toward Europe in excess of Turkey's demand.**

**The major transit flows through Bulgaria would then be Caspian (and possibly some Russian gas) in the Nabucco pipeline from Turkey through Bulgaria to Romania towards Central Europe and Russian gas flows via Serbia towards North East Italy.**

**Bulgaria's own consumption of gas is met primarily from imports (around 2.5 bcm pa), with domestic production, mainly from the Black Sea, contributing very negligible gas volume (under 0.010 bcm pa). For added security of supply, Bulgaria has 0.65 bcm of storage at a UGS facility at Chiren in its natural gas system. The Bulgarian transmission ring has capacity of 6 to 7 bcm/y, only half of which is used at present.**



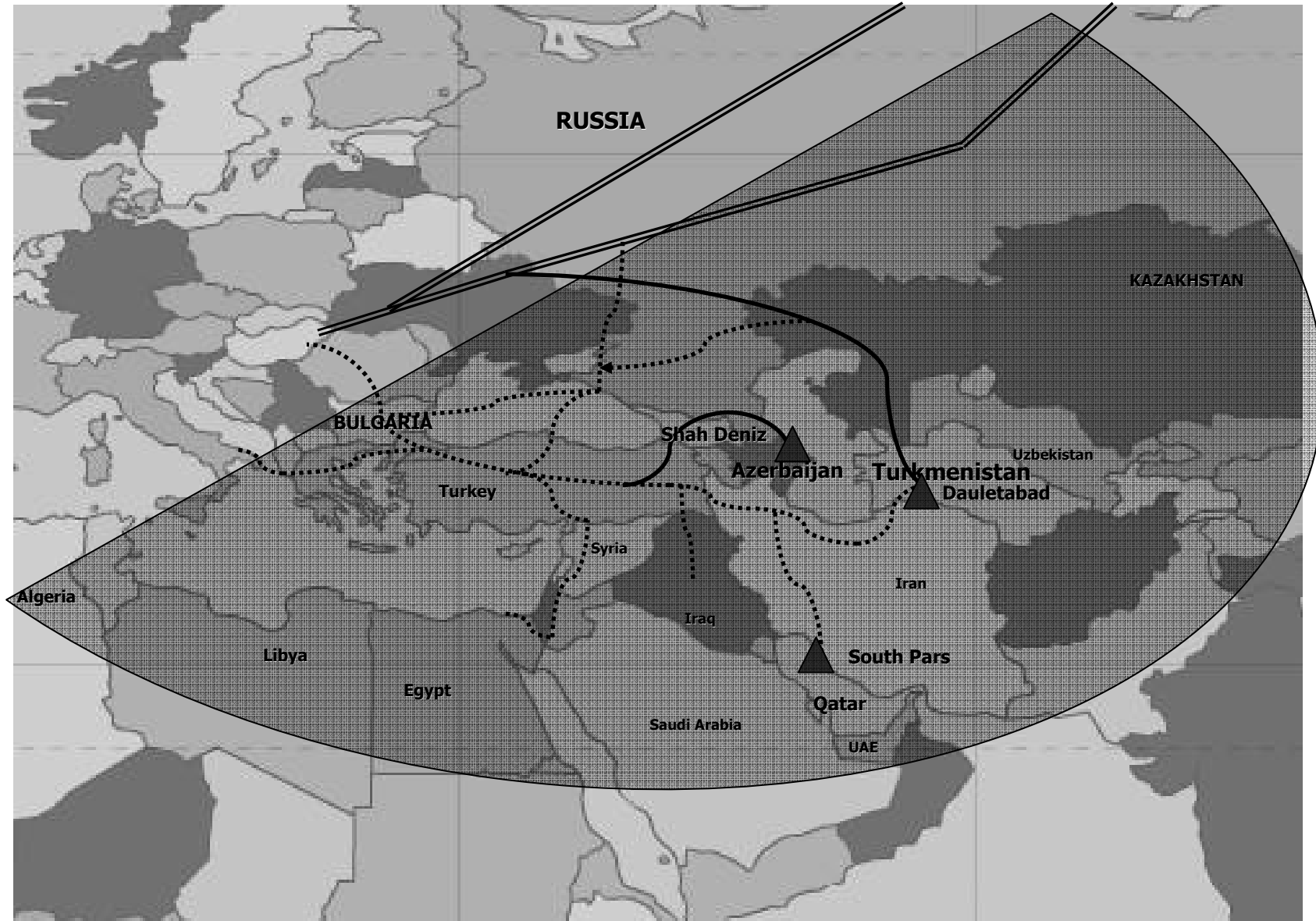
## **Focus On Gas Sources and potential Routes -1**

**Increased gasification requires increased diversification of supply. In assessing the economics of incremental new supplies, we need to consider both sources and delivery routes via pipeline or LNG. The gas sources taken into account include fields in a vast arc centered on SE Europe and sweeping clockwise from the Russian Federation all the way around to Algeria.**

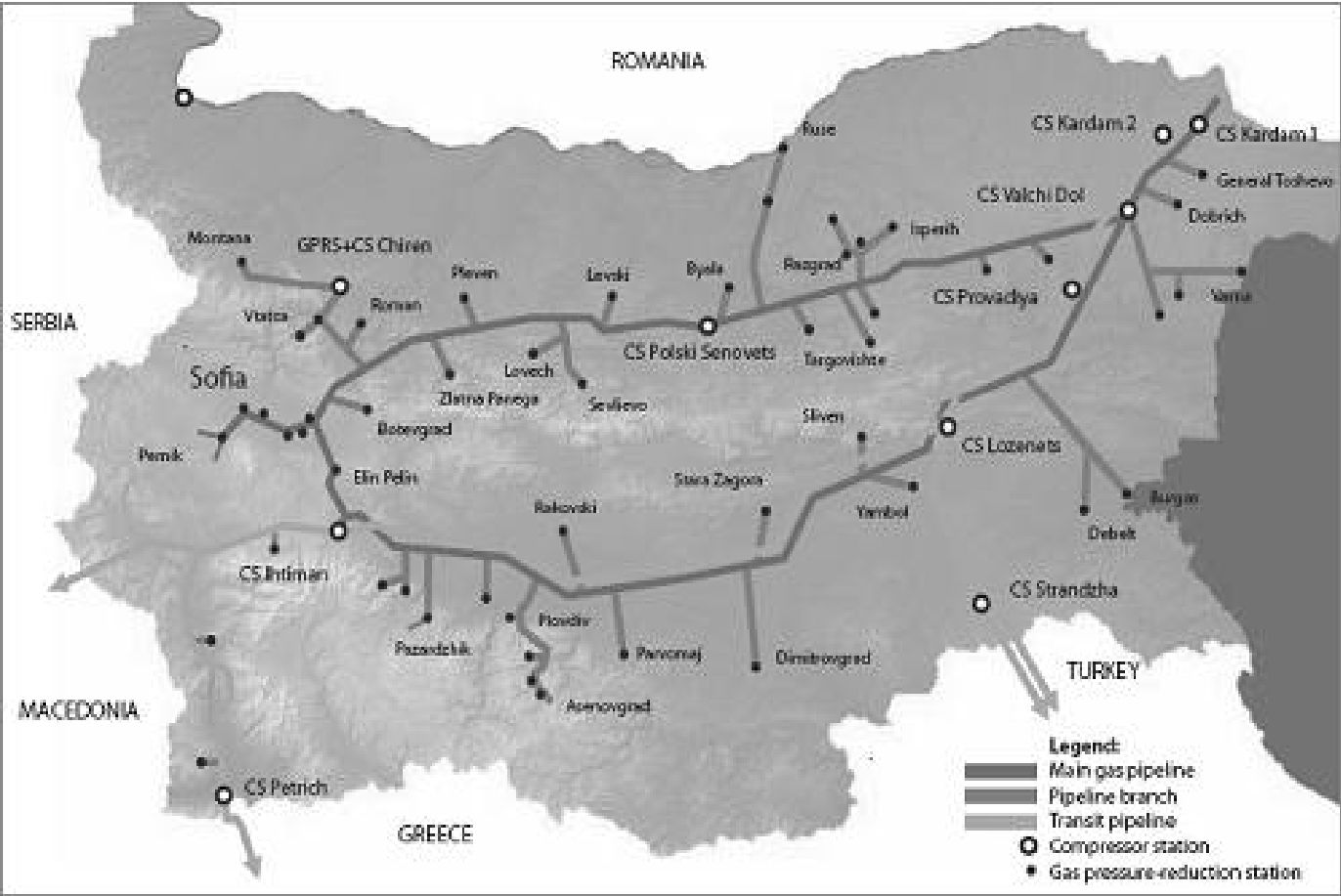
**The sources and potential routes include:**

- Russian gas (transported along existing routes or via new routes)**
- Caspian gas (transported through new pipeline routes)**
- Southern sources: Iran, Iraq, Egypt, and**
- LNG, which would most likely be delivered within the Middle East and the Mediterranean basin from suppliers in Qatar, UAE and Egypt, Libya or Algeria.**

# Focus On Gas Sources and potential Routes - 2



# BULGARIAN GAS TRANSIT & TRANSMISSION NETWORK CURRENT SITUATION



## A. Transit gas trunks to:

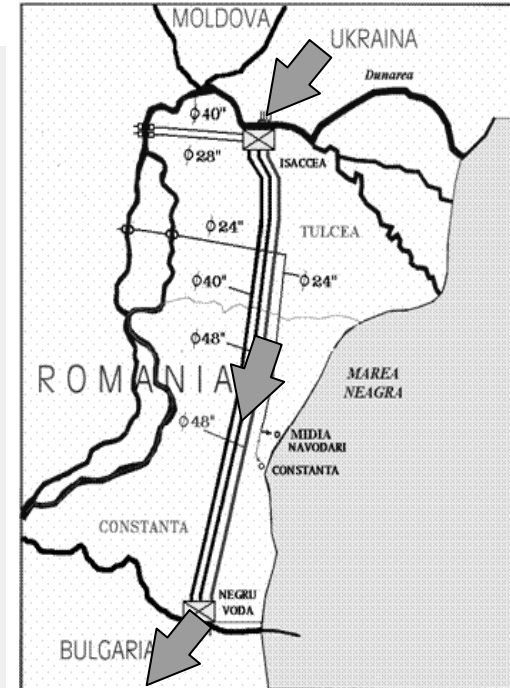
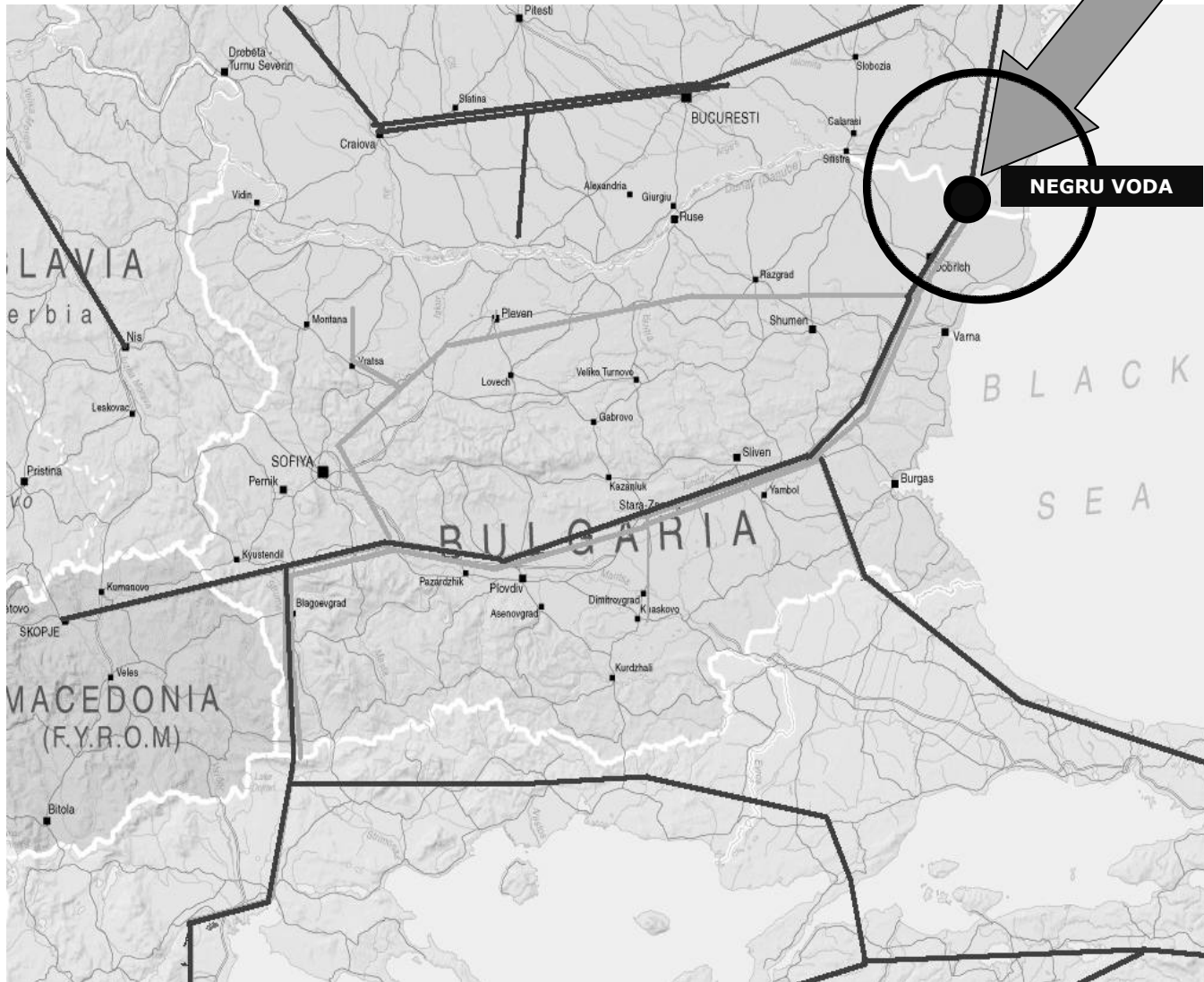
- Turkey
- Greece
- FYROM

## B. Transmission:

- Bulgarian National Gas Grid



# Natural Gas Import: ONE SINGLE ENTRY POINT



**Gas Source: Russia**

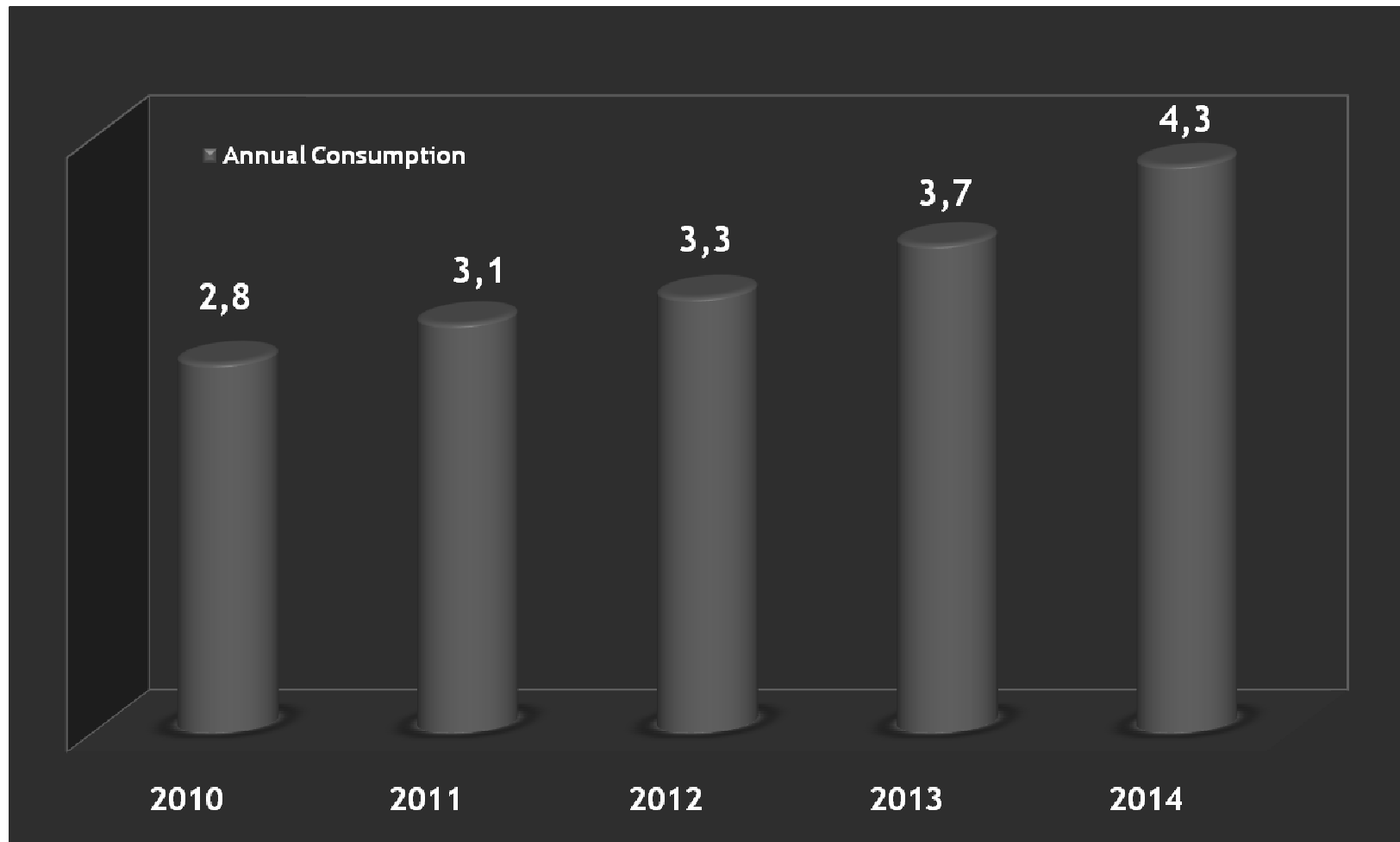
**At: Isaccea**

**Border: UKR**

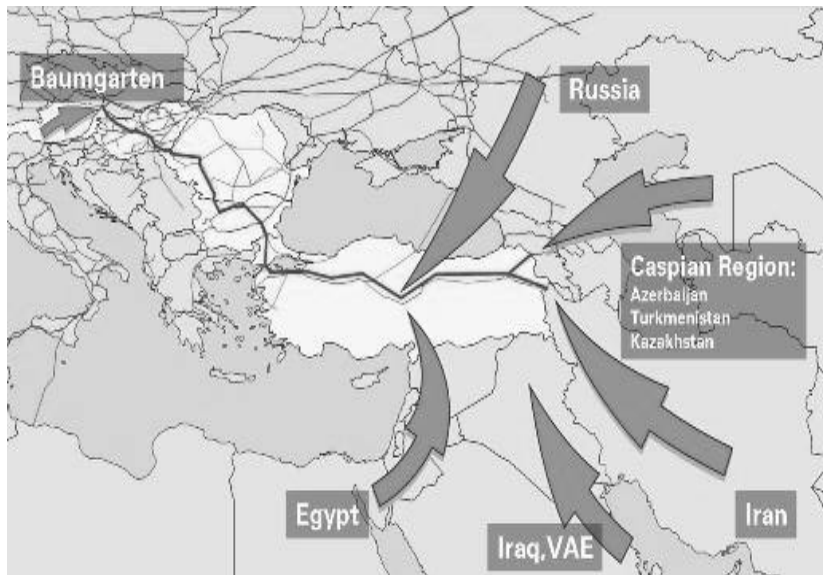
**Transit & transmission: ROMANIA**

**Import BMS: Negru Voda**

# ESTIMATED NATURAL GAS CONSUMPTION in BULGARIA 2010 -2014 (in bcm)



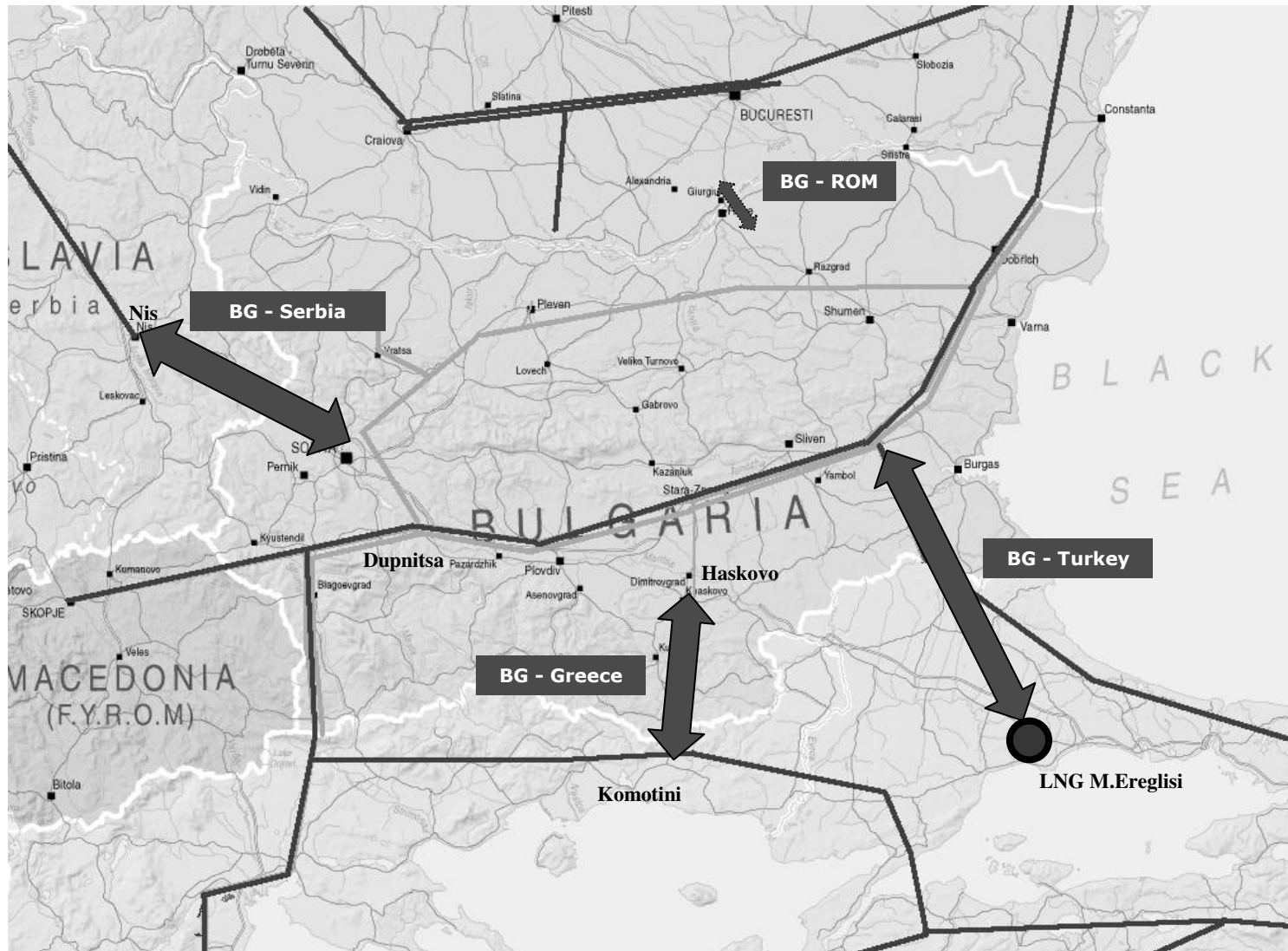
## Potential New Natural Gas Supply Sources & Routes via Pipelines to Bulgaria



- via Nabucco – gas from Azerbaijan, Turkmenistan, Kazakhstan, Iran, Egypt, Iraq, UAE
- via Blue Stream/Nabucco – gas from Russia
- via South Stream – gas from Russia
- via Turkey – Greece Interconnector (TGI)



# Potential New Natural Gas System Interconnectors to link Bulgaria and its Neighbour Countries



**Bulgaria - Romania**

- Russe - Giurgiu

**Bulgaria - Serbia**

- Sofia - Niš

**Bulgaria - Greece**

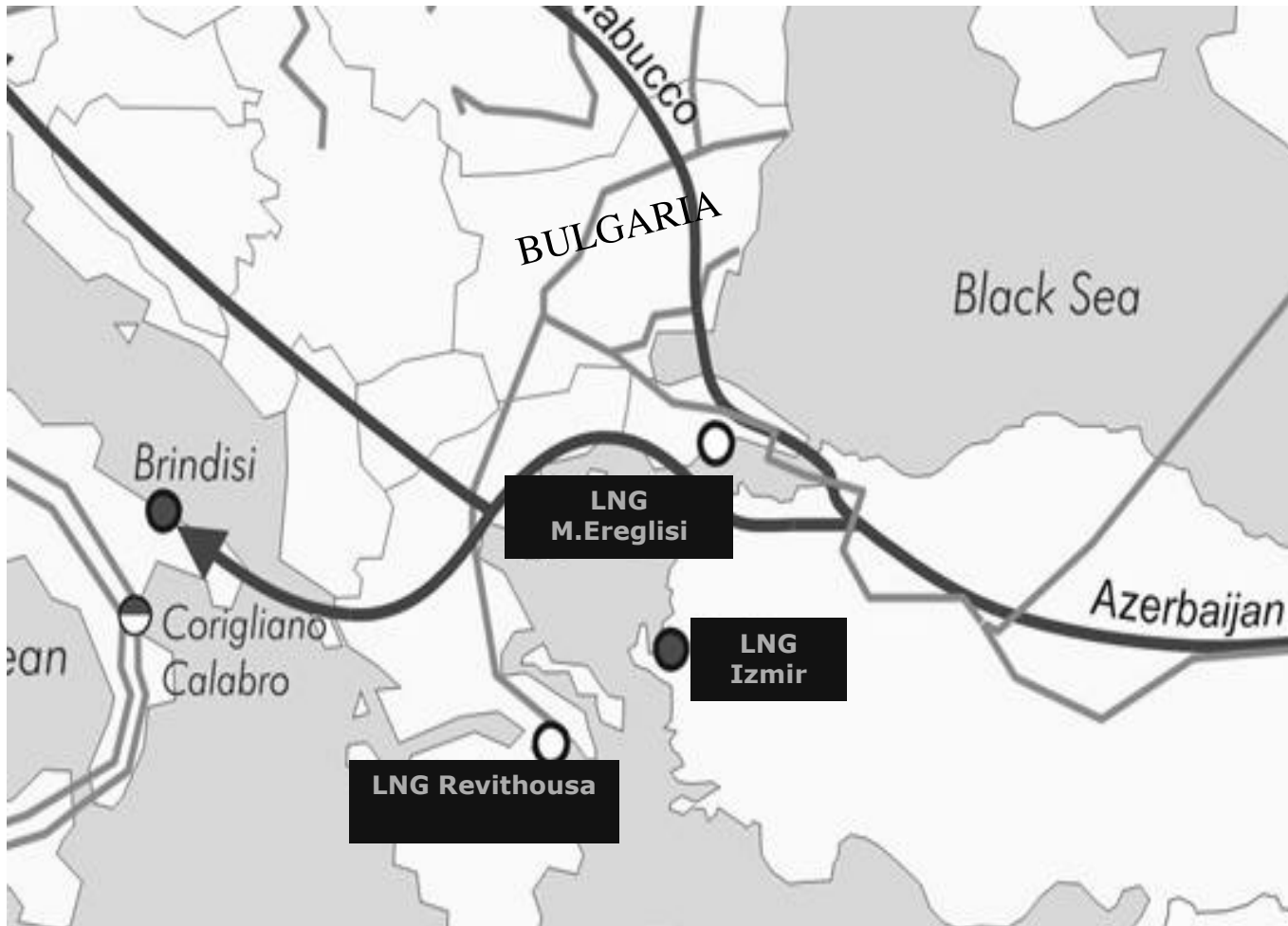
- Haskovo - Komotini

**Bulgaria - Turkey**

- BG Gas Ring - LNG M.Ereglisi



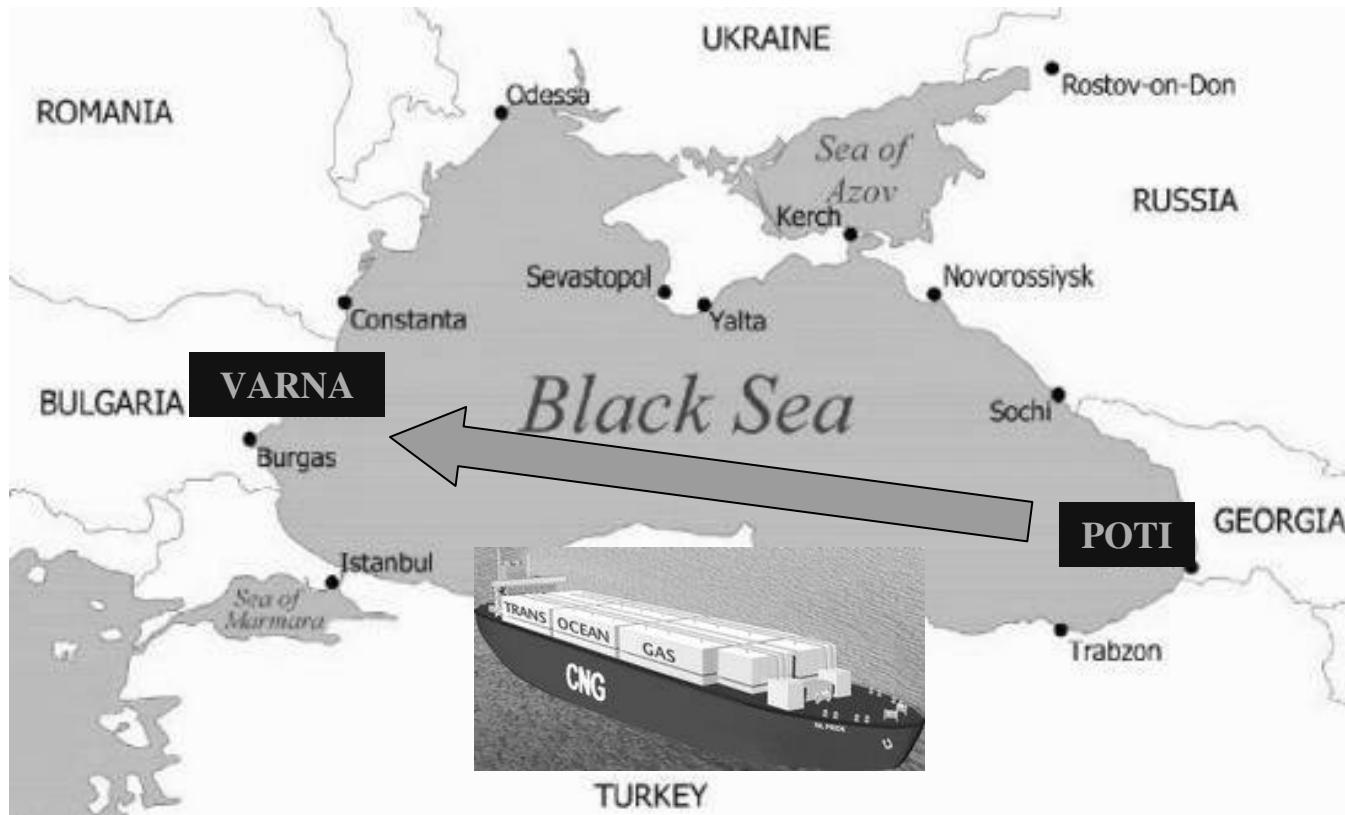
# Potential New LNG Supply Sources & Routes to Bulgaria



- LNG Import from:**
- Qatar
  - Algeria
  - UAE
  - Oman
  - Egypt
  - Libya

- Via Existing LNG Import Terminals:**
- Revithoussa , Greece
  - M. Ereğlisi, Turkey
  - Izmir, Turkey

# Potential New CNG Supply Sources & Routes to Bulgaria



**CNG Import from:**

➤ **Georgia**

CNG-vessels via Black Sea

## CHALLENGES

- **An interconnected infrastructure is needed**
- **Harmonized and stable regulation to be provided for a common ECSEE market**
- **Cost reflective tariffs, transparent and nondiscriminatory access to the system is required**
- **Promote new infrastructure in line with Directive 2003/55/EC**



**THANK YOU FOR YOUR  
ATTENTION!**