

NEW GAS SYSTEM OF THE REPUBLIC OF CROATIA AND NEW PROJECTS – BASIS OF REGIONAL AND TRANSREGIONAL CONNECTING OF GAS SYSTEMS AND MARKETS

Vladimir Đurović
Strategic Development Director

7th South East Europe Energy Dialogue
19-20 June 2013, Thessaloniki, Greece



PLINACRO – Croatian Gas TSO

- Defined as the Croatian gas transmission system operator in the next 30 years (Gas Market Act)
- PLINACRO Ltd was established by unbundling from INA group
- A 100% state-owned company
- In charge of development, modernisation, construction and maintenance of the Croatian gas transmission system

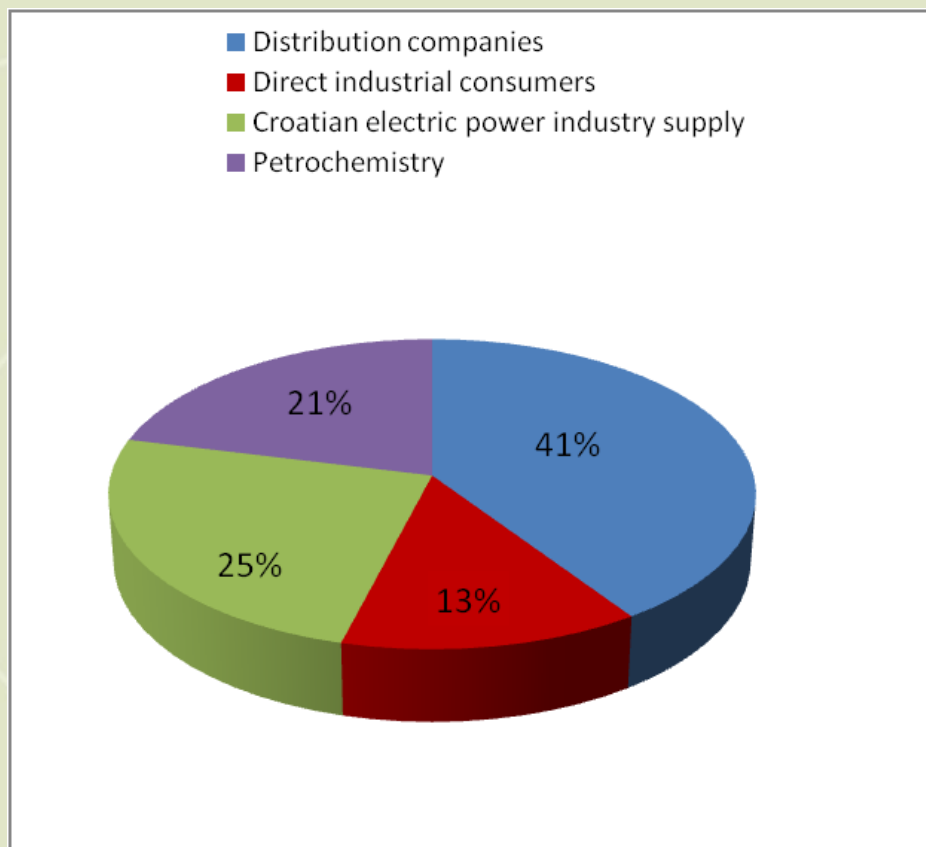
PSP – Operator of the UGS

- Since 2009 a member of the group (100%-owned by Plinacro)

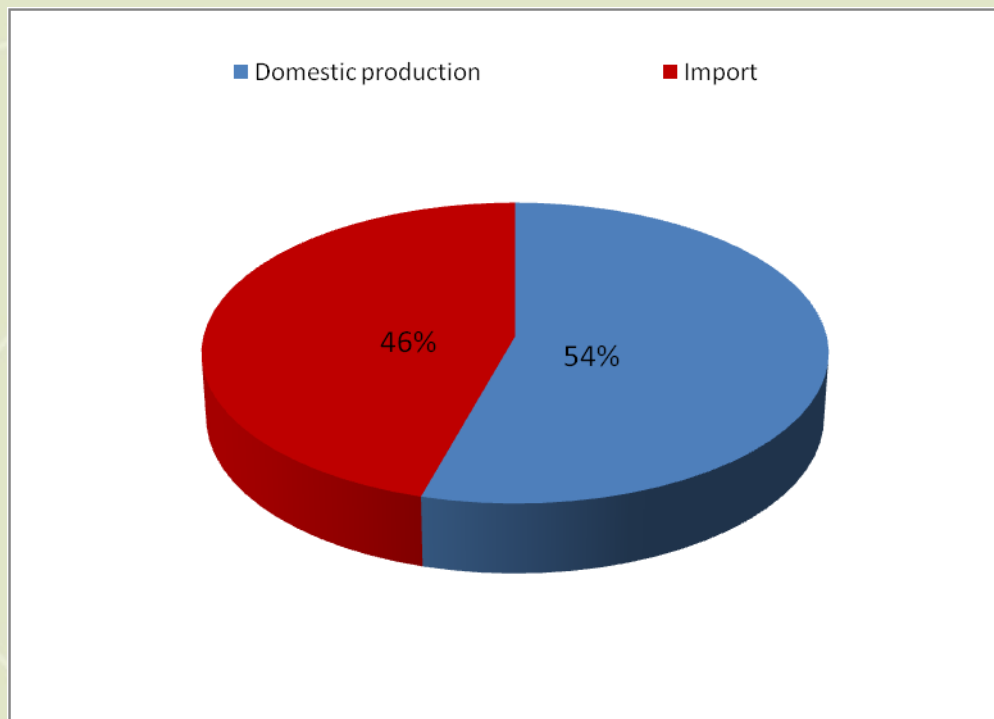
LNG HRVATSKA – development of LNG terminal

- Founded in 2010, Plinacro is a co-founder of the company (50% ownership)

NATURAL GAS DEMAND 2012	
	Bcm
Distribution companies	1,15
Direct industrial consumers	0,38
Croatian electric power industry supply	0,70
Petrochemistry	0,60
TOTAL	2,83



NATURAL GAS SUPPLY 2012	
	Bcm
Domestic production	1,61
-Production on-shore	0,67
-Production off-shore	0,94
Import	1,36
TOTAL	2,97



Underground Gas Storage

0,14 bcm

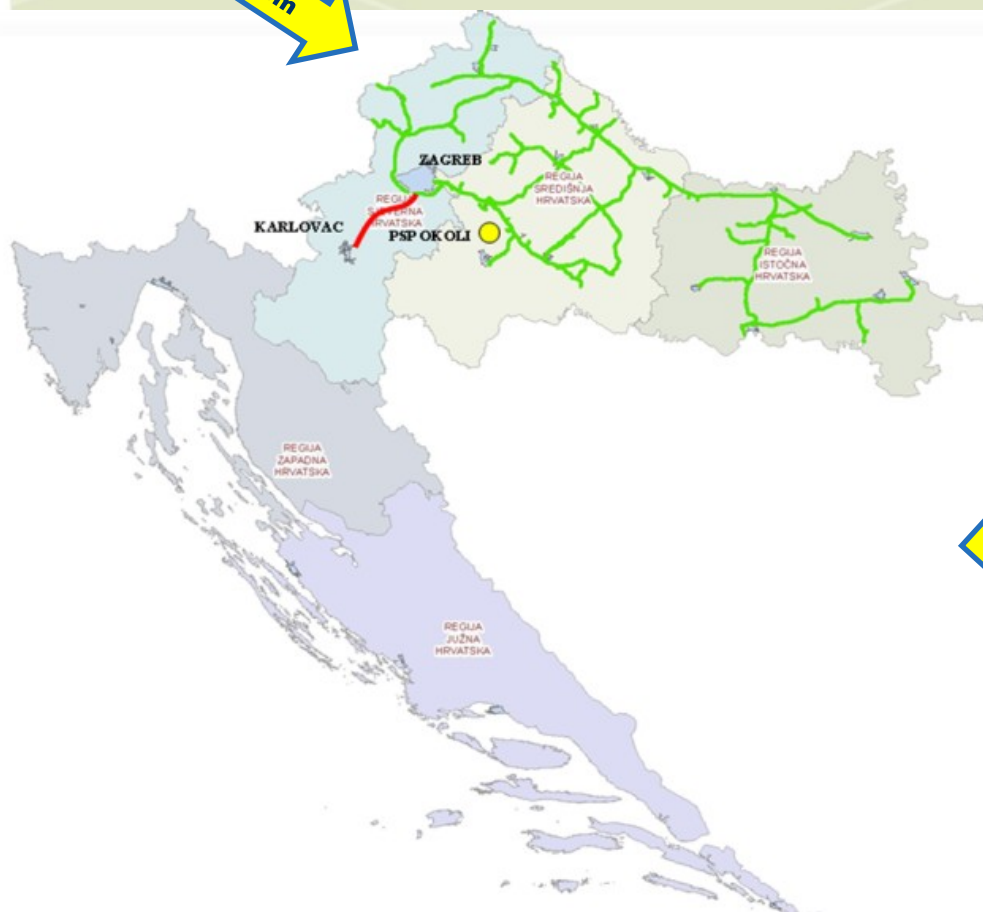
MARKET TOTAL

2,83 bcm

DEVELOPMENT OF THE GAS TRANSMISSION SYSTEM IN THE REPUBLIC OF CROATIA

2002.

1.5 bcm

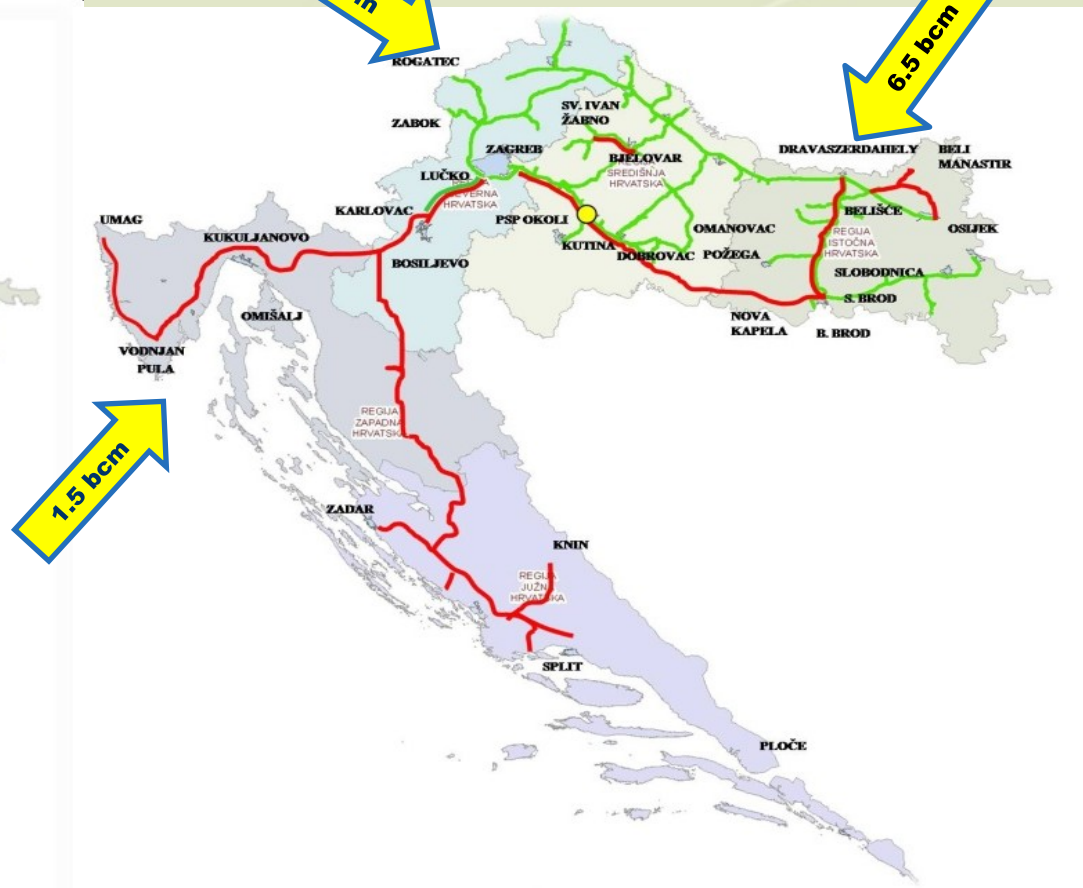


2012.

1.5 bcm

6.5 bcm

1.5 bcm



Technical data - 2002

1,641 km of high-pressure pipelines

137 MRSs

Transmission - 2.95 bcm of gas

max. capacity 560.000 m³/h

Technical data - 2007

2,085 km of high-pressure pipelines

9 entry points

151 exit points

DC - new SCADA, CS system

Transmission - 3.1 bcm of gas

Technical data - 2014

2,775 km of high-pressure pipelines

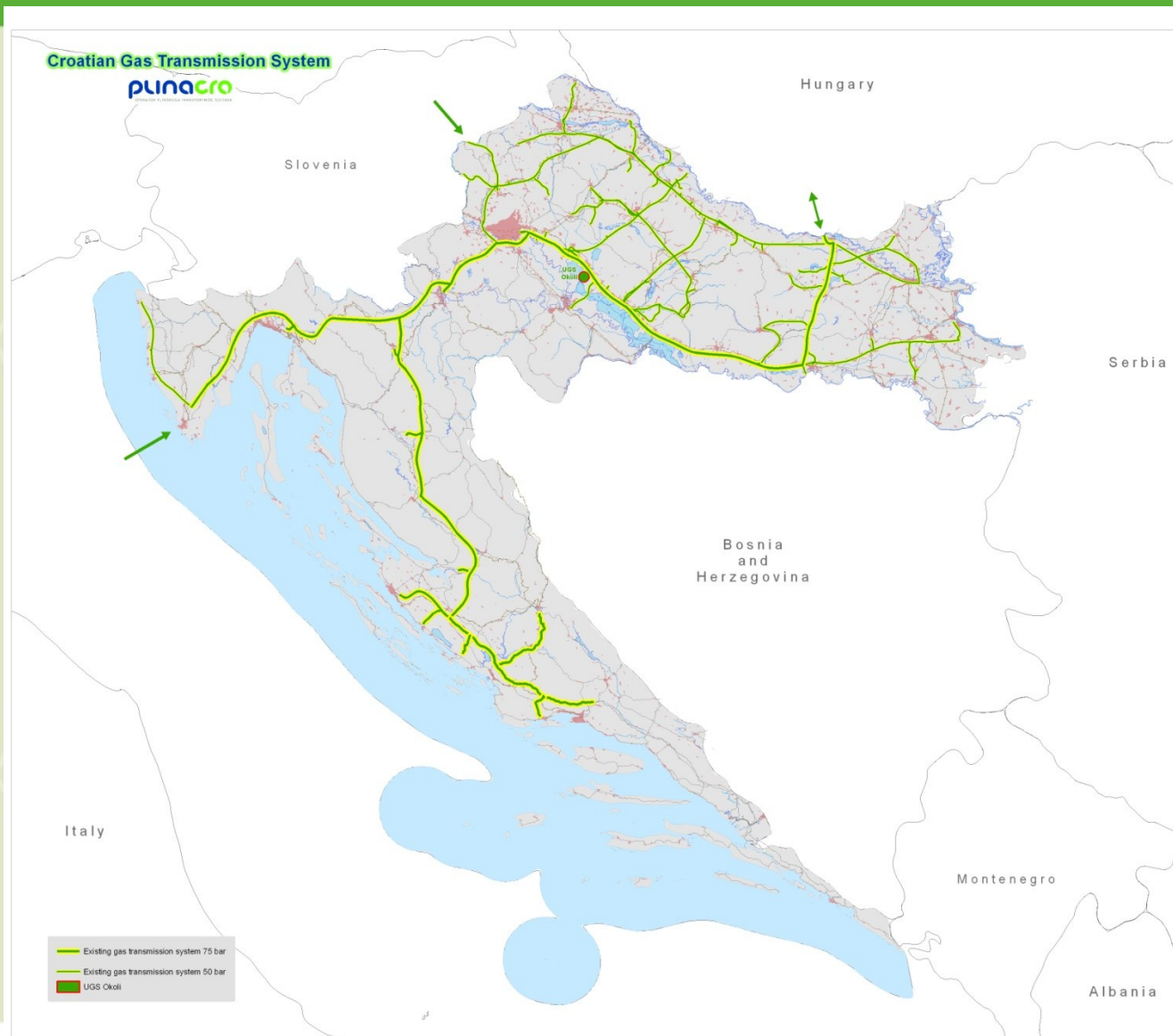
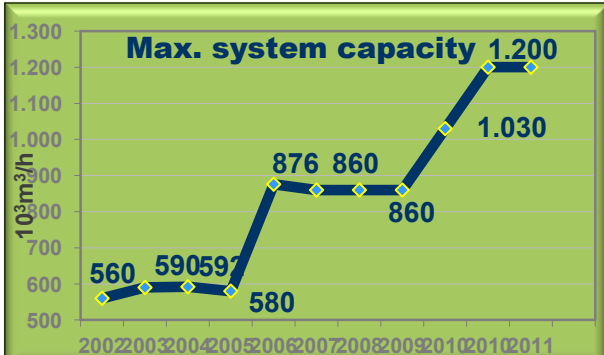
10 entry points

172 exit points

2 interconnections

Transmission - 4,5 bcm of gas

max. capacity 1.200.000 m³/h



HIGHLY DEVELOPED NATIONAL GAS TRANSMISSION SYSTEM



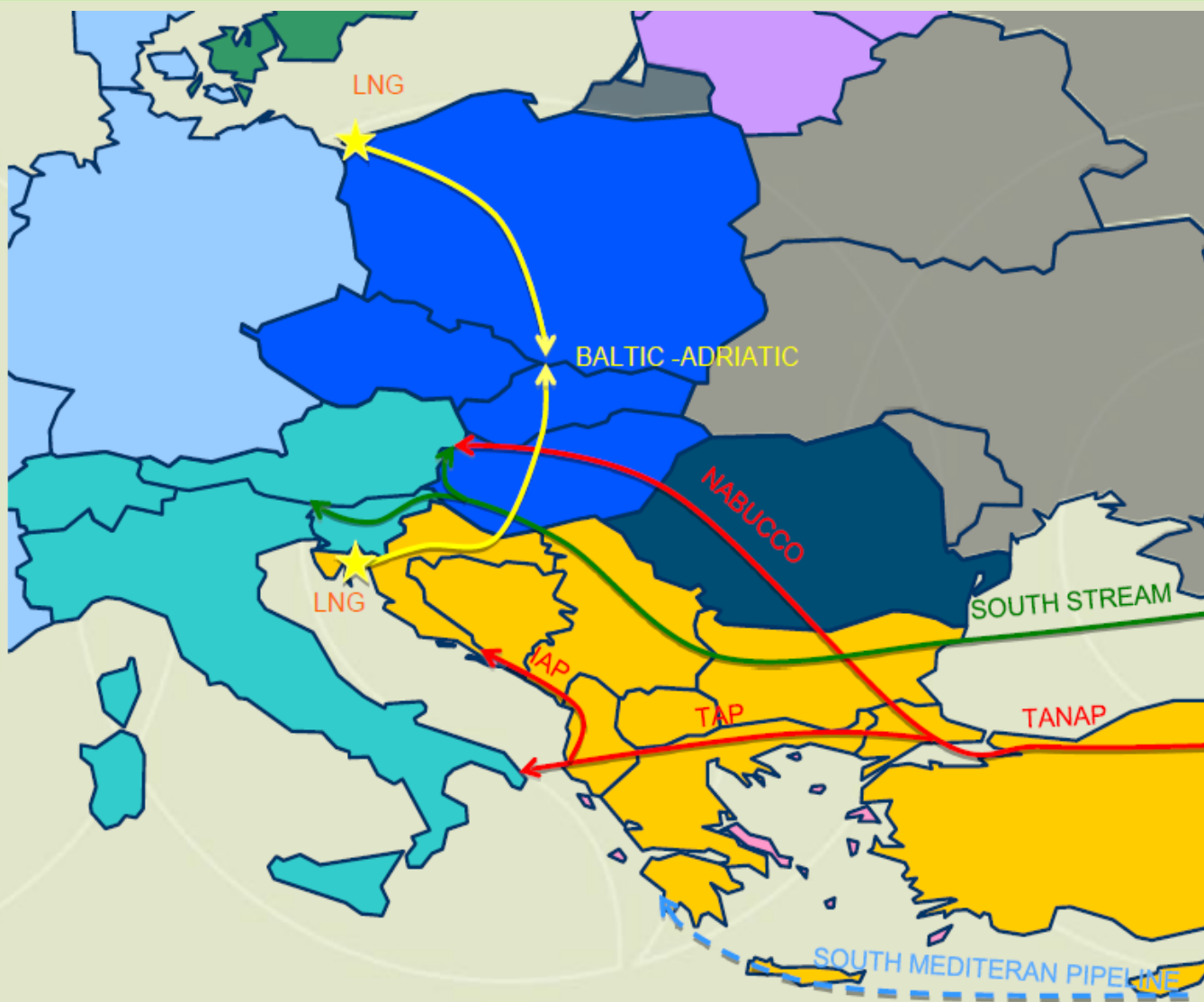
ORIENTATION TOWARDS THE DEVELOPMENT OF INTERCONNECTIONS AND TRANSIT GAS PIPELINES WITH THE AIM TO CONNECT AND INTEGRATE WITH NEW SUPPLY PROJECTS



INTEGRATION IN REGIONAL AND EUROPEAN NATURAL GAS ROUTES



INTEGRATION IN REGIONAL AND EUROPEAN NATURAL GAS MARKET

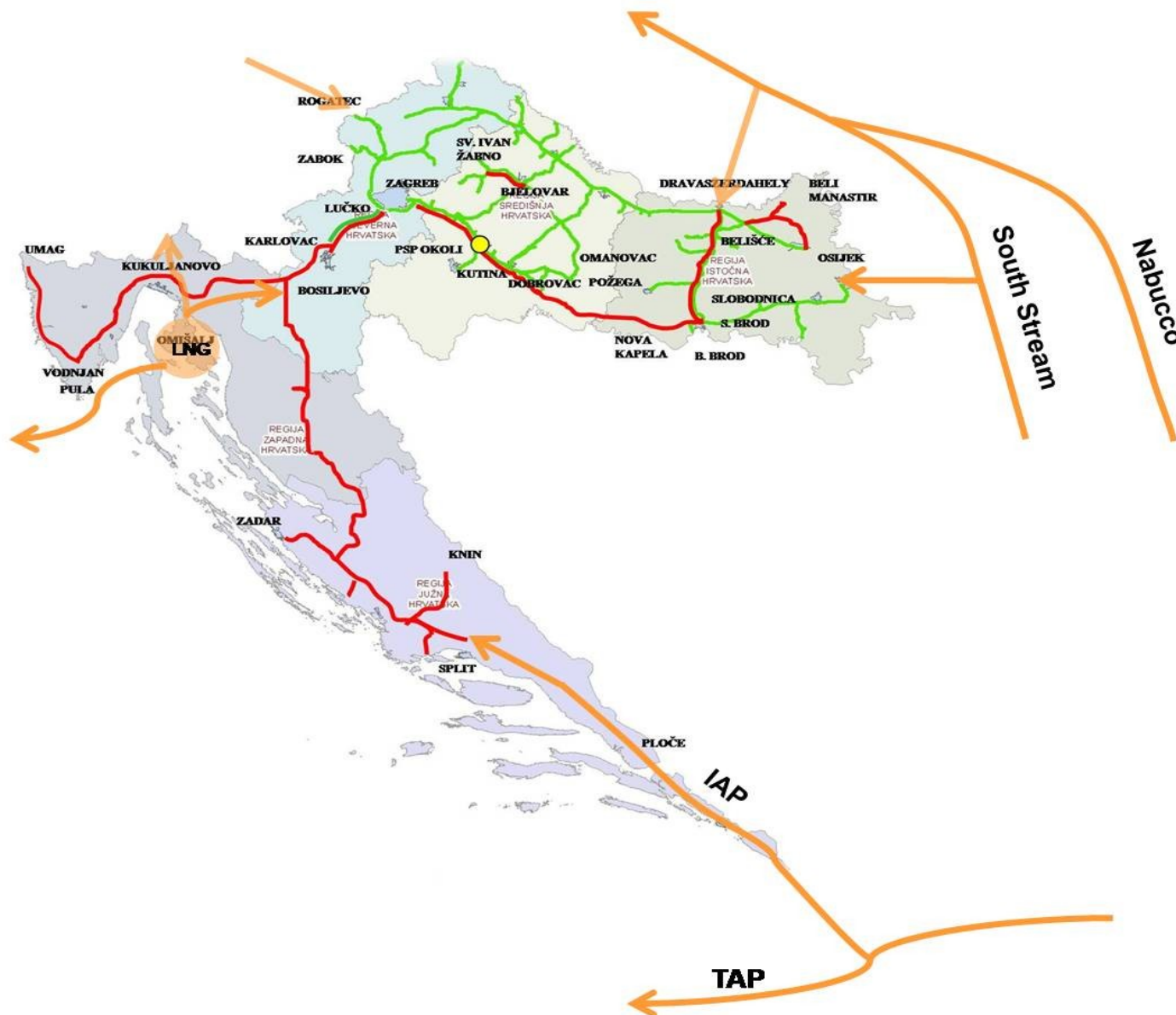


NEW GAS SUPPLY PROJECTS



CRUCIAL FOR SEE NATURAL GAS SECTOR DEVELOPMENT, SINCE BY PASSING OVER THE TERRITORIES OF THESE COUNTRIES THEY WILL:

- Increase the existing gas transmission systems and interconnect them
- Be a backbone of development of gas transmission systems in the countries with yet underdeveloped systems
- Connect gas transmission systems of SEE countries and integrate them in the comprehensive European gas transmission system
- Provide natural gas supply from new Middle East, Caspian and other sources
- Provide integration of SEE gas market in the European gas market

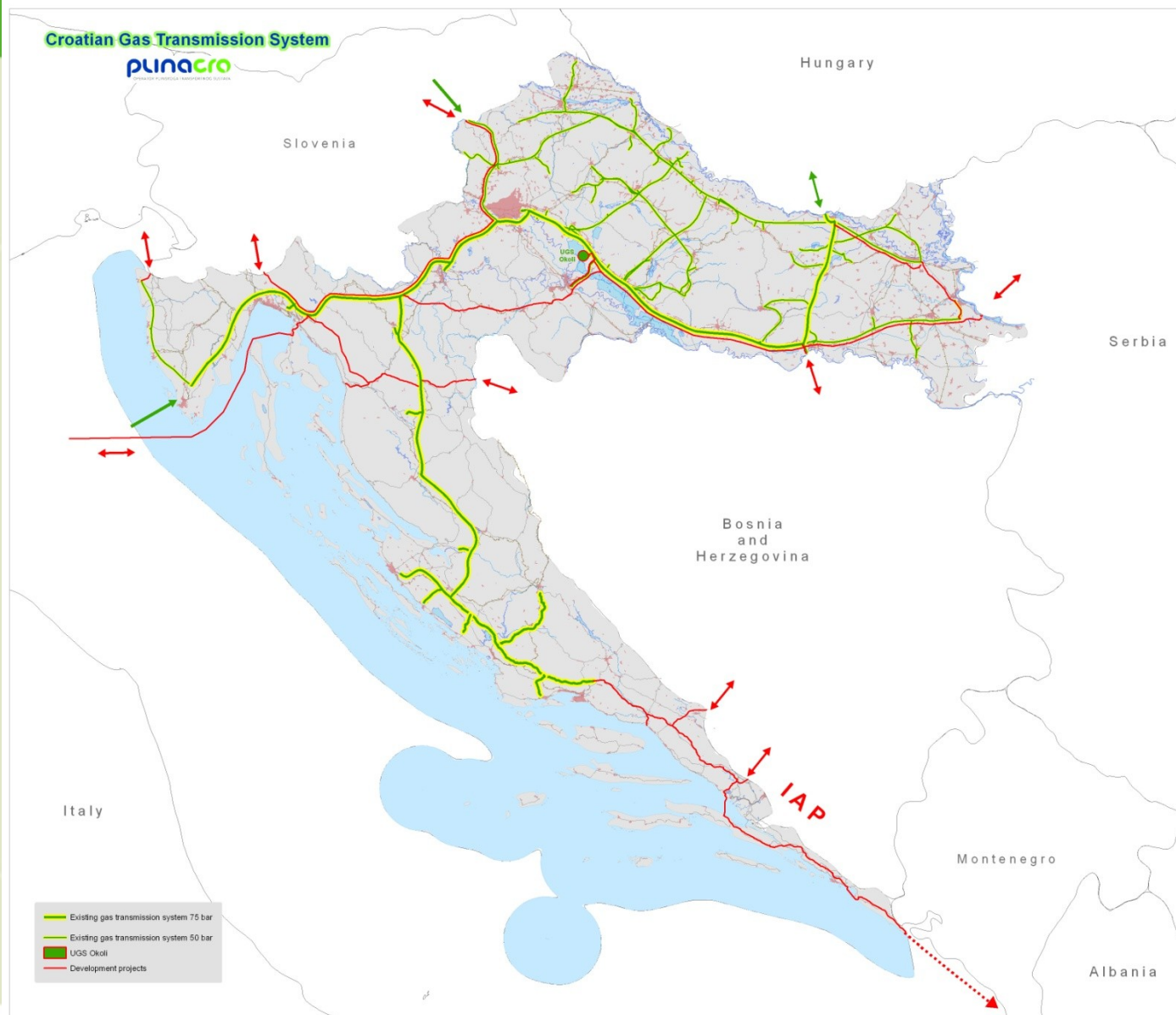


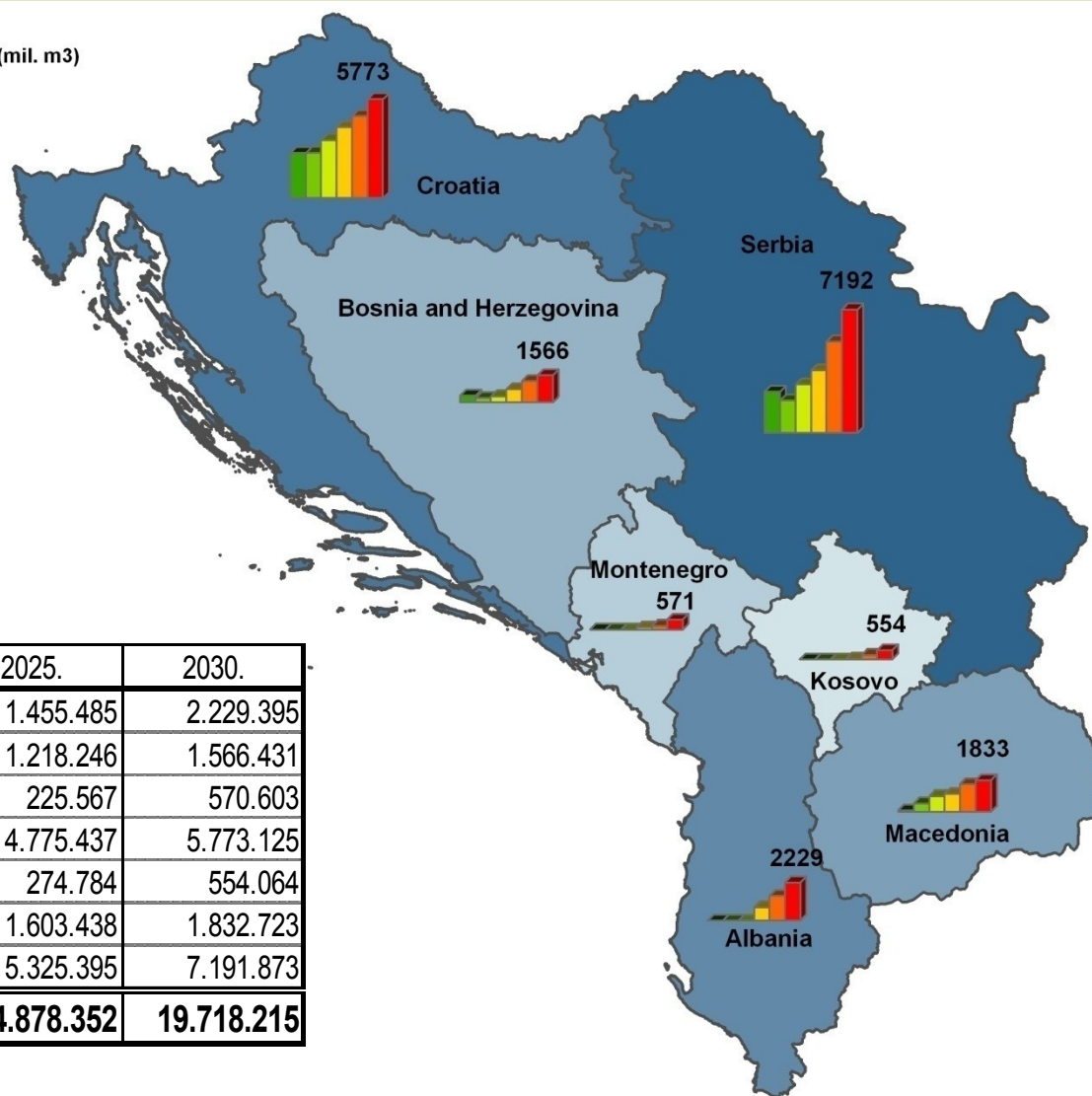
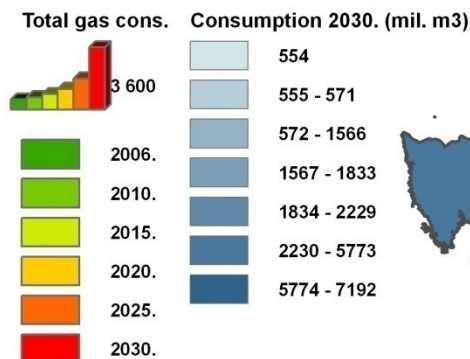
Interconnections:

- Interconnections Croatia/BiH
- Interconnections Croatia/Slovenia
- Interconnection Croatia/Serbia
- Interconnection Croatia/Italy

Regional projects:

- Ionian-Adriatic Pipeline (IAP)
- LNG Project
- South Stream
- North – South Gas Corridor





Country (1000 m3)	2010.	2015.	2020.	2025.	2030.
Albania	0	0	786.055	1.455.485	2.229.395
Bosnia and Herzegovina	242.494	338.319	738.698	1.218.246	1.566.431
Montenegro	0	0	133.918	225.567	570.603
Croatia	3.000.000	3.380.654	4.135.271	4.775.437	5.773.125
Kosovo	0	0	50.068	274.784	554.064
Macedonia	483.677	909.345	1.025.160	1.603.438	1.832.723
Serbia	1.881.141	2.824.187	3.635.879	5.325.395	7.191.873
TOTAL	5.607.312	7.452.505	10.505.050	14.878.352	19.718.215

Connection of gas transmission system of Lika and Dalmatia with TAP Project (Trans – Adriatic- Pipeline)

MP Split (HR) – Fieri (ALB) DN800
- DN1000 / 75 bar, L= 540 km

Supply with natural gas - Albania,
Montenegro, Bosnia and Herzegovina
and Croatia

Max capacity: 5 bcm/y

Possibility of transit of natural gas to
Central and Western Europe

Possibility of reverse flow

September 2007- Albania, Montenegro and Croatia signed **Ministerial Declaration**.
December 2008 - Bosnia and Herzegovina signed **Ministerial Declaration**.
EGL and Plinacro signed **Memorandum of Understanding**

June 2010 – Interstate Committee established, led by Croatia

February 2011 – Plinacro and TAP signed **Memorandum of Understanding**.

April 2011 – TAP/Plinacro/IAP Joint Working Group established

Request for financing from **WBIF** for **comprehensive feasibility study** for the entire IAP led by Croatia i.e. Plinacro; approved 3,5 Mil EUR



KEY PROJECT FOR OPENING THE SOUTH CORRIDOR



NABUCCO OR TAP?

THE QUESTION OF PRIORITIES – DYNAMICS OF REALISATION



**THERE WILL BE SUFFICIENT GAS FOR ALL PROJECTS, WHILE
TANAP PROVIDES SUFFICIENT CAPACITY**



**TAP + IAP ARE PRIORITY PROJECTS OF COUNTRIES OF ENERGY
COMMUNITY OF SEE**



**THEY PROVIDE GASIFICATION OF COUNTRIES YET UNCOVERED BY
GAS NETWORK**

LNG Croatia:

Founded in 2010 - Plinacro 50%,
HEP 50%

Capacity: 4-6 bcm/y

Request for financing from WBIF for
the CS, FS and CD; approved 1 Mil
EUR

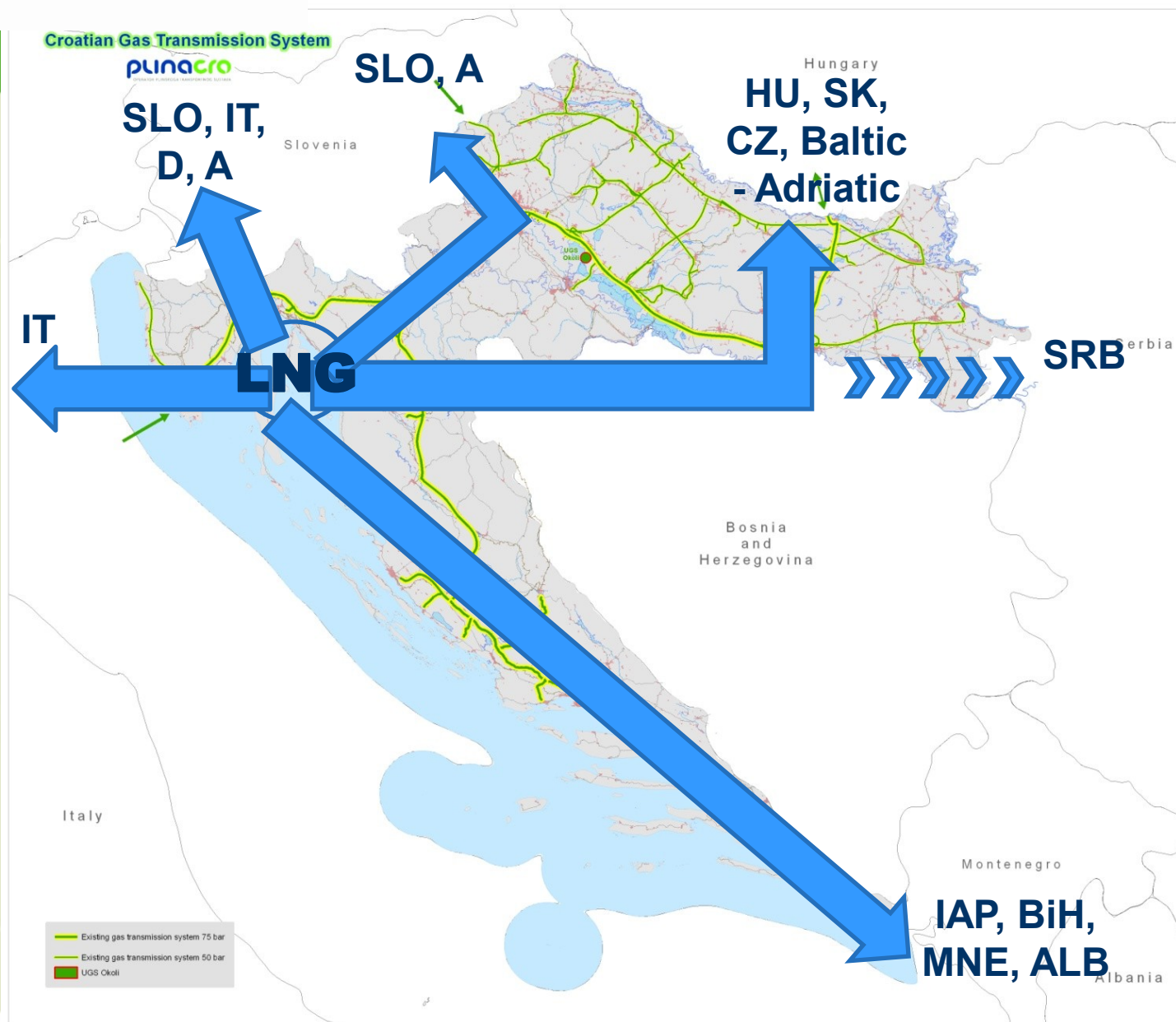
ToR for the Feasibility Study-
approved by EC, drawing up the
Study started in August 2012



- **A harbour of exceptional features for the safe receipt of largest LNG vessels**
- **Strategic position with regard to the CEE and SEE countries**
- **Opens possibilities of flexible – diversified supply**
- **Almost all surrounding countries expressed their wish and intention to include the LNG component in the structure of their supply**
- **Additionally supports interconnections of gas systems of the surrounding countries**



SECURITY OF SUPPLY AND INTEGRATION OF THE MARKET



Intergovernmental Agreement between the Russian Federation & the Republic of Croatia signed 02 March 2010.

Feasibility Study – done in February 2012

Status: The negotiations -still in progress.



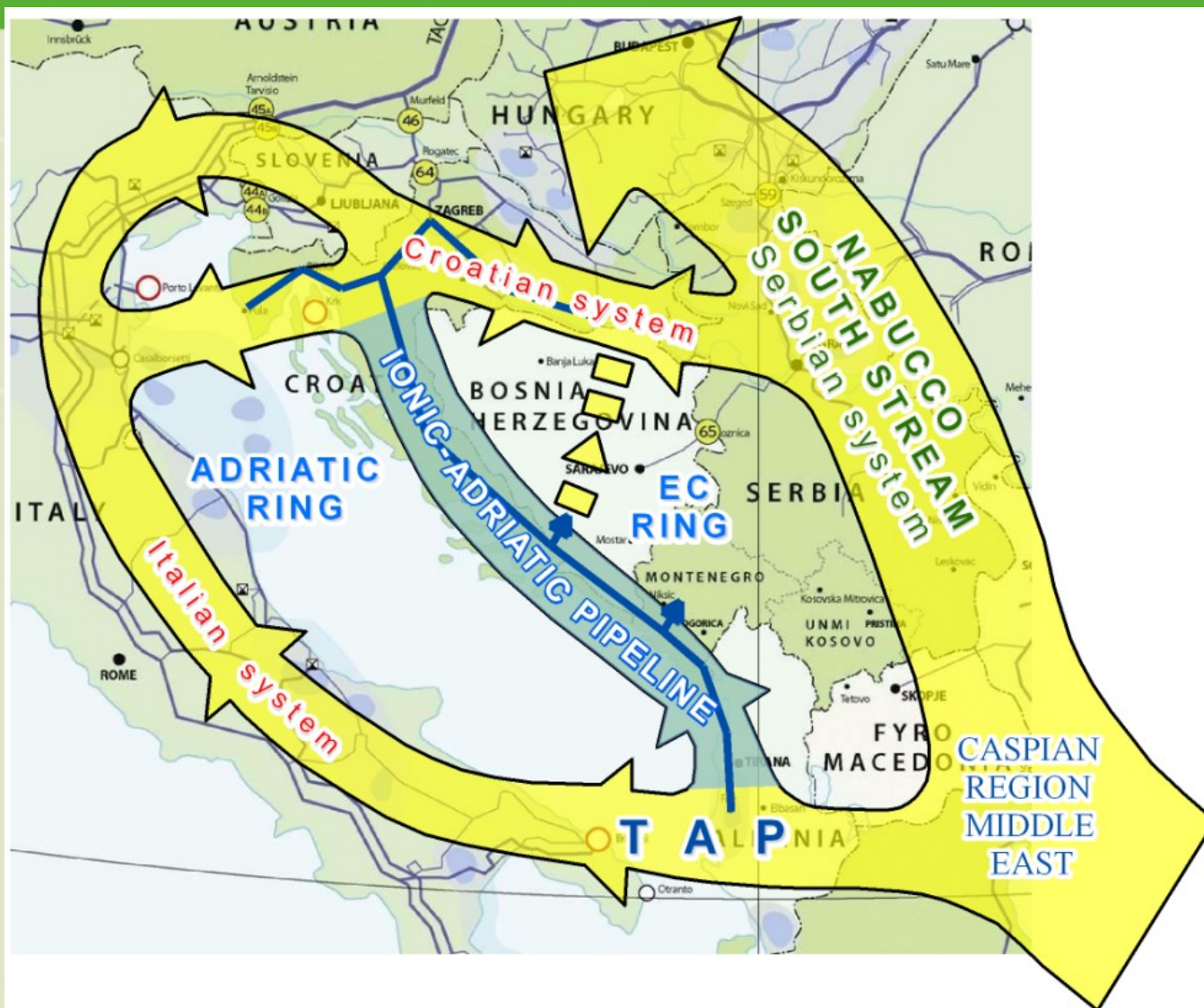


- Under the umbrella of the European Commission the North – South European Corridor more specifically the North-South Gas Connections has been established

- Working groups-established, Plinacro an active member

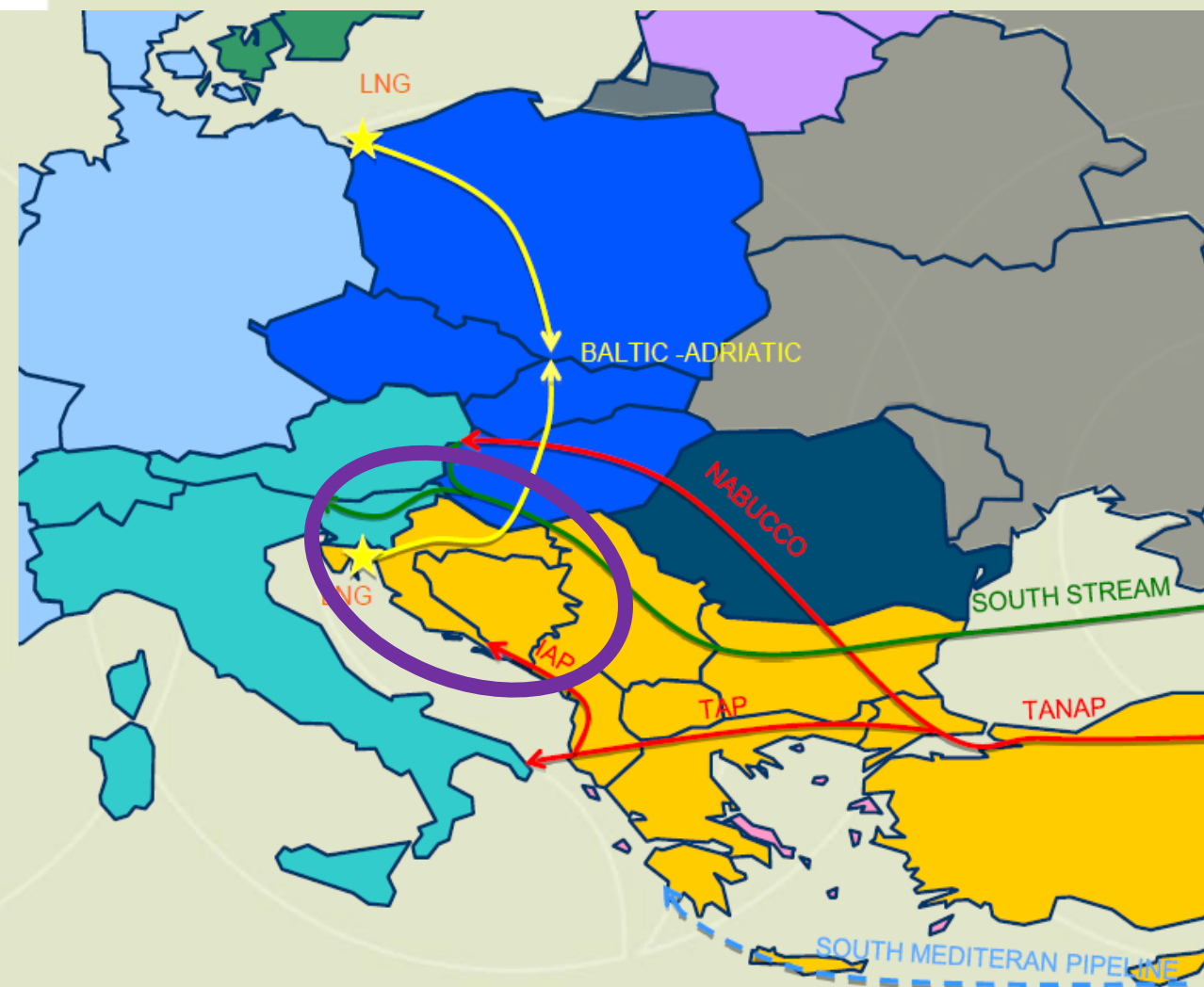
- TSOs of the countries involved in the work of the Group presented projects, tariffs, regulations, etc of the infrastructure that enables establishment of Gas Corridor

- 13 September 2012. PLINACRO and GAZ-SYSTEM signed **DECLARATION OF CEE GAS MARKET DEVELOPMENT SUPPORT** with an emphasis on the key role of LNG terminal in Poland and Croatia



INTEGRATION OF THE CROATIAN GAS TRANSMISSION SYSTEM INTO SUPPLY ROUTES AND INTO THE EUROPEAN GAS FLOWS





NEW SUPPLY PROJECTS



INTERCOONECTIONS



INCORPORATION IN REGIONAL AND
EUROPEAN GAS FLOWS



INTEGRATION IN REGIONAL AND
EUROPEAN GAS MARKET

Thank you for
your attention!