

# IONIAN ADRIATIC PIPELINE – IAP

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13<sup>th</sup> Gas Forum

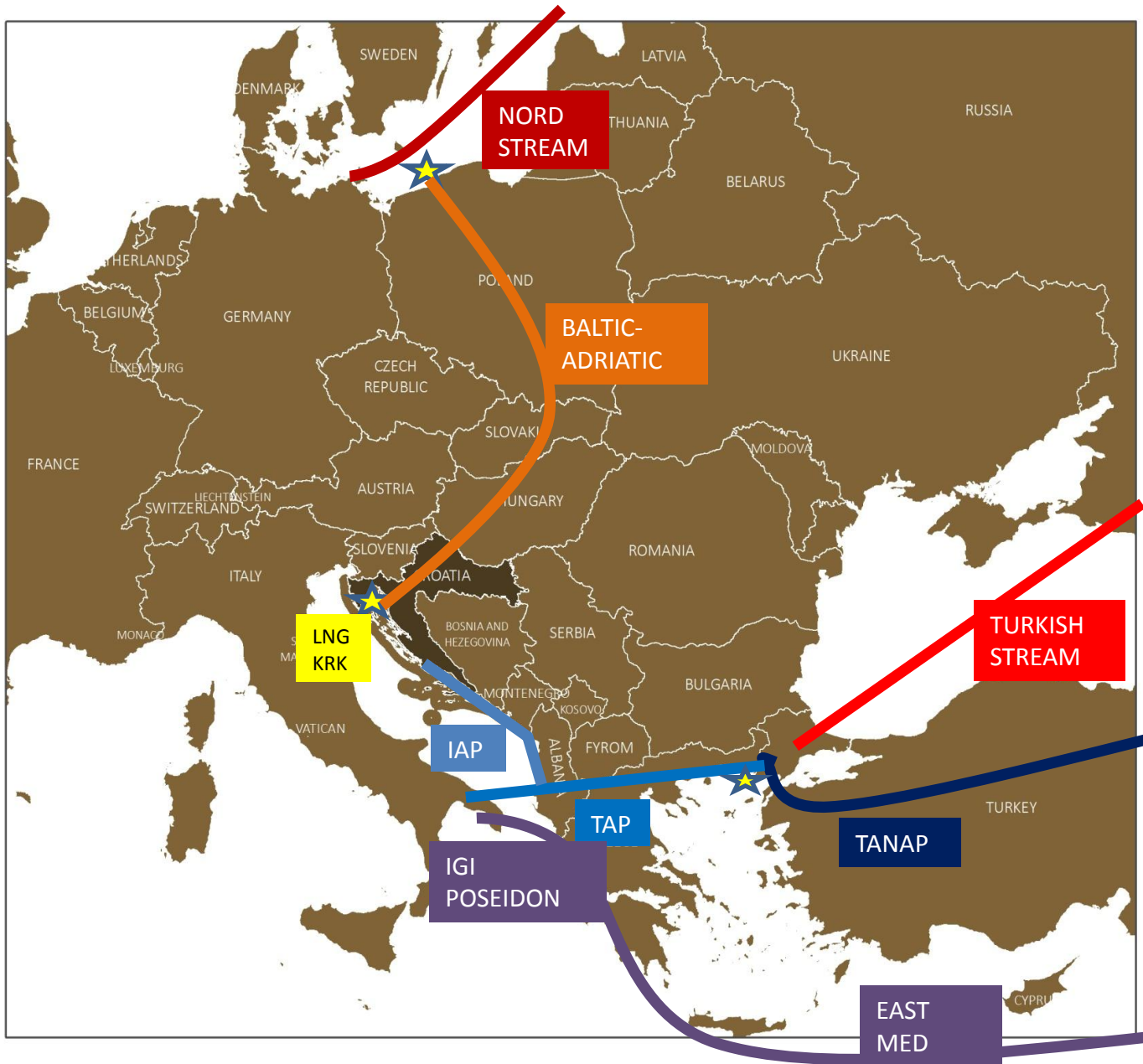


# IONIAN ADRIATIC PIPELINE - IAP

- *Connecting Croatian Gas Transmission System with project TAP*
- *New supply source for the region from the Southern Corridor*
- *Possibility of gas transit to the CE and CEE*
- *Provides access to future LNG terminal in Croatia*
- *Reverse flow*
- *pipeline Split (HR)-Fieri (ALB) DN800 /85 - 75 bar, L= 511 km, capacity 5 bcma*
- *gas supply of:*
  - Albania - 1 bcma*
  - Montenegro - 0,5 bcma*
  - BiH - 1 bcma*
  - Croatia - 2,5 bcma*
  - (further to CE & CEE)*



*Gas supply to BiH via Southern Interconnection Croatia - BiH*



Source: Plinacro

# SOUTHERN GAS CORRIDOR

**Total Length:** 3,500 km  
**Capacity:** Up to 31 billion cubic meters (bcm)/year



## Trans Adriatic Pipeline (TAP)

**Total Length:** 870 km (Greece 545 km, Albania 211 km, Italy 8 km, Adriatic Sea 105 km)



**Shareholders**

<b>SCC</b> (SOCAR + MoE)	SGC 20%	<b>FLUXYS</b>	Fluxys 19%
<b>bp</b>	BP 20%	<b>enagas</b>	Enagas 16%
<b>SNAM</b>	SNAM 20%	<b>axpo</b>	Axpo 5%

## Trans Anatolian Natural Gas Pipeline (TANAP)

**Total Length:** 1850 km (Turkey)



**Shareholders**

<b>SCC</b> (SOCAR + MoE)	SGC 58%
<b>BOTAŞ</b>	BOTAŞ 30%
<b>bp</b>	BP 12%

## South Caucasus Pipeline Expansion (SCPx)

**Total Length:** 691 km (Azerbaijan 443 km, Georgia 248 km)



**Shareholders**

<b>bp</b>	BP 28.83%	<b>Petronas</b>	Petronas 15.5%
<b>TPAO</b>	TPAO 19%	<b>Lukoil</b>	Lukoil 10%
<b>SOCAR</b>	SOCAR 10%	<b>NIOC</b>	NIOC 10%
<b>SCC</b>	SGC 6.67%		

*Technical Operator – BP, Commercial Operator – SOCAR*

## Shah Deniz Consortium (SHD II)

**Reserves:** 1,4 trillion cubic meters (tcm)

**Shareholders**

<b>bp</b>	BP (Operator) 28.83%
<b>TPAO</b>	TPAO 19%
<b>SOCAR</b>	SOCAR 10%
<b>SCC</b>	SGC 6.67%
<b>Petronas</b>	Petronas 15.5%
<b>Lukoil</b>	Lukoil 10%
<b>NIOC</b>	NIOC 10%

# IAP – FINAL ROUTE

- **Total length: 511 km**
  - Croatia 249 km
  - Montenegro 94 km
  - Albania 168 km
- **Subsea sections: 52 km**
  - Bar – Budva 33 km
  - Dobreč-Prevlaka (MNE-HR) 3 km
  - Cavtat 6,3 km
  - Rijeka Dubrovačka 1,5 km
  - Stonski zaljev and Pelješac 8,2 km
- **DN 800 (32")/ 75 barg u HR and MNE; 85 barg u ALB**
- **CS in Split (HR)**
- **Connection for BiH via Zagvozd – Imotski – Posušje – Novi Travnik with branch za Mostar**

Source: IAP Feasibility Study



# IAP CAPEX

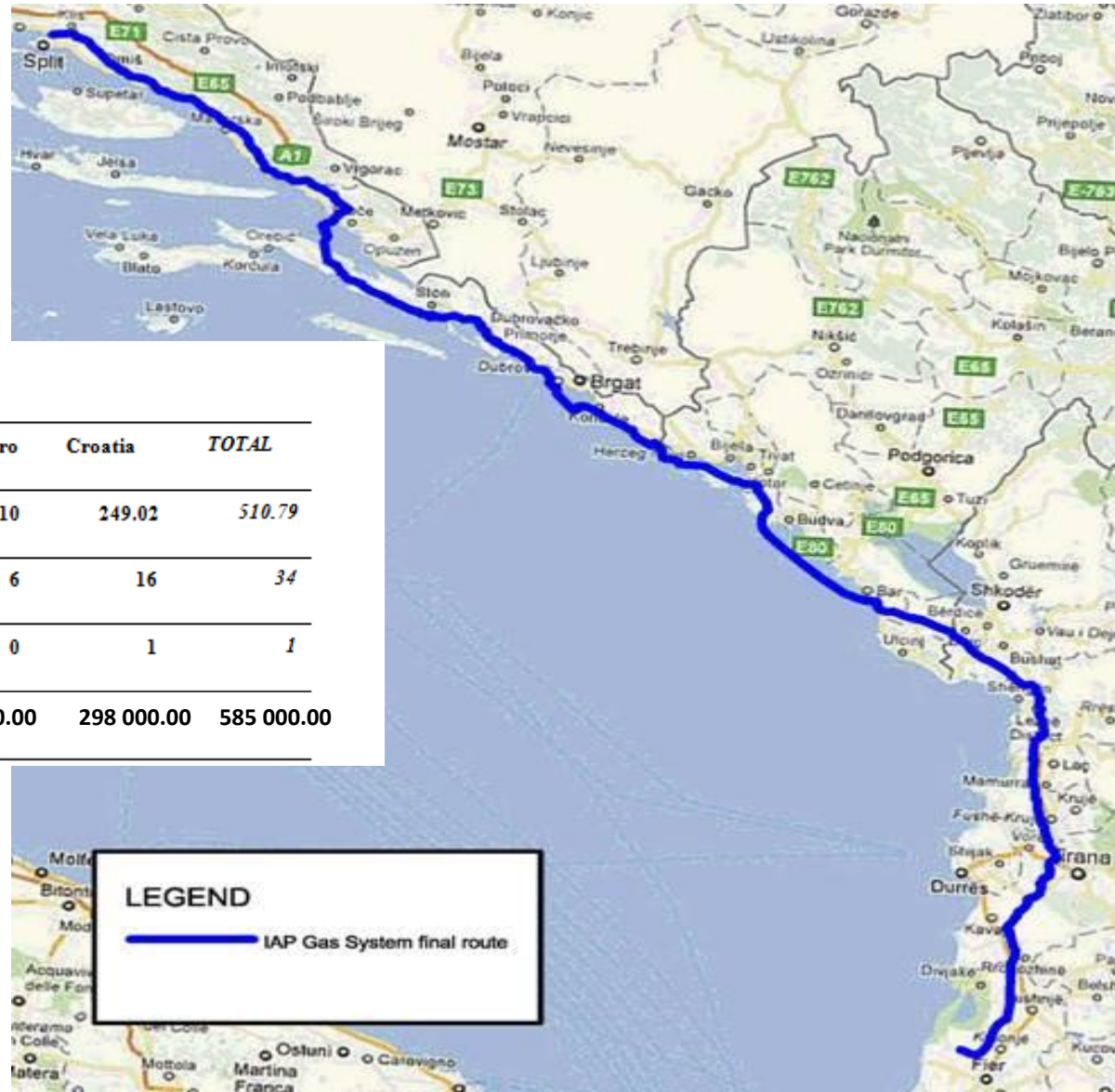


Table 1 IAP pipeline basic CAPEX (in 1000 EUR)

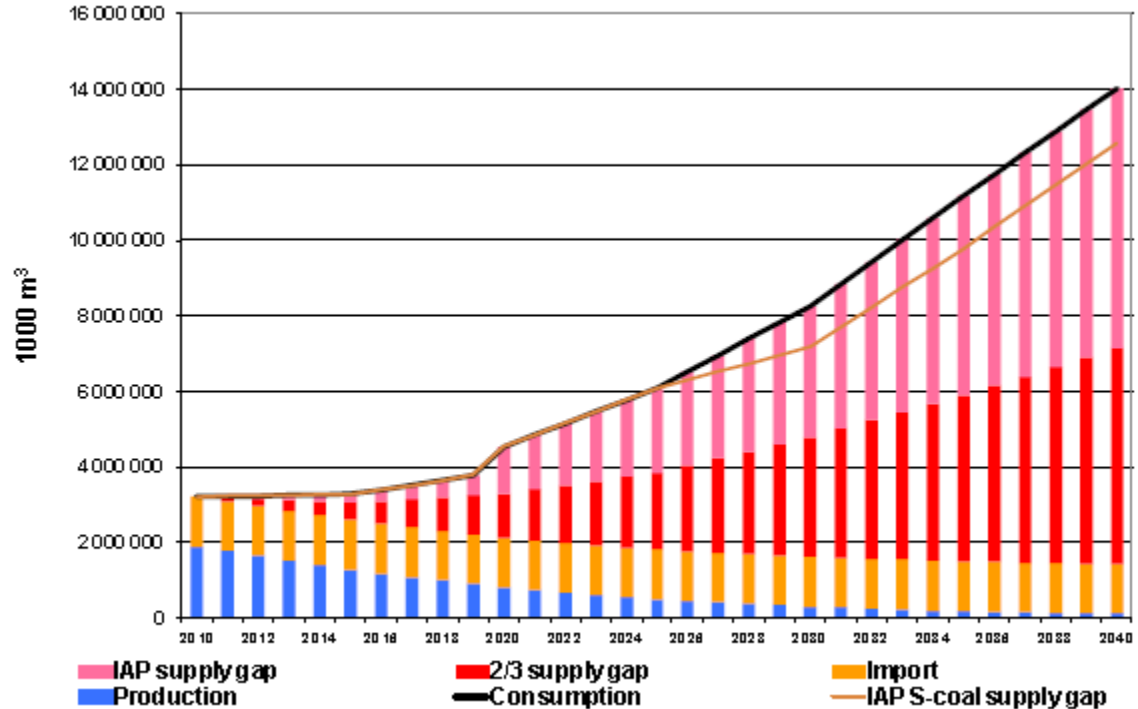
Country	Albania	Montenegro	Croatia	TOTAL
Pipeline length (km)	167.67	94.10	249.02	510.79
Number of facilities	12	6	16	34
Number of CS	0	0	1	1
CAPEX Items (1000 EUR)	169 000.00	118 000.00	298 000.00	585 000.00

Source: IAP Feasibility Study

# GAS CONSUMPTION SCENARIO

- IAP total demand (gas scenario) in 2040 – **6,88 bcm/y**
- IAP total demand (coal scenario) in 2040 – **5,81 bcm/y**  
(transit for other states is not included)
- Albania and Montenegro: total demand – supply from IAP
- Croatia and BiH: a third of supply gap - supply from IAP

demand bcm/y			
	2020	2030	2040
Albania	0,55	1,64	3,3
Montenegro	0,1	0,24	0,72
Croatia	0,48	1,23	2,1
B&H	0,11	0,36	0,76
<b>IAP gas</b>	<b>1,24</b>	<b>3,47</b>	<b>6,88</b>
<b>IAP coal</b>	<b>1,24</b>	<b>2,76</b>	<b>5,81</b>



Source: IAP Feasibility Study

# POSSIBILITY OF TRANSIT THROUGH CROATIA



Source: Plinacro



# INTERNATIONAL ACTIVITIES

- 2007:**
- **Ministerial Declaration: Croatia, Montenegro and Albania**
  - **MoU between Plinacro and EGL (former TAP project promoter)**
- 2008:**
- **BiH signed Ministerial Declaration**
- 2010:**
- **establishing Interstate Committee for IAP under Energy Community umbrella**
- 2011:**
- **MoUC between Plinacro and TAP**
  - **MoUC between TAP and BH Gas, and TAP and representatives of ALB and MNE**
  - **establishing Joint Working Group TAP/IAP**
  - **granted 3,5 mil EUR by WBIF for the Comprehensive Feasibility Study**
  - **Joint Working Group TAP/IAP joined by Plinovodi**
- 2013:**
- **MoUC between Plinacro and Socar**
  - **TAP selected for the transmission of gas from Shah Deniz II field**
- 2014:**
- **Comprehensive Feasibility Study finalized**
- 2016:**
- **Joint Statement of the Ministerial Meeting on the Ionian Adriatic Pipeline**
  - **Memorandum of Understanding and Cooperation: Albania, Croatia, Montenegro, BiH – pending**
  - **Project Management Unit (PMU) – Ministries and TSOs – Albania, BiH, Croatia, MNE and SOCAR**

# PROJECT MANAGEMENT UNIT

- August 2016 in Dubrovnik- Ministerial Memorandum of Understanding and Cooperation signed between Albania, Croatia, Montenegro, BiH –pending
- PMU established consisting of: Ministries and TSOs – Albania, BiH, Croatia, MNE and SOCAR; Energy Community Secretariat – Observer

**Alb:** Ministry of Infrastructure and Energy  
Albgaz

**BiH** Ministry of Foreign Trade and  
Economic Relations  
BH Gas

**HR:** Ministry of Environment and Energy  
Plinacro

**MNE:** Ministry of Economy  
Montenegro Bonus

**SOCAR**

**EnCS** Observer

**Secretariat of IAP PMU – Ministry of Economy**  
**MNE**

**PMU for IAP Project** -devoted to defining further steps leading to facilitation of development and implementation of the IAP Project

- 5 PMU Meetings held
- Action Plan – drawn up
- ENTSOG TYNDP 2017/2018
- Southern Gas Corridor Advisory Council Ministerial Meeting
- Meetings held with: EC, DG Energy, TAP,...

**February 2018** – Letter of Intent on the foundation of a Ionian-Adriatic Pipeline project company

-Next steps: establishing IAP company, signing MOU with TAP,...

# EU LISTS & FUNDS

## ENTSOG TYNDP

- 2010-2019
- 2013-2022
- 2015-2024
- 2017-2026
- 2018-2027

## PCI

- 1<sup>st</sup> PCI List 2013

## PECI

- 1<sup>st</sup> Peci List 2013
- 2<sup>nd</sup> PMI List 2016
- 3<sup>rd</sup> PMI List 2018 (to be approved)

## WBIF

-Comprehensive Feasibility Study – 3,5 mil EUR

-Prefeasibility Study for the Southern Interconnection BiH/HR – 0,4 mil EUR

-Gas Master Plan MNE – 0,5 mil EUR

-Gas Master Plan ALB – 1,2 mil EUR

-Main Design (Preliminary Design for MNE and ALB) - 2, 5 mil EUR

Candidate for:

4<sup>th</sup> PCI LIST

*EU Lists are important due to the financial support and political support to the project. EU Funds are important in order to solve financial issues.*

*IAP project is the project connecting the MS and CPs countries, therefore facing the difficulties entering the EU Lists (except PMI List) and getting the EU Funds (problems of EU MS peripheral countries).*

# CROATIAN SECTIONS OF IAP

## Split-Ploče

- DN 800/75 bar, L 102 km

- ESIA, Basic Design, Location Permit,  
Main Design ✓

- Building Permit :

-1. Gas Node Split ✓

-2. Split-Zagvozd- in progress

-3. Zagvozd –Ploče – in progress

## Ploče-Dubrovnik

- DN 800/75 bar, L 103 km

- ESIA, Basic Design ✓

- Location Permit in progress

## Dubrovnik-Prevlaka-Dobreč

- DN 800/75 bar, L 47 km

- ESIA, Basic Design ✓

- Location Permit in progress



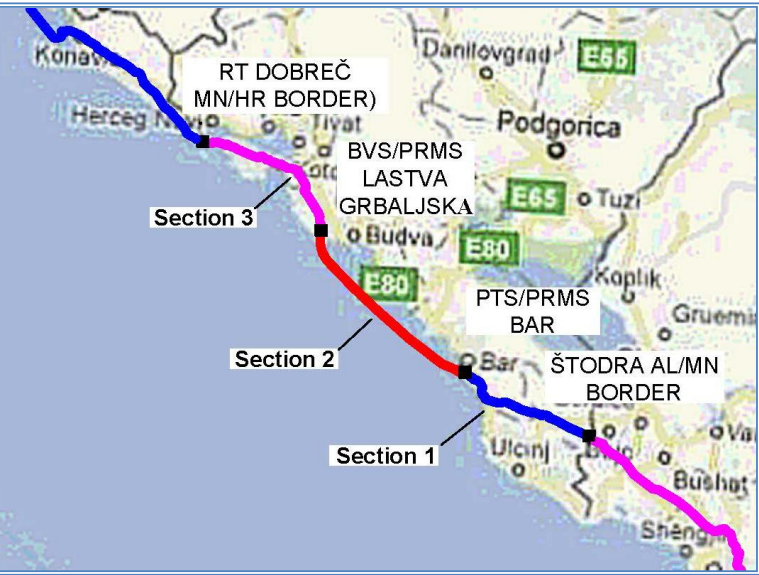
Source: IAP Feasibility Study

## Compressor Station Dugopolje (Split)

-1,4 MW

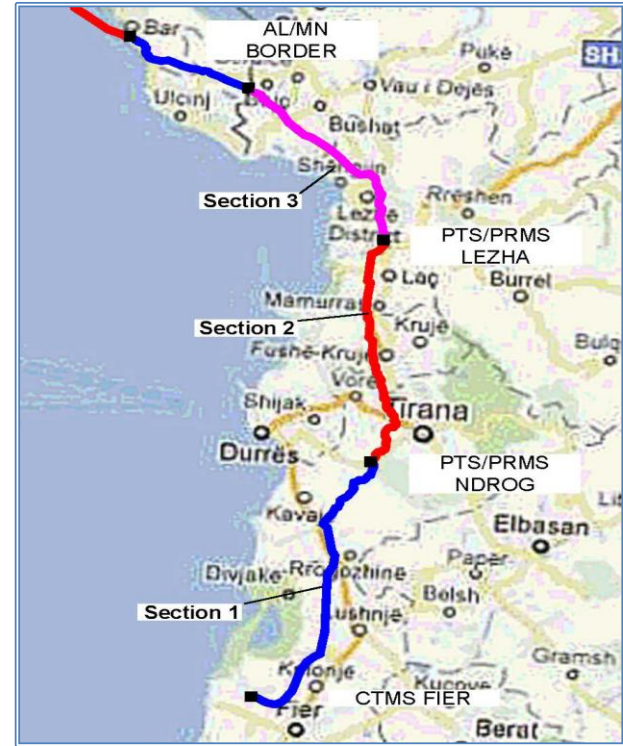
- Conceptual solution in progress

# MONTENEGRIN AND ALBANIAN SECTIONS OF IAP



Montenegrin section

*DN 800/75 bar, L 94 km*



Albanian section

*DN 800/ 85 bar, L 167 km*

*Gas Master Plan MNE and ALB – finalized*

*Preliminary Design for MNE and ALB – in progress*

Source: IAP Feasibility Study

# INTERCONNECTION HR - BOSNIA & HERZEGOVINA

✓ Prefeasibility Study for South Interconnection of BiH and Croatia – October 2013

✓ CBA South Interconnection of BiH and Croatia – May 2018

Croatian section:  
Imotski-Zagvozd-  
Posušje

- DN 500/75 bar, L 22 km

- ESIA, Basic Design, Location Permit ✓

B&H section: Posušje-  
Tomislavgrad-Novi  
Travnik with branch to  
Mostar

-DN 500/75 bar, L 165 km

- Preparation of TOR for ESIA and Preliminary Design ongoing

- Possibility of reverse flow
- PMI project
- Next step : Open Season



Source: CBA South Interconnection of BiH and Croatia

# THE SIGNIFICANCE OF IAP

the implementation of this project:

- **provides Security of Supply**
- introduces an environmentally sound energy source in the region (replacement for wood, coal, fuel oil...)
- **facilitates gasification of Albania**
- **creates precondition for gasification of Montenegro**
- facilitates gasification of significant part of Bosnia and Herzegovina
- facilitate gasification of southern part of Croatia
- **provides diversified supply for the entire region**
- provides access to future LNG terminal in Croatia
- provides access to Croatian and Albanian storage capacities
- provides significant transit and income thereof to Albania, Montenegro and Croatia
- provides access to new potential gas reserves in Montenegro and Croatia
- significantly activates the entire region in an economic aspect
- **IAP is a project of cross-European significance as it expands the area of the Southern Gas Corridor deeper into the SEE thus providing additional source of gas to the region and increasing energy security of SEE and the Western Balkans.**
- **IAP is a new element in the energy interconnectivity paradigm which is being built in this region.**

THANK YOU FOR  
YOUR ATTENTION!

