The need for new Interconnecting Infrastructure in South Eastern Europe

Dr. Konstantinos Karagiannakos,
International Projects Division Head
DEPA S.A. Public Gas Corporation

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PUBLIC GAS CORPORATION S.A

EU Market
EU-30 Growing Supply Demand Imbalance

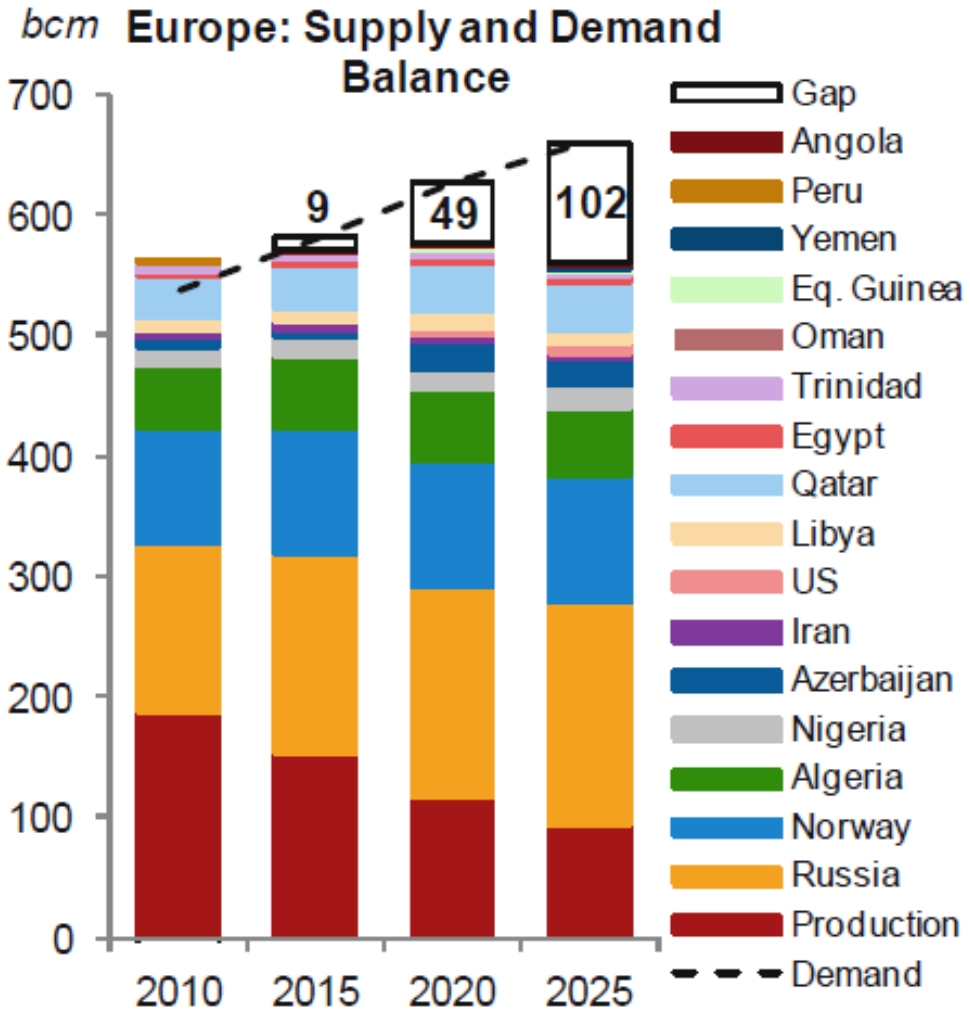
Europe needs to replace ~100 bcma from declining production by 2025.

Increasing demand
(just in Greece and despite the crisis, demand rose from 3.6bcm in 2010 to 4.5bcm in 2011 and approximately an additional 15% in the first five months of 2012).

Most of its existing suppliers will not increase exports.

Europe faces a supply-demand gap by 2020 and it grows larger by 2025.

Around 20 bcma of the supply gap stems from the growth in SEE region, the closest market to the Southern Gas Corridor.



Source: PFC Energy

Market

SEE & Italy - Developments in the region

Romanian domestic gas production is expected to decline by 2-3 bcma by 2025.

There are new potentially significant discoveries offshore Romania and Bulgaria.

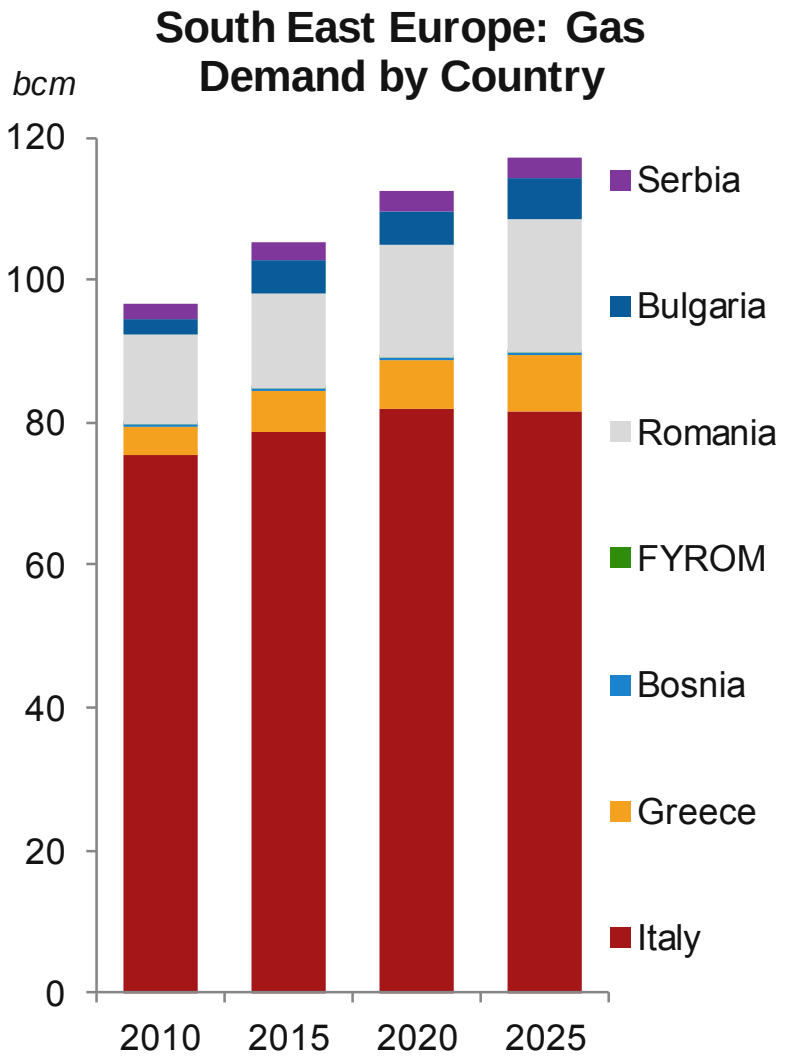
Gas demand will grow by 1% p.a. through 2025 in SE Europe (growth of 19bcma, from 96 bcma in 2010 to 117 bcma in 2025).

Italy, Romania and Greece remain the biggest markets in 2025.

Considering the few options for meeting this supply gap, around 12 bcma are left to be met by different sources.

The need for diversification of supply sources in Italy for enhancing its energy security and the gas to gas competition remains strong.

SEE is in URGENT need of new suppliers to enhance its energy security.



Source: PFC Energy

Source
Caspian Region/Middle East

Azerbaijan's development of the Shah Deniz field (1st and 2nd phase) will eventually supply Europe with more than the initial 10bcma.

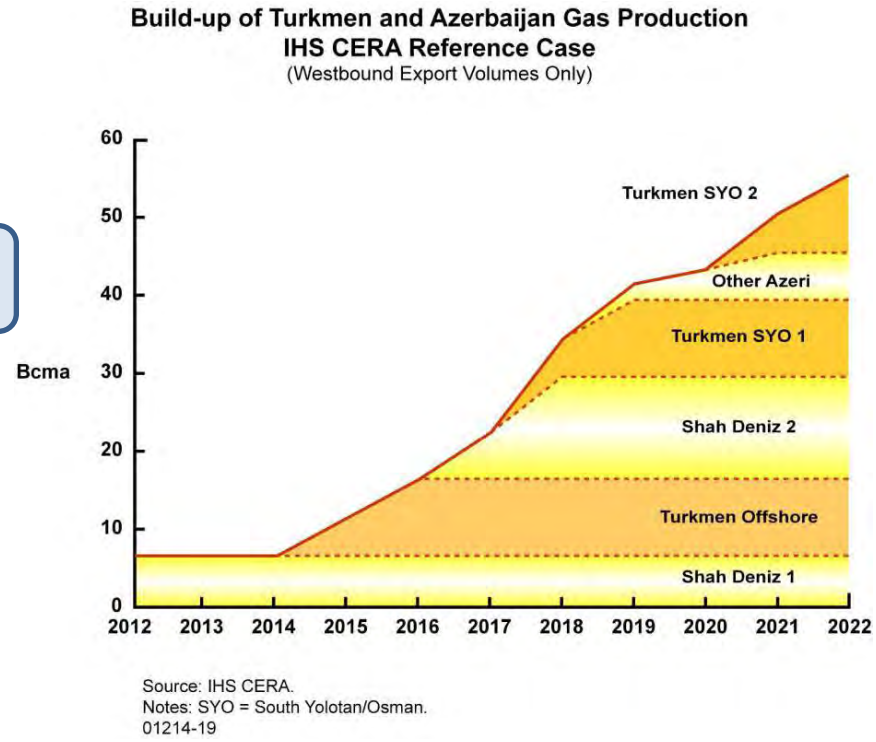
Turkmenistan has considerable reserves, however the need of the Trans-Caspian pipeline significantly reduces the chances of exports to Europe by 2025.

Caspian Region

Iran will not be able to export to Europe due to political reasons - sanctions issued in 2011 apply to the energy sector as well.

Iraq is currently bogged down due to domestic political reasons and no export potentials to Europe are foreseen by 2025.

Middle East



Source
East Mediterranean

Tamar, Leviathan and Block 12 are three of the top five world's largest discoveries of the decade.

Tamar	2009	Israel	257bcm
Leviathan	2010	Israel	481bcm
Block 12	2011	Cyprus	198bcm

According to the USGS (United States Geological Survey) total reserves at the Levantine basin could be three times more than what has already been discovered.

And there may be even more gas in Greece south of Crete.

Estimates are that more than 16 bcma will be exported. Prompt political and commercial decision must be taken by the producers to allow flow into Europe by 2018.

Summary
From Sources to SEE's market

SEE's market is:

- **the closest market to new sources, including LNG through Greece;**
- **a growing market with competitive prices;**
- **in urgent need to diversify its supply sources and increase its energy security.**

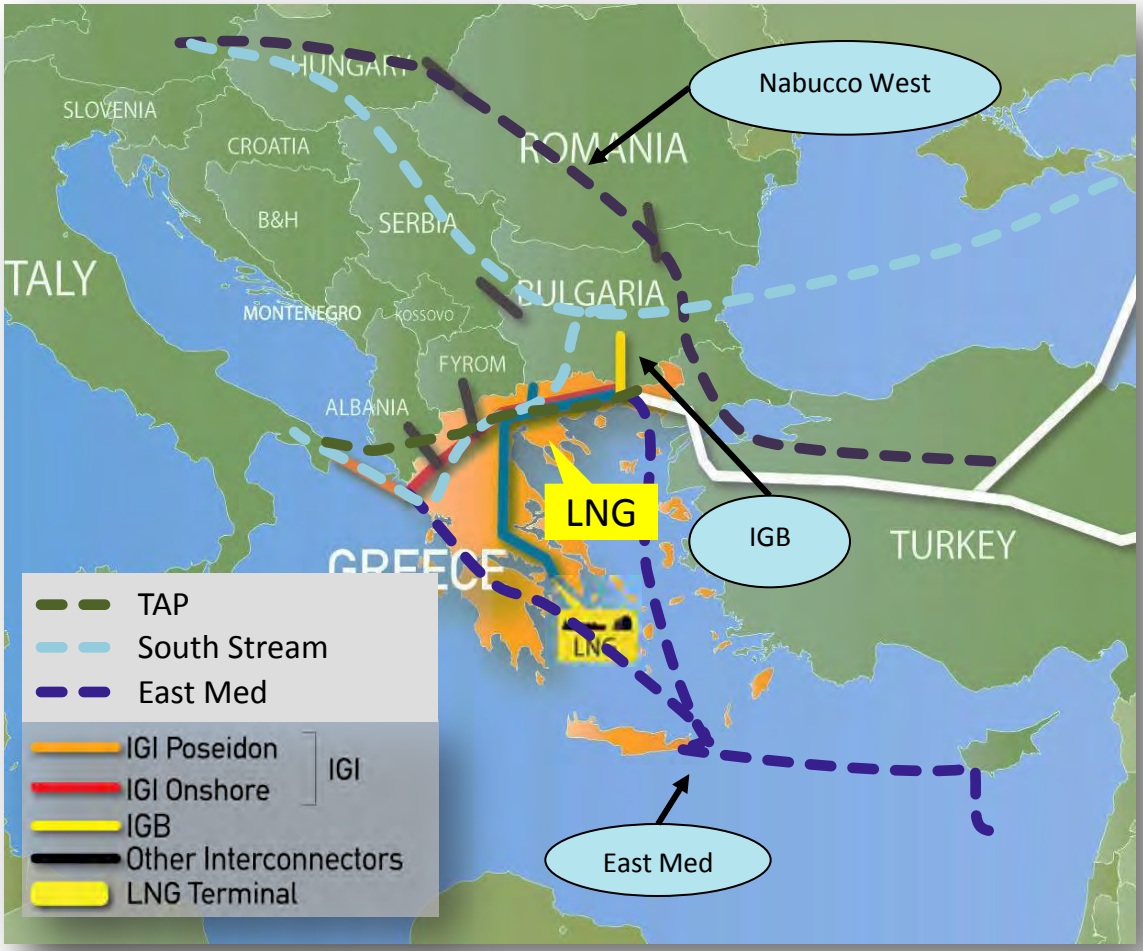
What are the options for transport?

Interconnector Greece Bulgaria (IGB) will supply up 3-5bcma by the end of 2014.

Nabucco West, the new scaled down proposal from Nabucco which will utilise the TANAP (Socar/Botas pipeline crossing Turkey). Nabucco's West route from Bulgaria to Austria remains the same.

An offshore pipeline from the fields of Eastern Mediterranean may connect these newly found sources to Europe as early as 2018 opening a New Energy Corridor.

A planned Floating Storage and Regasification Unit (FSRU) in Northern Greece will allow LNG to flow from 2015.

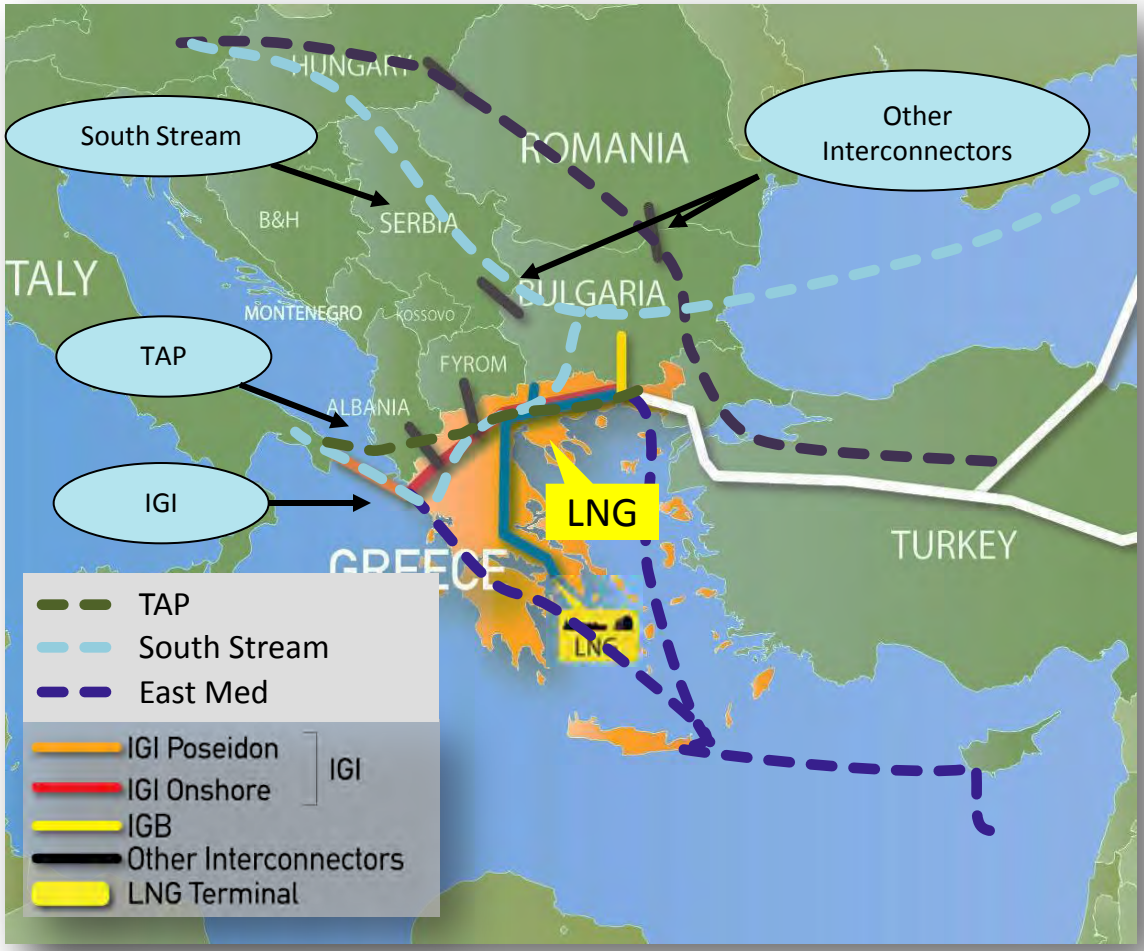


What are the options for transport?

The very important link between Greece and Italy may be completed by either IGI or TAP. Currently TAP has been chosen by SD II consortium as the preferred southern option to carry its gas, while the final choice will be made in March 2013.

South Stream will be filled mainly with Russian redirected gas, it will however allow for some additional quantities to reach SEE.

Small interconnectors, such as the Bulgaria-Romania which is under construction and the Bulgaria-Serbia which is planned, are infrastructure projects that will create the necessary physical links amongst the SEE countries.



Projects through Greece
IGB

IGB acts as a gateway to SEE through Greece, which is situated at the crossroads of all the new sources

IGB will be carrying 3bcma, scalable up to 5 bcma.

IGB's national importance has been announced by both the Greek and Bulgarian governments.

IGB's regional significance has been reaffirmed by the EU, receiving a €45million grant through the EEPR framework.

IGB:

- Has received the PEIA permit in Greece and submitted the EIA while in Bulgaria the EIA public consultation will be concluded by the end of October.
- IGB will launch its Market Test within the next month while updating its business plan and financial structure, taking into consideration the mandate signed with EBRD.
- FID is scheduled to be taken within March 2013 and first gas in 2014.

Projects through Greece
East Med a New Energy Corridor

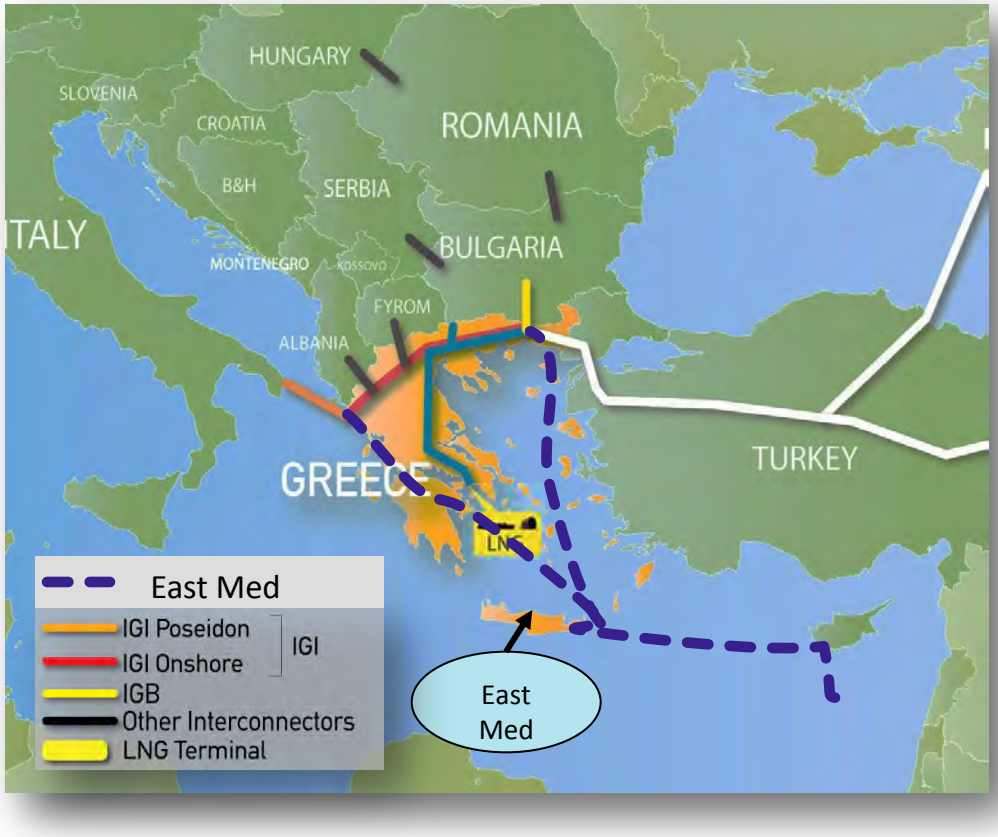
East Med will be able to carry natural gas from new sources, through a new route with solely EU transit countries.

East Med will initially carry 8bcma to Europe thusly opening a New Energy Corridor.

East Med is excepted to be granted the label of Project of Common Interest by the EU, allowing for direct Union financing as well as much better terms while negotiating with other financial institutions.

East Med:

- Prefeasibility studies have shown conclusively that East Med is technically feasible.
- Feasibility studies and Reconnaissance Surveys need to be carried out in order to decide on the optimum route/landfalls etc.
- East Med, provided that prompt decisions are undertaken by the producers, may carry gas to Europe as early as 2018.



Projects through Greece
Aegean LNG terminal

The planned FSRU in Northern Greece will allow SEE region to have easier access to more LNG capacities (in addition to the LNG terminal in Revythousa).

The Aegean LNG will be able to flow 3-5 bcma of gas into Greece and from there, in conjunction with IGB, to the SEE

Aegean LNG:

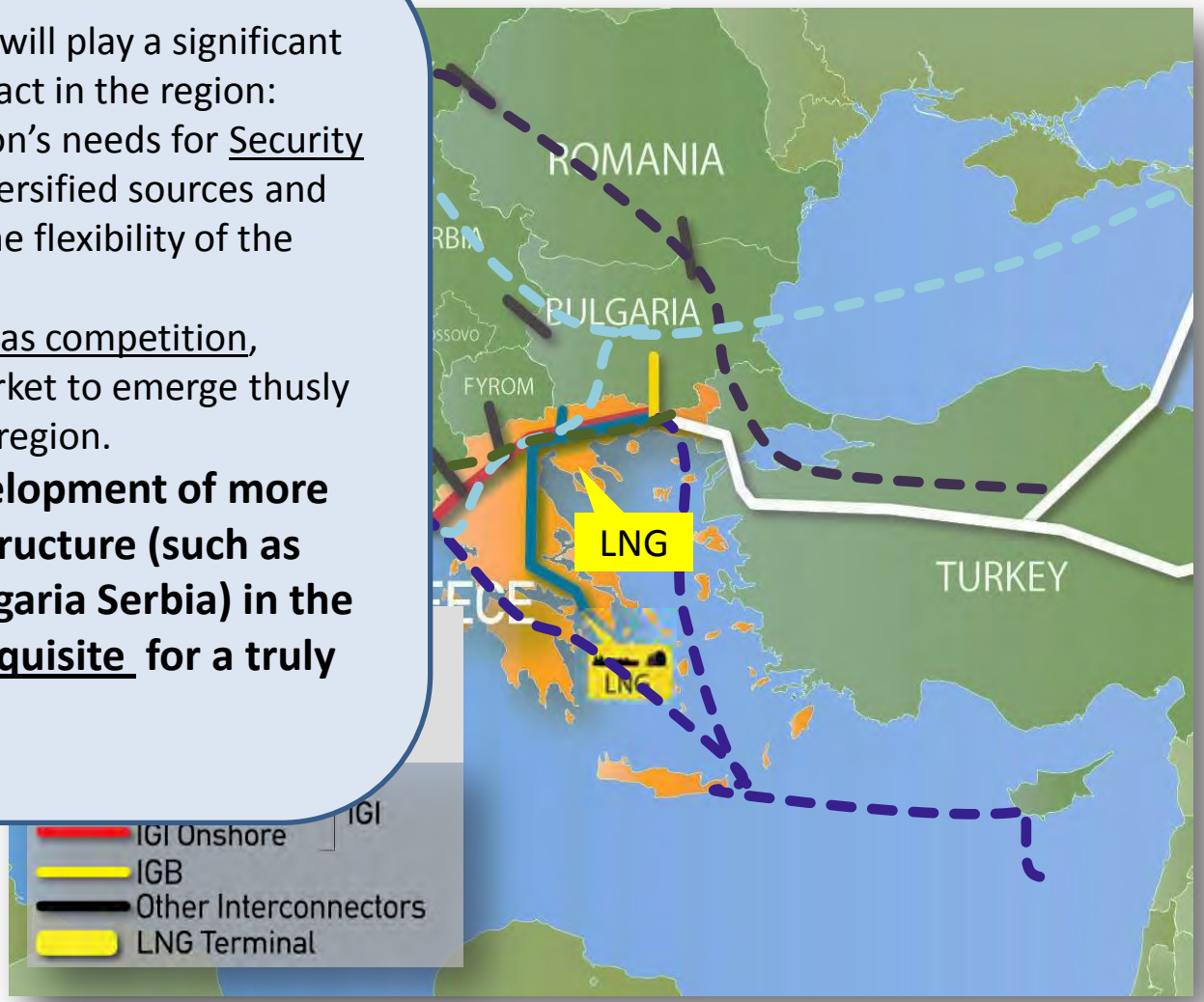
- Has completed its pre-feasibility study.
- Feasibility studies are currently ongoing and EIA permits are expected by mid 2013.
- Natural gas may flow from the Aegean LNG terminal into SEE as soon as 2015.

Impact of these projects to SEE

Development of Interconnecting Infrastructure in SEE

The aforementioned projects will play a significant role and will have a great impact in the region:

- They will address the region's needs for Security of supply, its needs for diversified sources and routes and will enhance the flexibility of the region.
- They will promote gas to gas competition, allowing a more liquid market to emerge thusly lowering the prices in the region.
- **They will spur the development of more Interconnecting Infrastructure (such as the Interconnector Bulgaria Serbia) in the region which is a prerequisite for a truly integrated market.**



Thank you for your attention

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