Gas competition in SEE: New regional infrastructure - a factor for development

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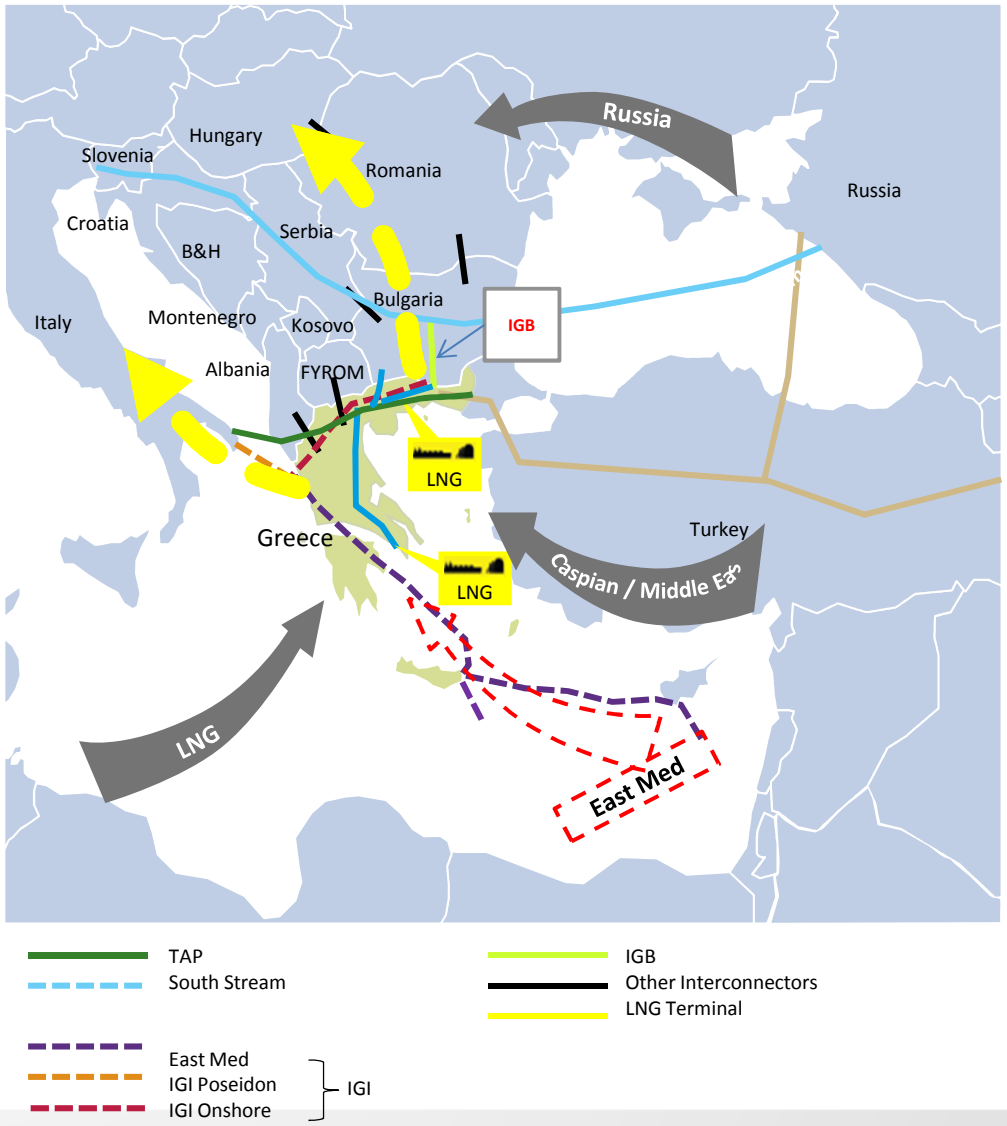
ΔΕΠΑ

SE Europe is a promising market
Greece as a gateway to SE Europe

SEE's market is:

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

Greece can undertake the role of a **gateway** for the new gas sources, thus contributing to the aim of the SEE gas source diversification and the security of supply.



The Aegean LNG & the IGB pipeline

Additional gas quantities can be delivered in the near future to the SEE market by the following two projects:

- **The Interconnector Greece-Bulgaria (IGB)**, connecting Komotini to Stara Zagora.
- **The Aegean LNG,** located in Northern Greece (Gulf of Kavala).

Interconnector Greece – Bulgaria data

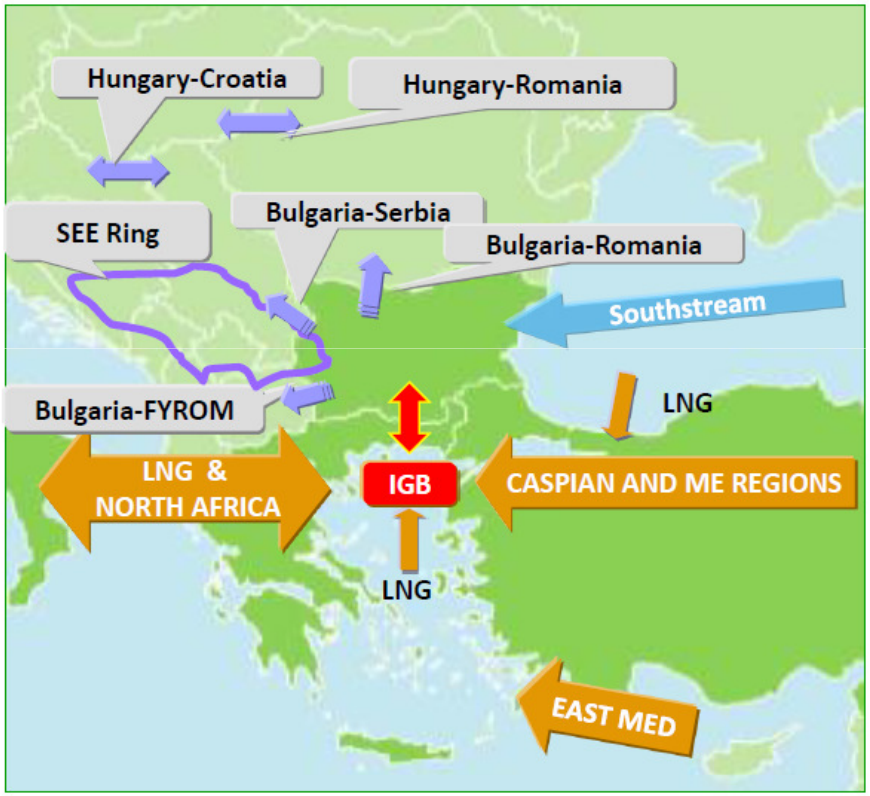
Specific data of IGB:

- **Length:** 180km (30km in Greece and 150km in Bulgaria).
- **Diameter:** 32'', bi-directional gas flow.
- **Capacity:** 3 bcma, expandable to 5 bcma with the installation of a Compressor Station.
- **CAPEX:** ~220 M€ .
- **Technical activities:** FEED completed in Greece, close to completion in Bulgaria.
- **Permitting activities:** Environmental Impact Studies have been approved in both countries.
- **Regulatory activities:** the binding phase of the market test for long-term capacity booking is in progress.
- **Intergovernmental support:** IGA between Greece and Bulgaria signed in 2009, confirmed by Greek Law 4001/2011 & Decision No 452/07 of 2012 of the Bulgarian Council of Ministers.
- **EU support:** the project is included in the Projects of Common Interest of EU and 45M€ contribution have been secured via EEPR.
- **FID:** 4Q 2014
- **First gas:** 2016.
- **Owner:** ICGB AD registered in Sofia**,** jointly formed by IGI Poseidon (DEPA, Edison) 50% and Bulgarian Energy Holding 50%.

Interconnector Greece – Bulgaria (IGB)

The IGB pipeline will connect SEE with supply sources from Caspian, Middle East and East Med via Greece.

Diversified Gas, imported to Bulgaria via IGB, could be transited to other SEE Countries taking advantage of the national networks and of other interconnectors, such as IBR (BG-RO) and IBS (BG-SER).



The Aegean LNG data

Specific data of Aegean LNG:

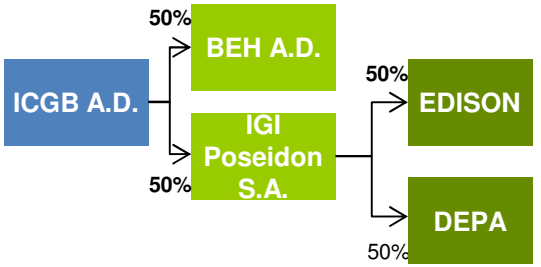
- **Project type**: A Floating Storage and Re-gasification Unit (FSRU).
- **Project status**: a feasibility study has been completed by DEPA, showing that the Project is feasible, while the EIA study is in progress and expected to be completed within 2014.
- **Proposed size/capacity**: 150.000 m3 storage capacity and 5 bcma send out.
- **CAPEX**: 270 M€.
- **EU support**: the project is included in the Projects of Common Interest of EU.
- **Project structure**: a participation of additional investors is anticipated, including an LNG supplier and SEE downstream shippers.

The Aegean LNG Market

The Aegean LNG:

- can redefine the regional gas market landscape since **it will be the first regasification facility targeting the broader SEE region**, mainly the Balkans.
- **will allow SE Europe to diversify its gas supply sources** and have easier access to a number of neighboring LNG producers.
- **is located in northern Greece, at the crossroads of several key infrastructure projects,** including cross-border pipelines (ITG, TAP, IGB, IGI etc.) and UGS facilities .
- **would consist an attractive commercial option,** due to its proximity to a number of LNG producers, flexibility & scalability , while meeting all relevant environmental, safety, social, legal and regulatory standards.

Aegean LNG / IGB
Summary Characteristics

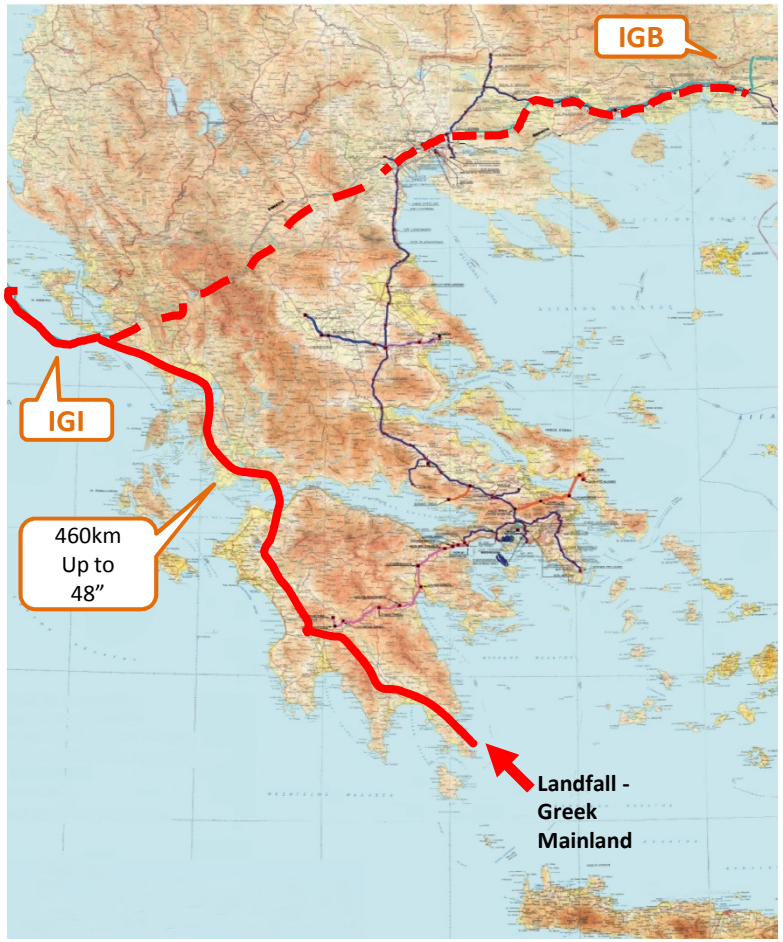
	CAPEX	Capacity	Completion	Shareholders
Aegean LNG	**270 m€** Potential for EU Funding	**5 bcma**	To be defined	DEPA Other possible investors
IGB	**220 m€** Granted EU Funding: **45 m€**	**5 bcma**	**2016**	

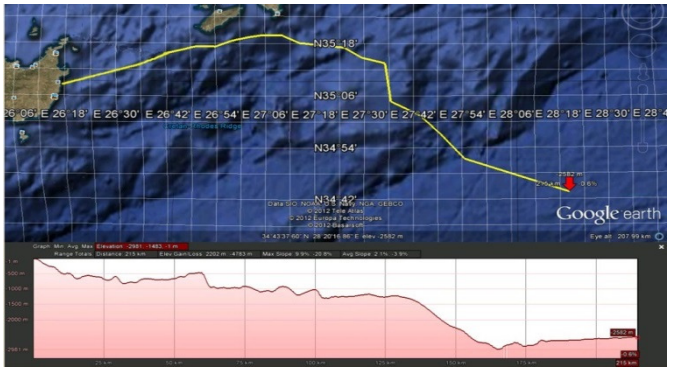
Why the Aegean LNG / IGB System

- South East Europe **needs long-term supply** and is a stable growing market.
- The two Projects (Aegean LNG & IGB) are the **closest and least expensive route** to the SEE market.
- Market Test results (1st phase) have shown **significant market interest** for forward and reverse flow, starting from 2016.
- Aegean LNG can be the first regasification terminal to **target the broader SE European market** through IGB & **Turkey** through the already operating ITG.
- **Synergies** between TAP, Aegean LNG, IGB and the interconnectors between Bulgaria – Serbia, Bulgaria-Romania and onwards to Hungary could serve **multiple countries** .

The EastMed Pipeline is technically feasible

Onshore Pipeline onwards to IGI





The challenging approach to Crete (with water depths in the order of 2900m) will be examined in more detail in the Feasibility Study, which is expected to confirm the Project’s pre-feasibility positive results.