

The role of Greece as a supply route to Europe:

An emphasis to SEE market's quest for security and competitiveness

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DEPA's new strategy responds to changes in the market

Changes in the market environment

- Major changes in oil with implications for oil-gas competition and the gas market
- LNG supply will grow and will re-direct LNG flows
- New infrastructure / supplies will add liquidity in Southeast Europe
- Demand for natural gas has fallen considerably—due to the crisis and due to changes in the power market
- Domestic market fully liberalized by 2017, putting pressure on DEPA as the incumbent

After privatization efforts in 2013, DEPA needs to develop a new strategic plan

DEPA's response

- Gasification rate in Greece remains low—there is great potential in bringing gas to more people in existing and new markets
- LNG from Revythoussa, from the Aegean LNG in Northern Greece and small scale LNG offer attractive opportunities to reach new customers—in line with trends across Europe
- Market ripe for offering of energy solutions
- Gas offers a competitive alternative to oil in transportation—but needs fueling stations to grow

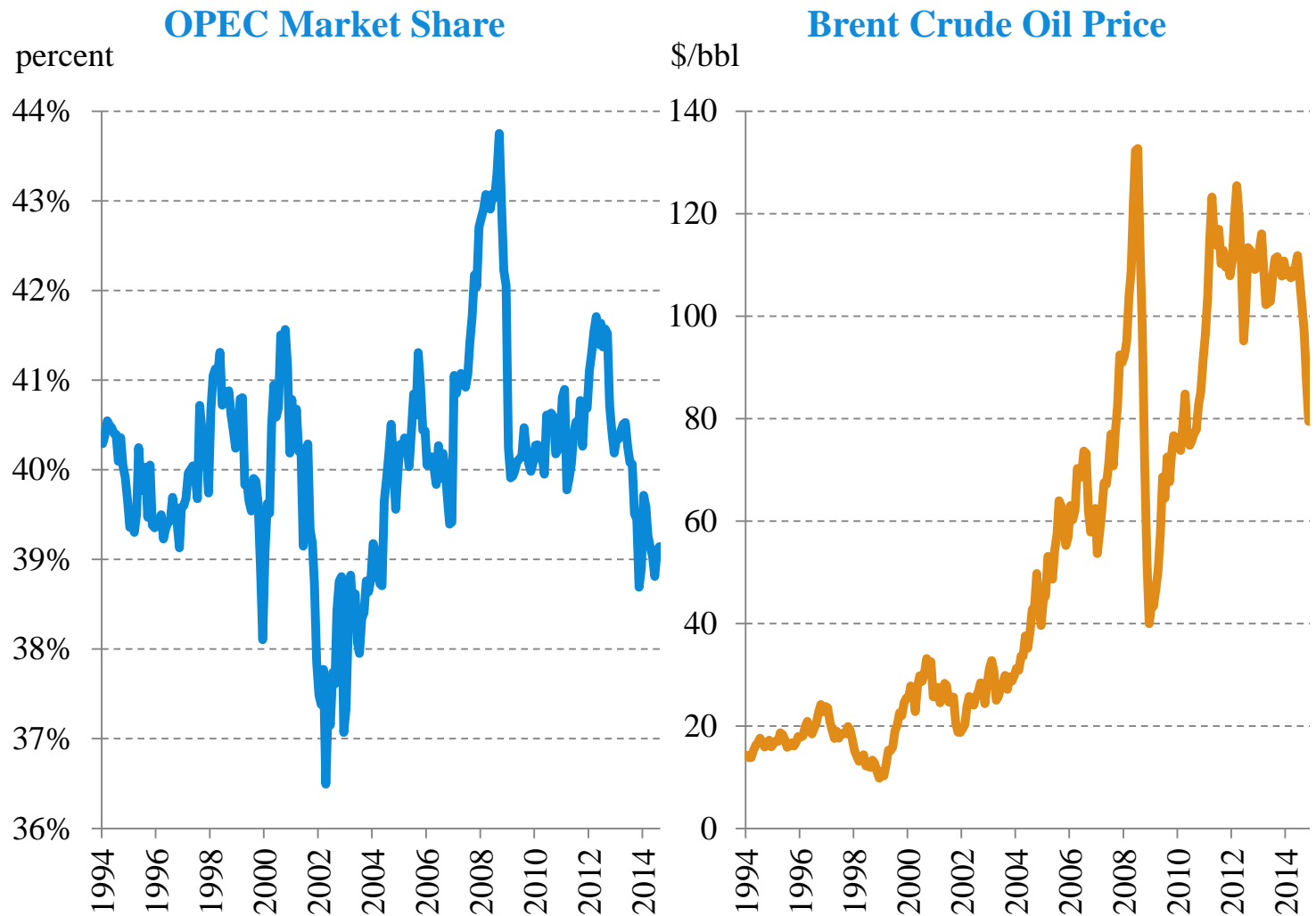
DEPA's new plan involves operational excellence, joint ventures and strategic partnerships and an emphasis on the customer

Changes in the market environment



Oil market undergoing seismic shift

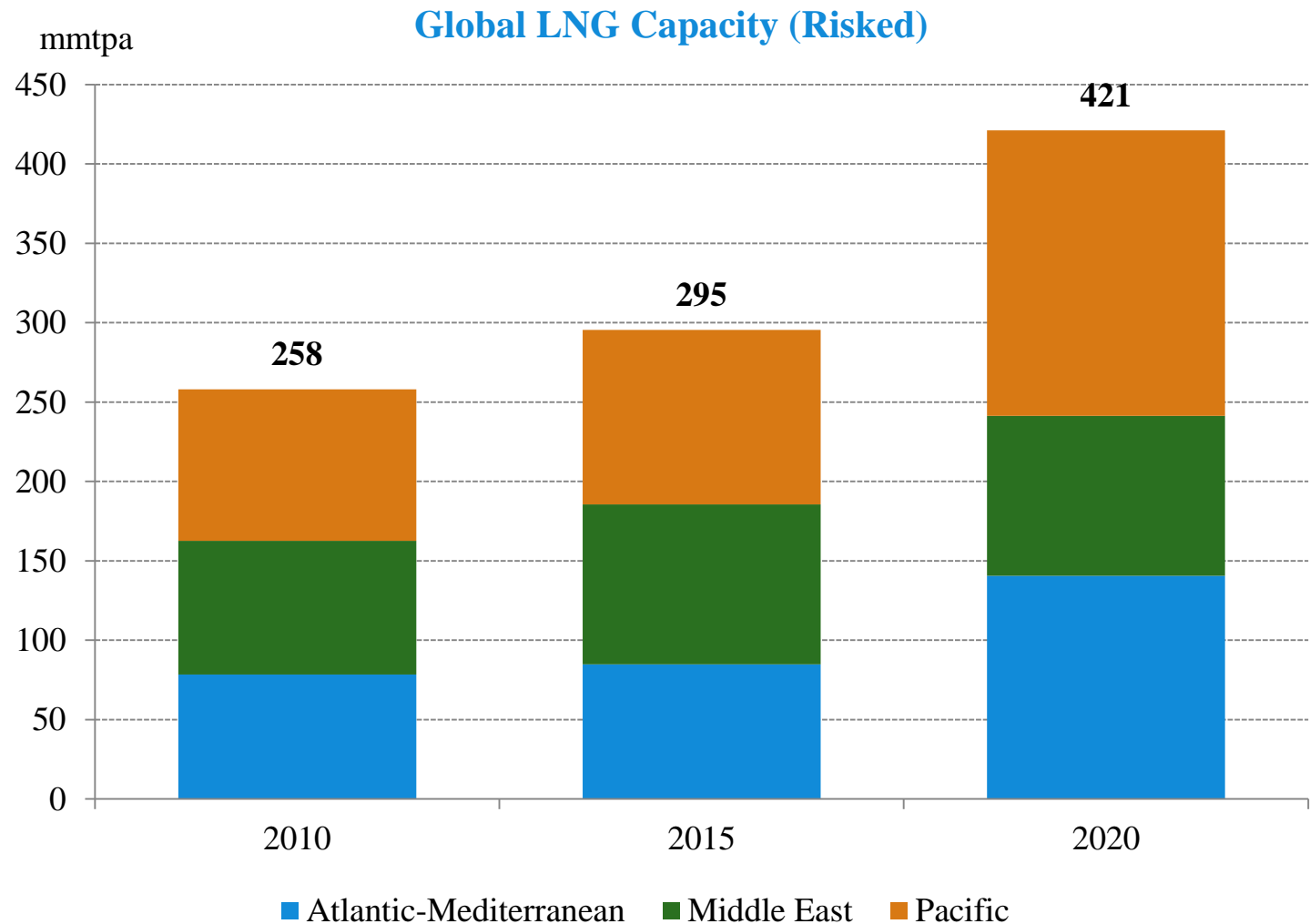
- Oil prices have dropped by over 40% since this summer
- OPEC's market share is shrinking as new oil from the United States is adding supply to the market
- The competitive dynamic between oil and gas is changing rapidly



Source: United States, Department of Energy, Energy Information Administration

LNG from Australia and the United States will change flows, with more LNG possibly coming to Europe

- Between 2015 and 2020, LNG capacity will grow considerably
- Australia and the United States will drive the growth
- Gas that was previously going to Asia from the Atlantic Basin will be redirected to other markets—including Europe

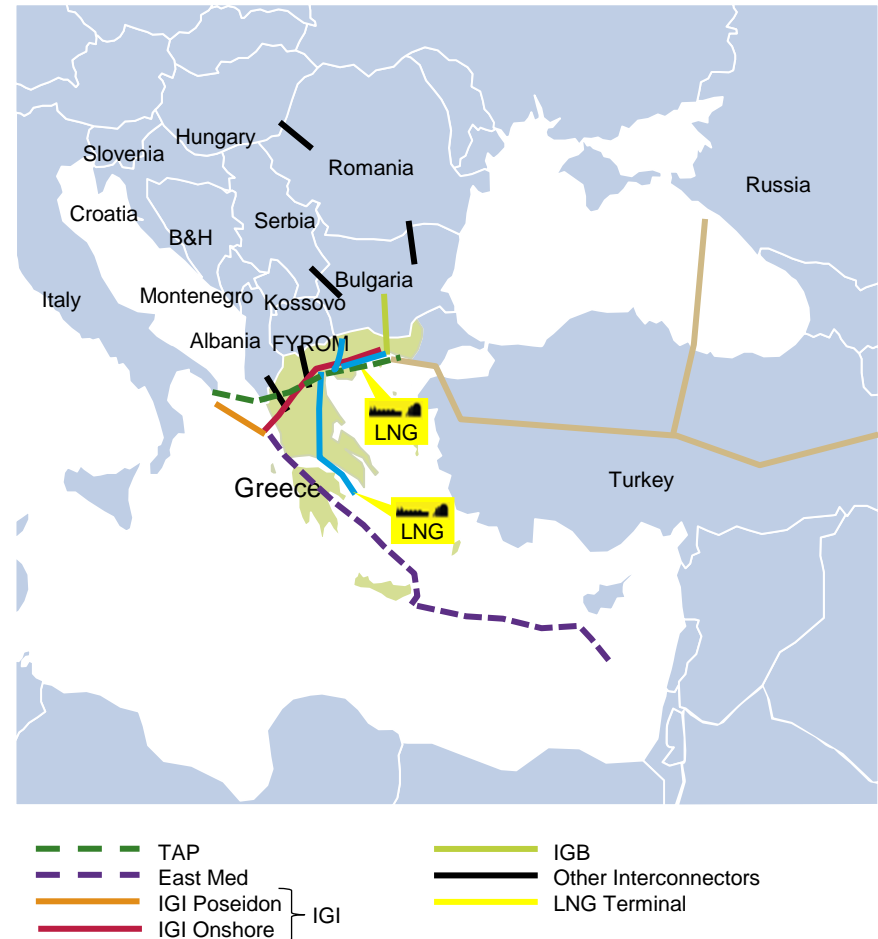


Source: IHS Energy, LNG Value Chain & Market Analysis Service (December 1, 2014)

SE Europe to benefit from added liquidity

- **TAP** pipeline will bring at least 10 bcm into the region—and it could bring up to 20 bcm
- **IGB** pipeline will provide supply and route diversification and a new entry point into the Balkans
- **FSRU** in Northern Greece will deliver volumes for the Balkan market
- Gas from the **Eastern Med** will add further volumes into the region
- **Gas discoveries** in Greece could add even more liquidity to the market

Location of key international projects



DEPA's response



Streamlining the organization

Improve efficiency

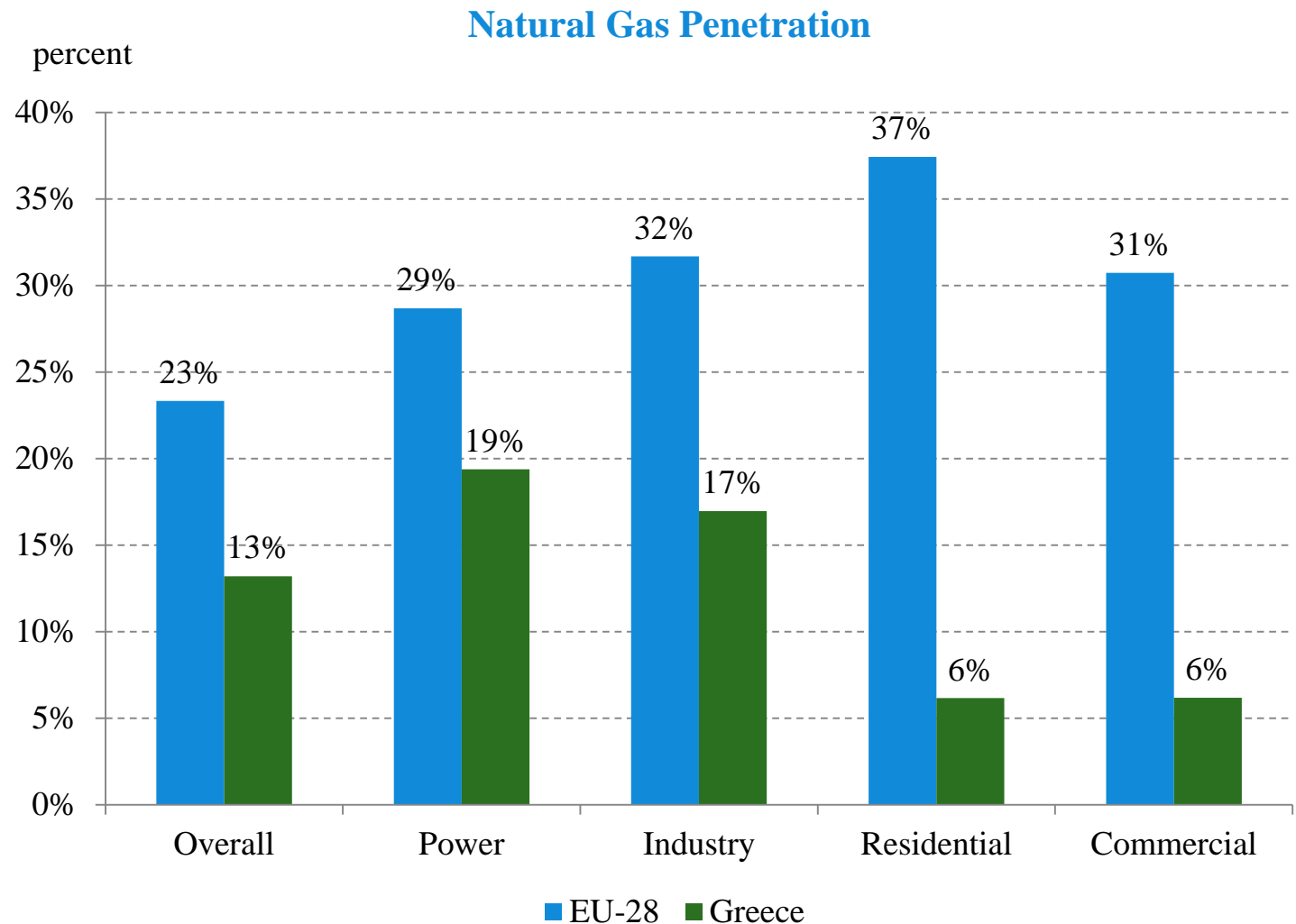
Strengthen the organization

Adapt commercial policy to new market realities

Improve commercial offerings

Gas penetration in Greece remains low—and demand mostly from large users (power and big industry)

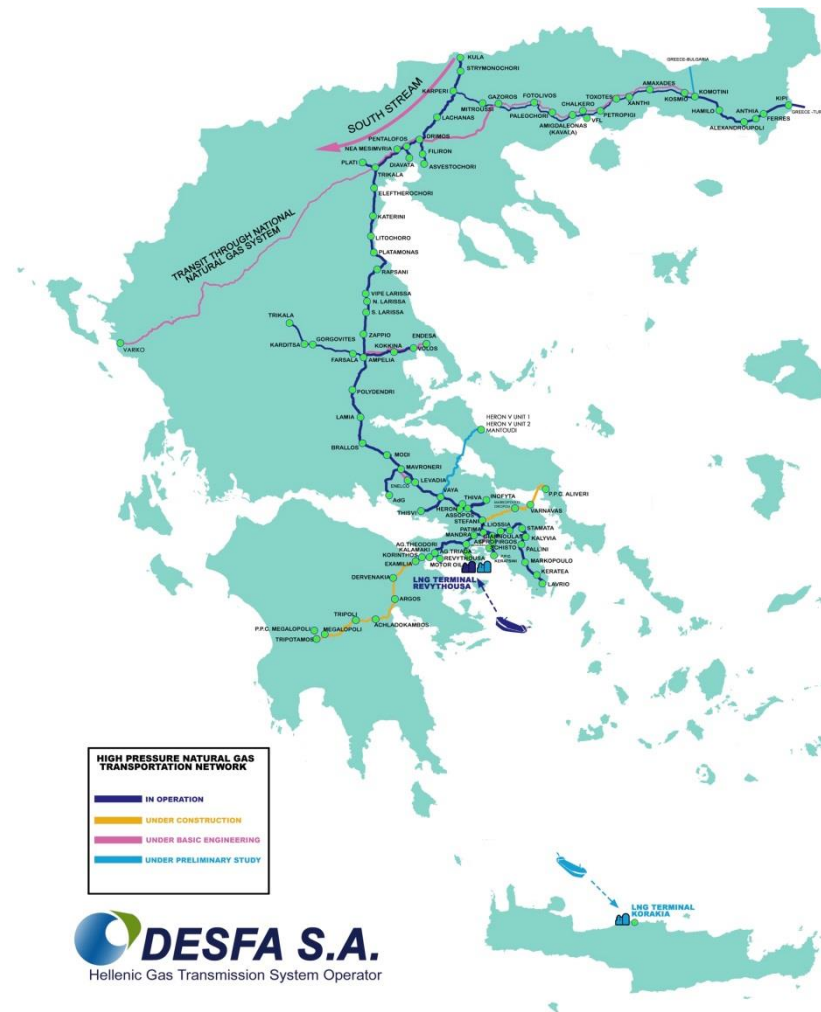
- Gasification rate in Greece much below EU average
- Penetration limited mostly to big users
- Considerable upside by reaching more customers in all sectors
- Expansion of networks where viable (existing and new EPAs)
- Adoption of CNG/remote LNG solutions when networks are uneconomic



Source: Eurostat, Supply, transformation, consumption - all products - annual data [nrg_100a]

Low penetration reflected in limited network reach

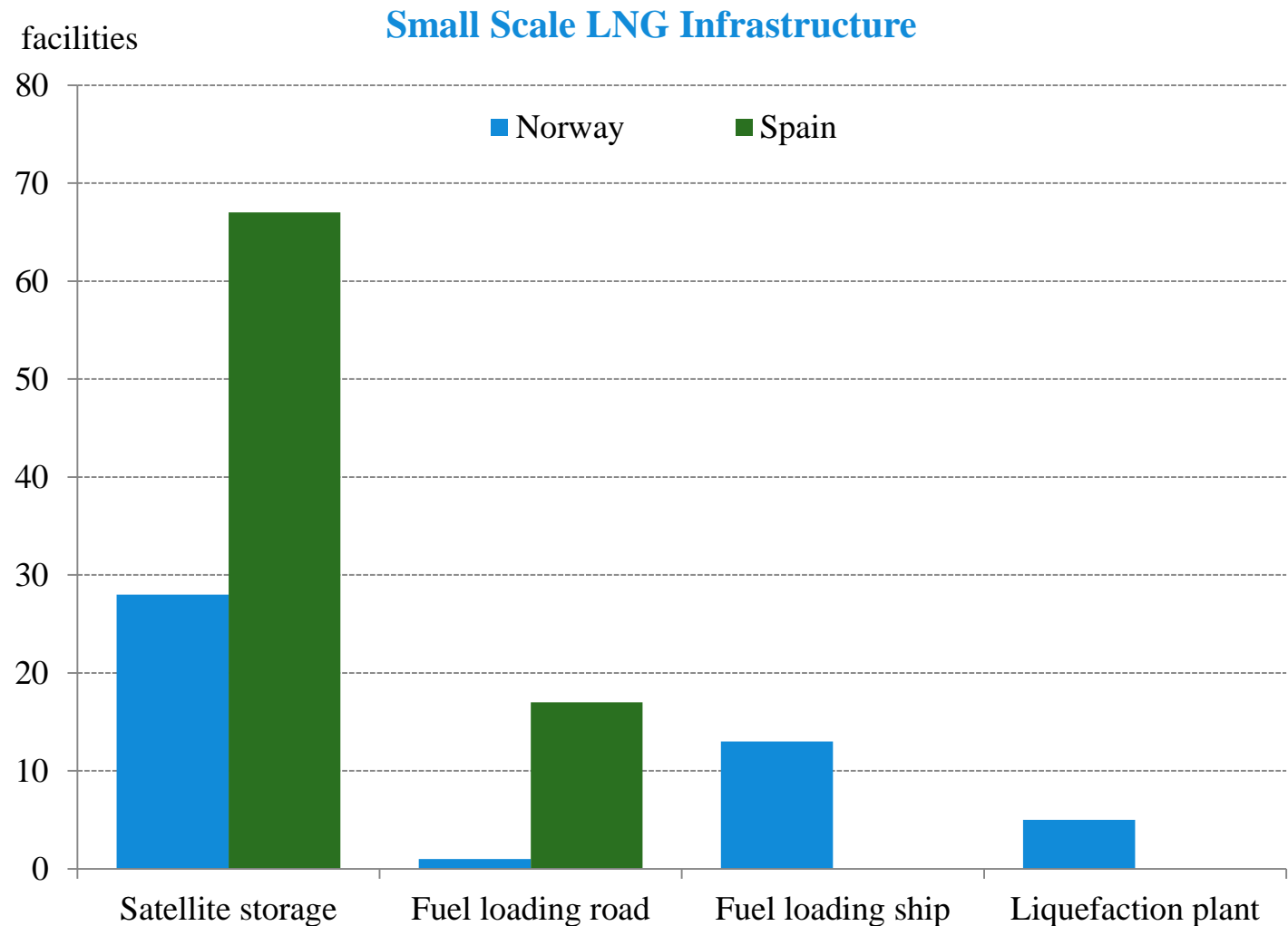
- The existing network captures only a small portion of the Greek periphery
- A large portion of the population and of economic activity is yet to be reached by pipeline
- Extending the pipeline network or developing remote CNG/LNG is the surest way to close the gasification gap



Source: DESFA

Norway and Spain successful case studies for remote CNG/LNG penetration

- Norway and Spain are examples of countries that have successfully developed small-scale LNG
- Both countries have storage sites; Spain has focused on road fueling, while Norway has emphasized ship fueling



Source: Gas Infrastructure Europe, LNG New Services Inventory, March 2014 data

DEPA is already promoting CNG for vehicles

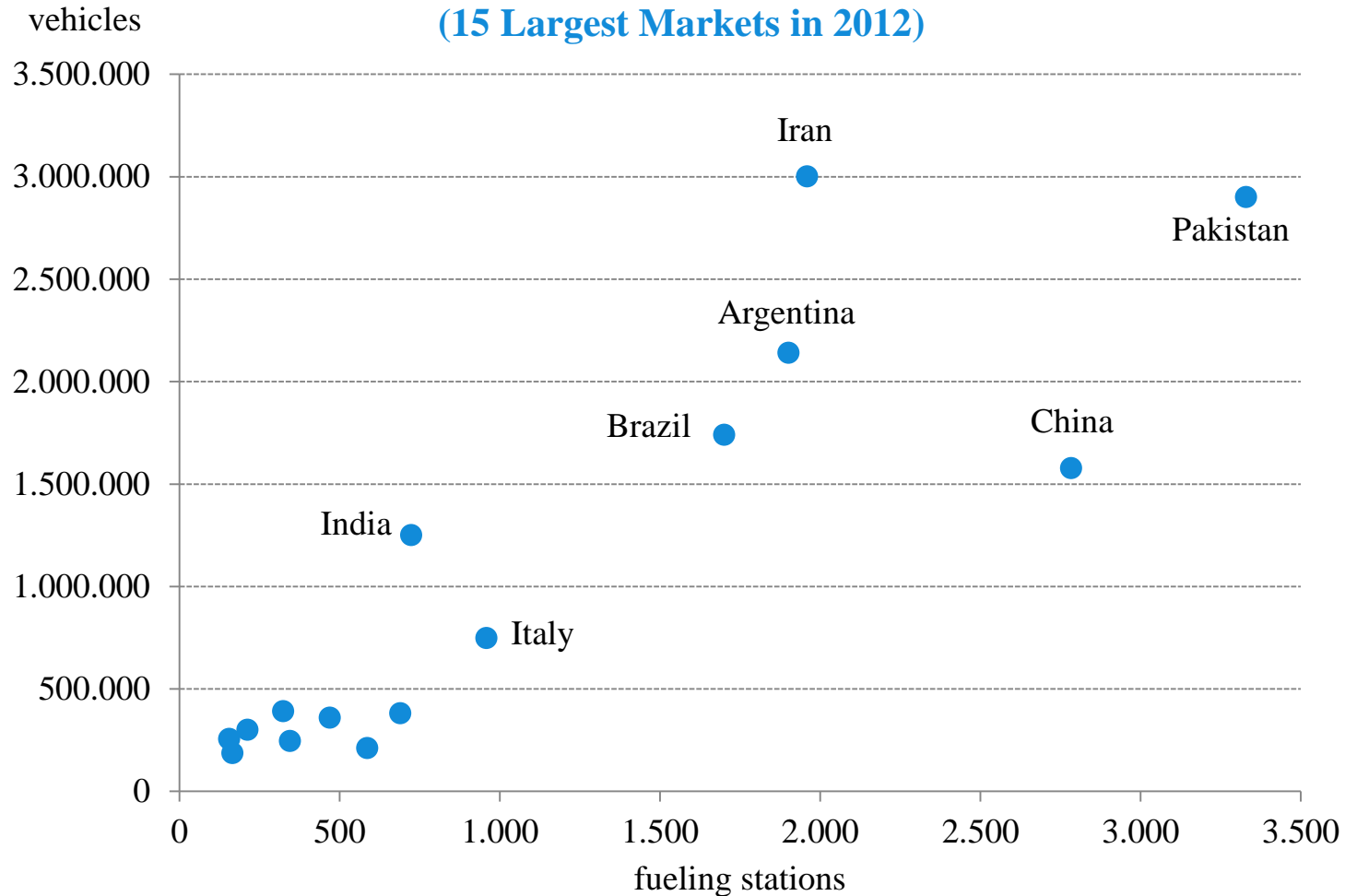
- DEPA is already bringing CNG to the Greek market
- CNG offers a competitive and environmentally friendly solution for large users, for fleets and for private consumers
- The expansion of the CNG network offers a great opportunity to further gasify the Greek market



CNG needs fueling stations to grow materially

**CNG Vehicle Size and Fueling Stations
(15 Largest Markets in 2012)**

- Several markets, including in Europe, are using gas in transport
- Growth in market comes together with growth in fueling stations
- Companies need to invest in developing stations in order to provide incentives and certainty for conversions / new builds



Source: Natural Gas Vehicle Knowledge Base

SEE is an attractive market for Caspian, Middle East and East Med gas

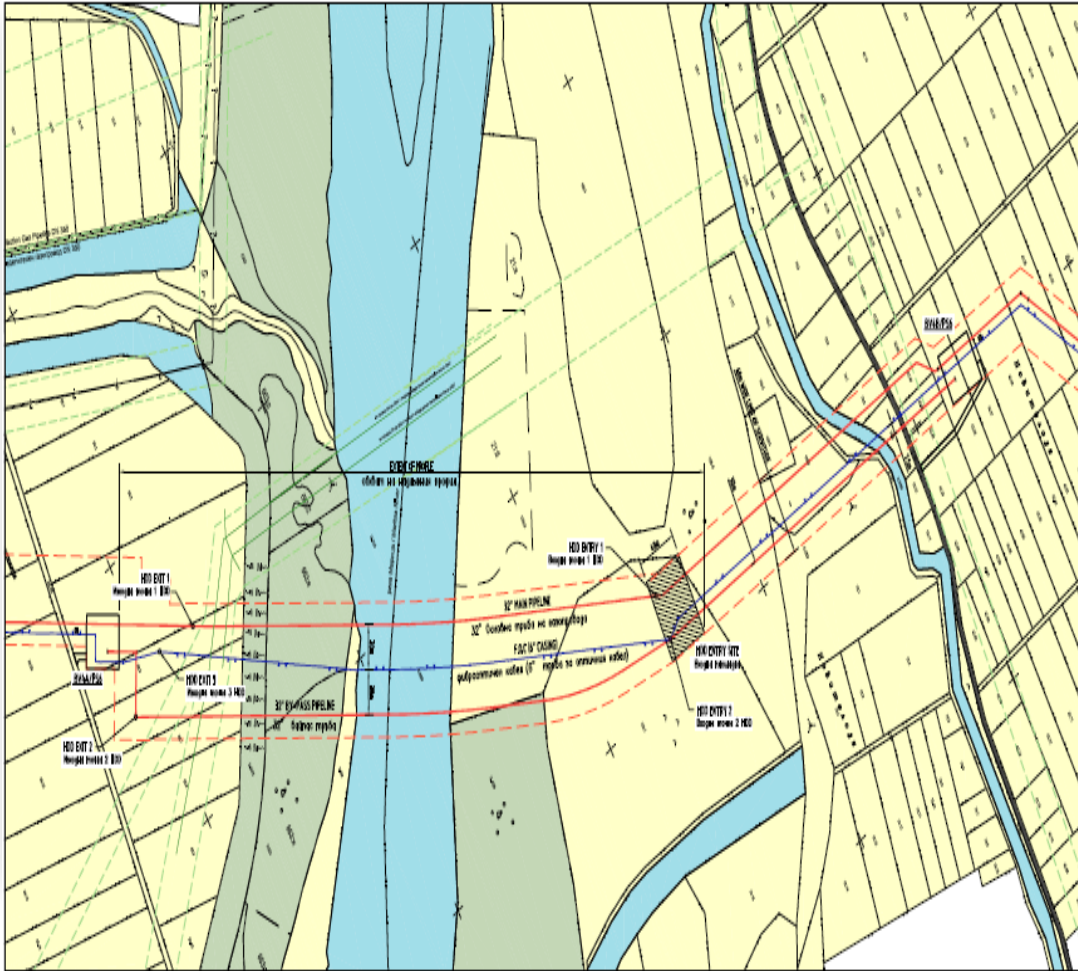
SEE's market is:

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

DEPA's vision is to create a new gas gate to SE Europe and establish Greece as a physical and pricing gas hub in the region.



The Greece – Bulgaria Interconnector (IGB)



- FEED/Technical Design are in the final stage.
- Linepipe & LLI procurement procedure is in progress.
- FID to be taken in 2014 and construction to start in 2015
- First gas is expected to flow in 2017

The IGB pipeline:

Project concept & status & strategic importance

Length: 180km (30km in Greece and 150km in Bulgaria)

Diameter: 32", bi-directional gas flows

Capacity: 3 bcma, expandable to 5 bcma maximum

CAPEX: ~300 mio USD

Technical activities: FEED close to completion, procurement tenders for line pipes and other LLI ongoing

Permitting activities: completed

Regulatory activities: the second phase of the market test for long-term capacity booking ongoing – binding offers received

Intergovernmental support: an IGA between Greece and Bulgaria in place

EU support: the project has been granted the label of PCI by EU and a contribution of 45M€ has been secured via EEPR

First gas: 2017

Owner: ICGB AD registered in Sofia, jointly formed by DEPA (25%), Edison (25%) and Bulgarian Energy Holding (50%)

The IGB pipeline: Project Rational and Strategic Importance

The IGB pipeline:

- ✓ will connect Bulgaria with both existing and new gas supply pipelines (i.e. TAP) allowing gas from the Caspian Region and the Middle East to be transported through Turkey and Greece
- ✓ in combination with other existing or under development interconnectors of local nature, (i.e. IBR connecting Bulgaria and Romania, IBS connecting Bulgaria and Serbia etc) would provide incremental gas supplies to the entire SE Europe region
- ✓ similarly, would allow LNG supplies from East Med, North Africa the Gulf and beyond to reach the region through existing and/or new re-gas facilities in Greece
- ✓ in conjunction with the Aegean LNG would consist a real multi-source project (including East Med LNG), essential in meeting SE European market needs and EU energy policy requirements

The Aegean LNG: project concept, status & strategic importance

Project type: A Floating Storage and Re-gasification Unit (FSRU)

Location: Northern Greece

Project status: a specific strategic evaluation study and a technical feasibility study have been completed by DEPA, while the EIA study is expected to be completed by early 2014

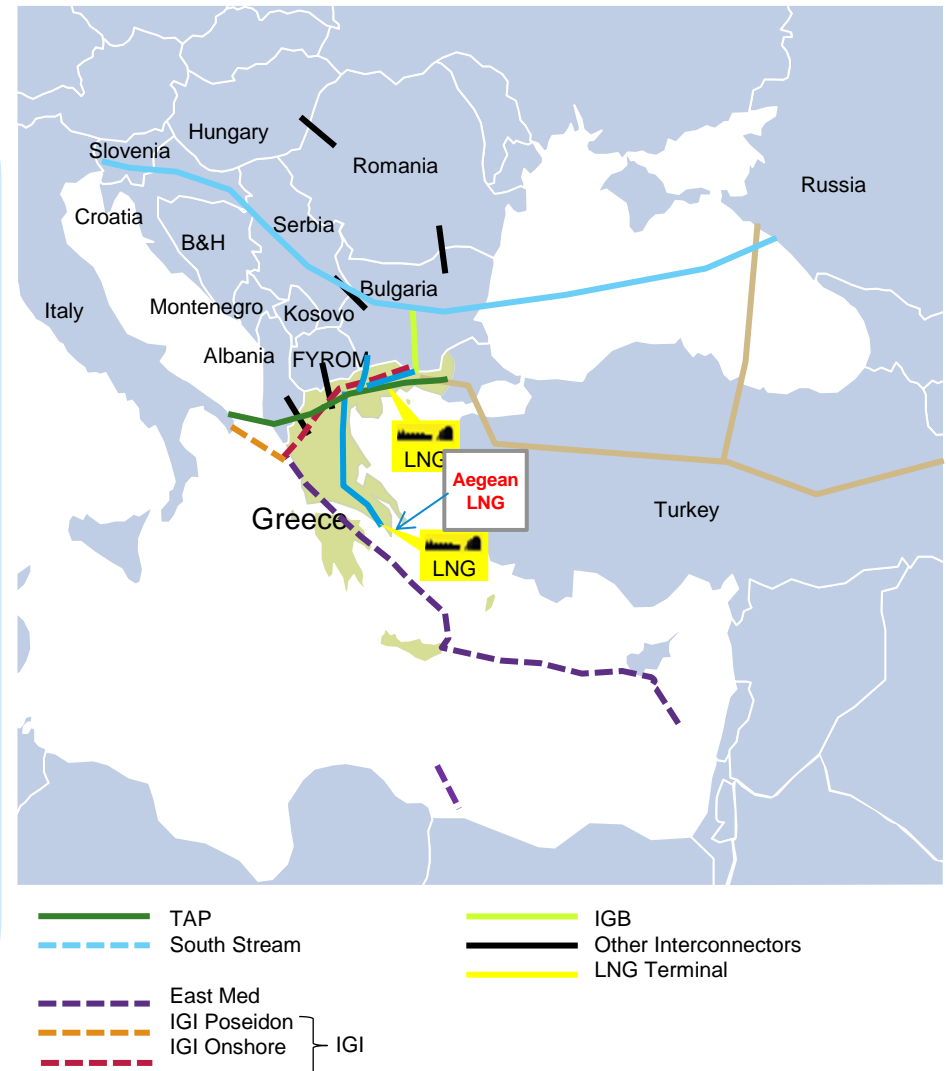
Proposed size/capacity: a ship with 150,000m³ storage capacity and 5 bcma send out capacity

Estimated start date: 2017

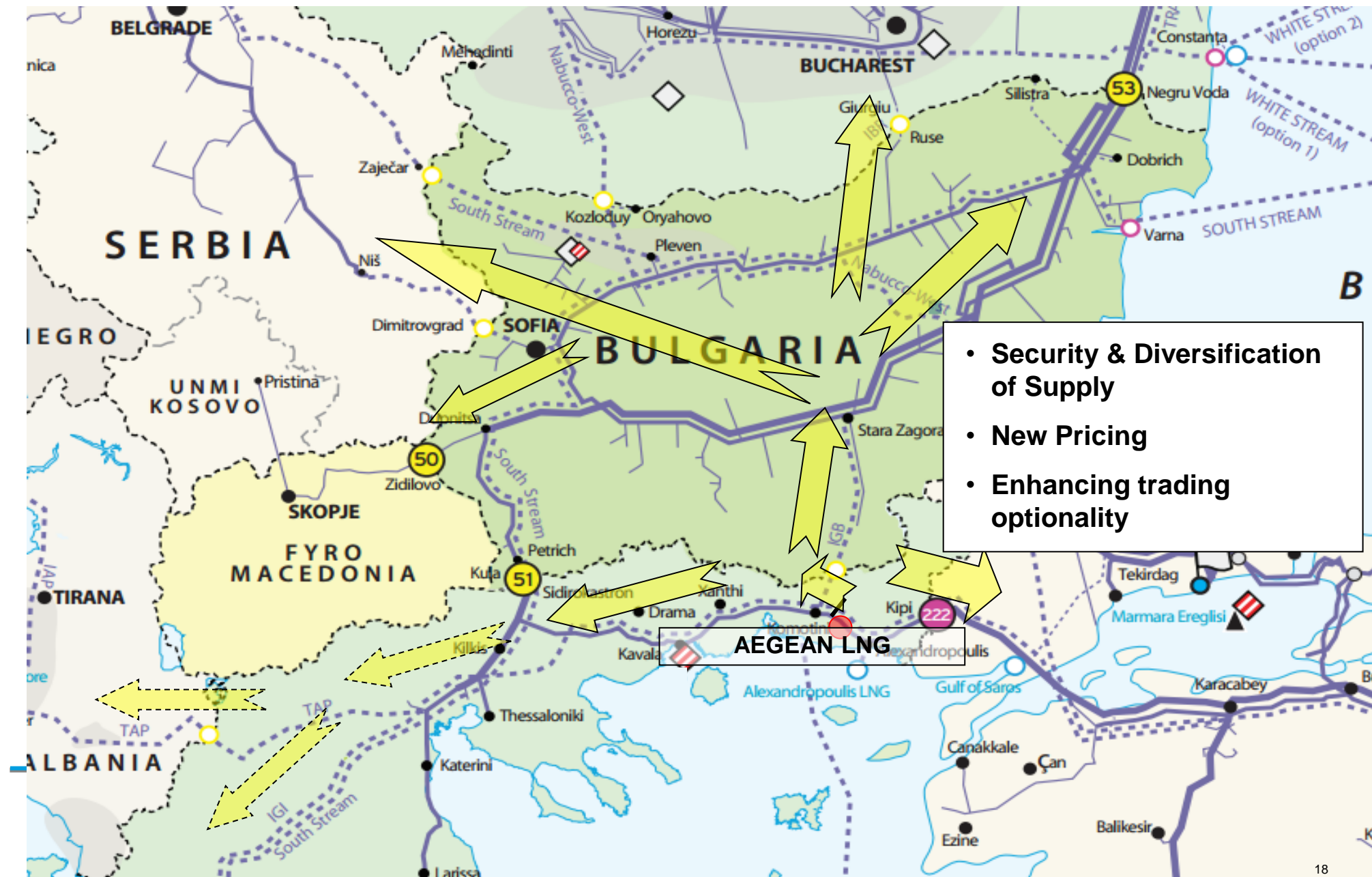
CAPEX: 350m USD

Third-party access: TPA exemption likely

Project structure: Ideally a consortium with 3-4 investors, including an LNG supplier and area's midstream & downstream players



Best placed to offer an Alternative Supply and Route Solution to Bulgaria and onwards to Romania, Serbia and the wider Region



Aegean LNG:

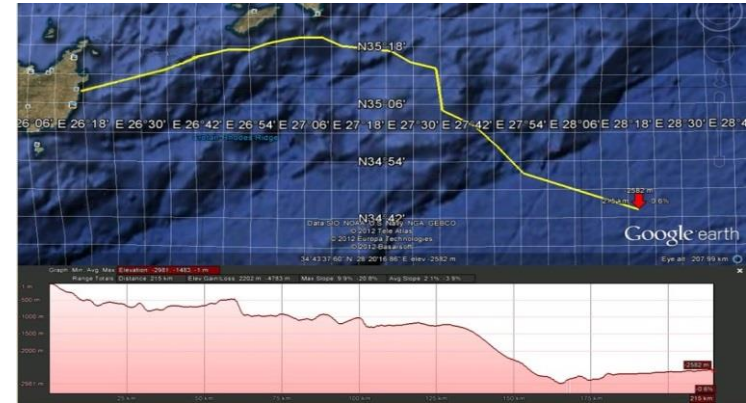
Project Rational and Strategic Importance

The Aegean LNG:

- ✓ can redefine the regional gas market landscape since it will be the first re-gas 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
- ✓ located in northern Greece is at the crossroads of several key infrastructure projects, including cross-border pipelines (ITG, TAP, IGB, ITGI etc.) and UGS facilities
- ✓ would consist an attractive commercial option, due to its proximity to a number of LNG producers, flexibility, scalability and the ability to meet all relevant environmental, safety, social, legal and regulatory standards

THE EASTMED PIPELINE IS TECHNICALLY FEASIBLE

Onshore Pipeline onwards to IGI



The challenging approach to Crete (with water depths down to 2900m) has been looked into in more detail in a way that will minimize the technical challenges. A marine survey scope has been defined.



An assessment of potential landfalls and sites for onshore installations has been completed and coordinated with the offshore survey.

East Med – IGI a New Energy Corridor

Europe is a promising market

The Eastmed pipeline is technically feasible

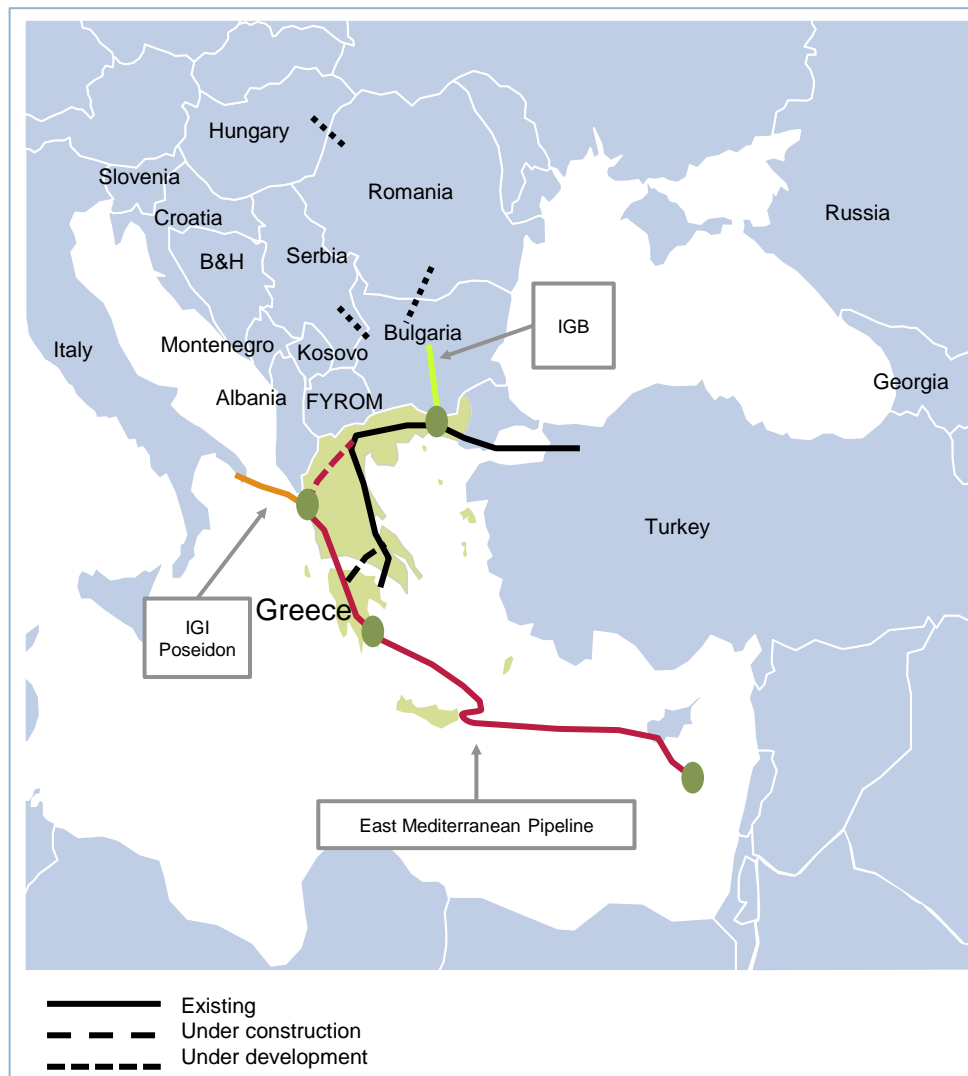
The Eastmed pipeline is financially feasible

Fastest path to market

East Med will be able to initially carry 8bcma to Europe from new sources, through a new route with solely EU transit countries

IGI

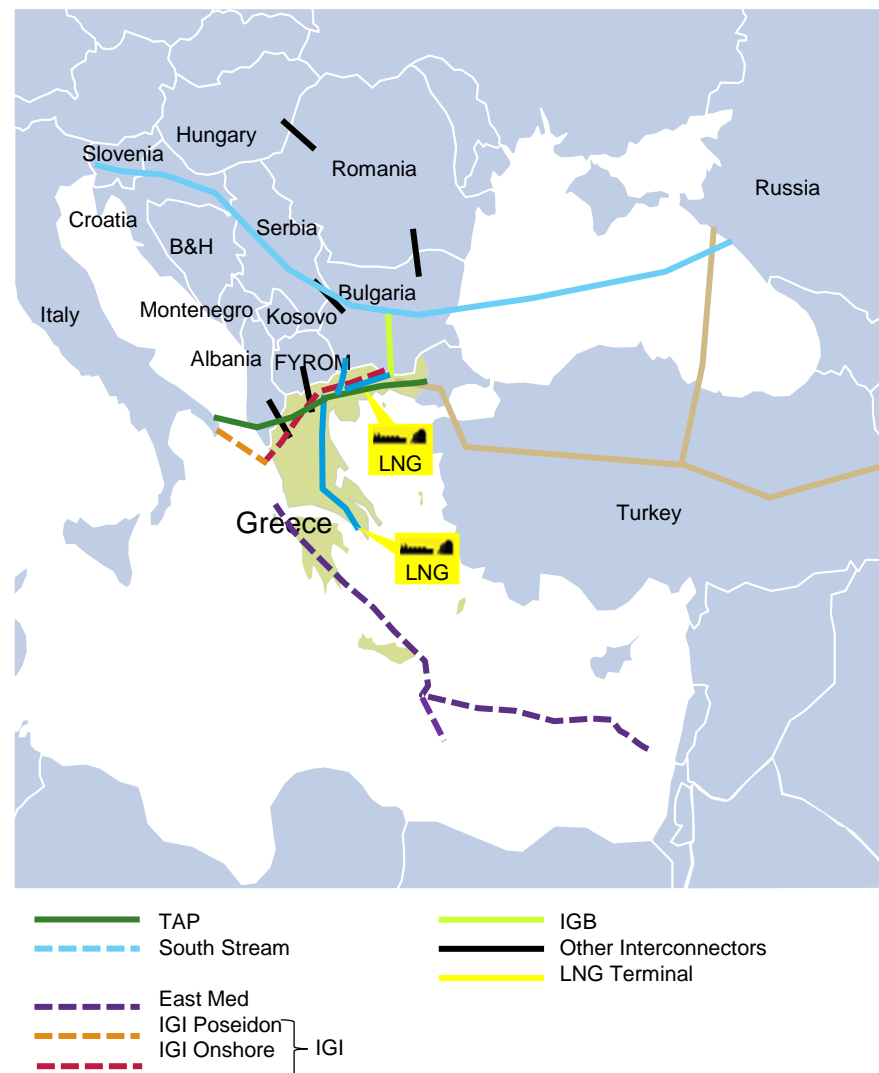
- ✓ IGI remains the most advanced project connecting South East Europe and Italy
- ✓ Permitting procedure in Italy and Greece is completed
- ✓ Has a TPA exemption for 9 bcma and 25y
- ✓ All technical activities completed in 2012, FID to be taken provided supply of gas has been secured



Impact of these projects to SEE

Development of Interconnecting Infrastructure in SEE

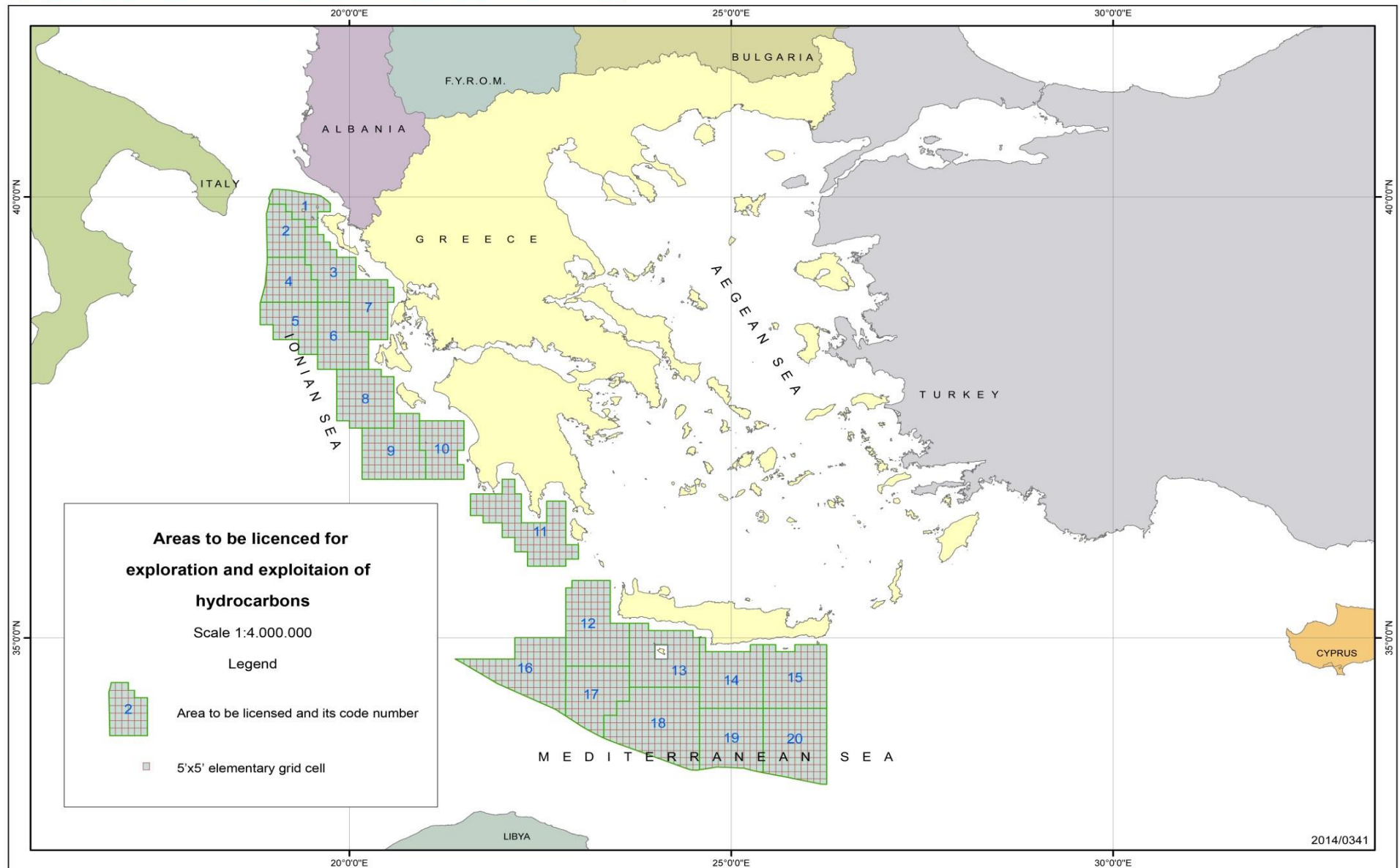
- Projects will play a significant role and will have a great impact in the region since they will address the region's needs for Security of supply and promote gas to gas competition.
- DEPA is endeavoring to secure gas quantities for the regional market at competitive prices.
- DEPA is committed to integrating the SEE market to the benefit of business and households.



Hydrocarbons exploration in Greece: a new opportunity for Europe



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Thank you for your attention

