



SEPTEMBER 27
2017 TCG
HEADQUARTERS



Greece as
**Southeastern
Europe
& East Med
Energy Gas Hub**



MINISTRY OF
ENVIRONMENT
& ENERGY

New landscape in the transportation of Natural Gas to Europe via pipelines

❑ The routes from East to West

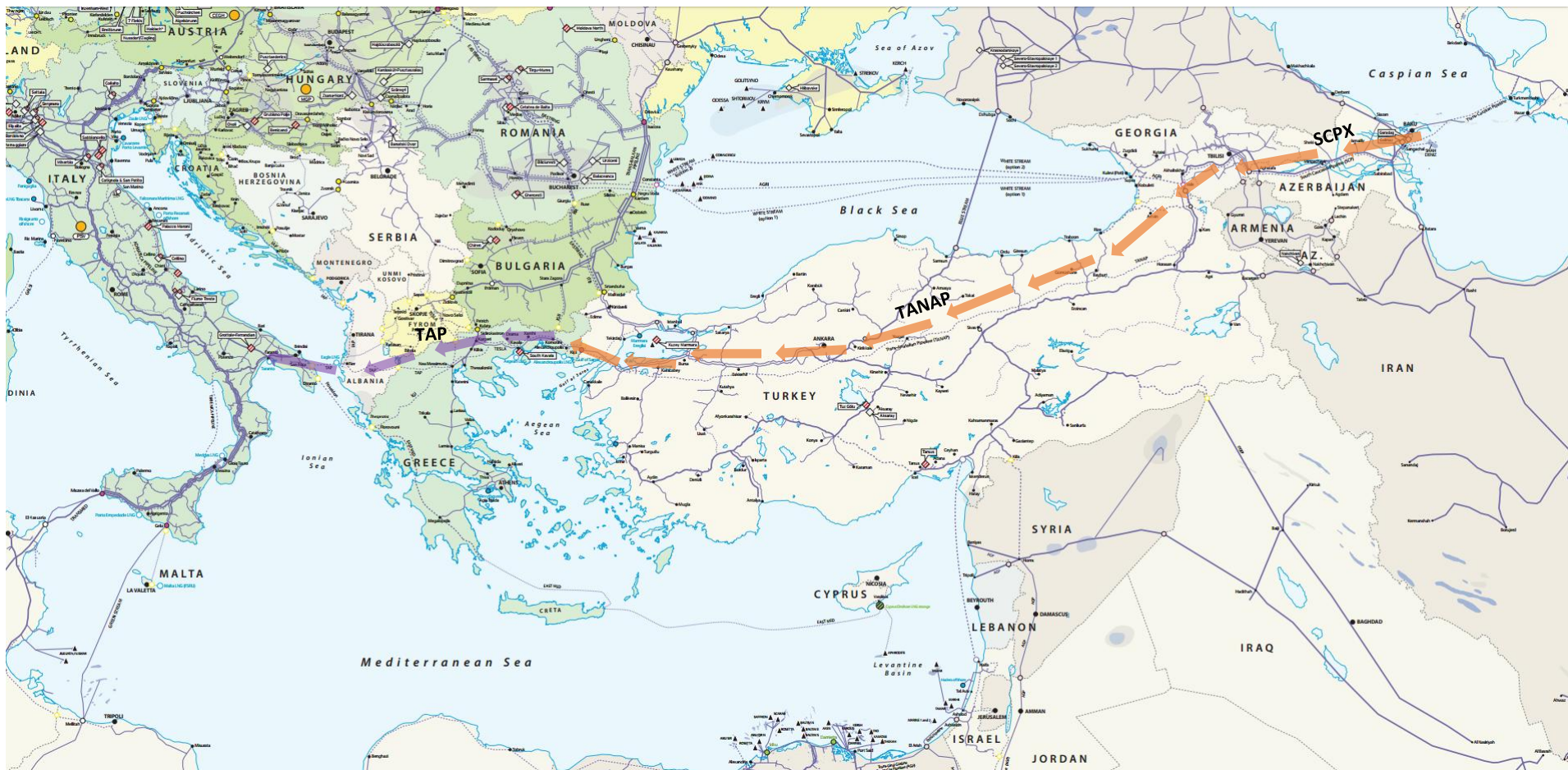
- The South Corridor – SCPx, TANAP, TAP: Moving Azeri Gas to the SE and Western European Markets. 1,850 km through Turkey
- Enhancing the South Corridor with Turkmen gas
- New gas from Iranian fields – Reviving the “Silk Road”
- Eastern Mediterranean gas – Moving gas from Israeli offshore fields through Turkey

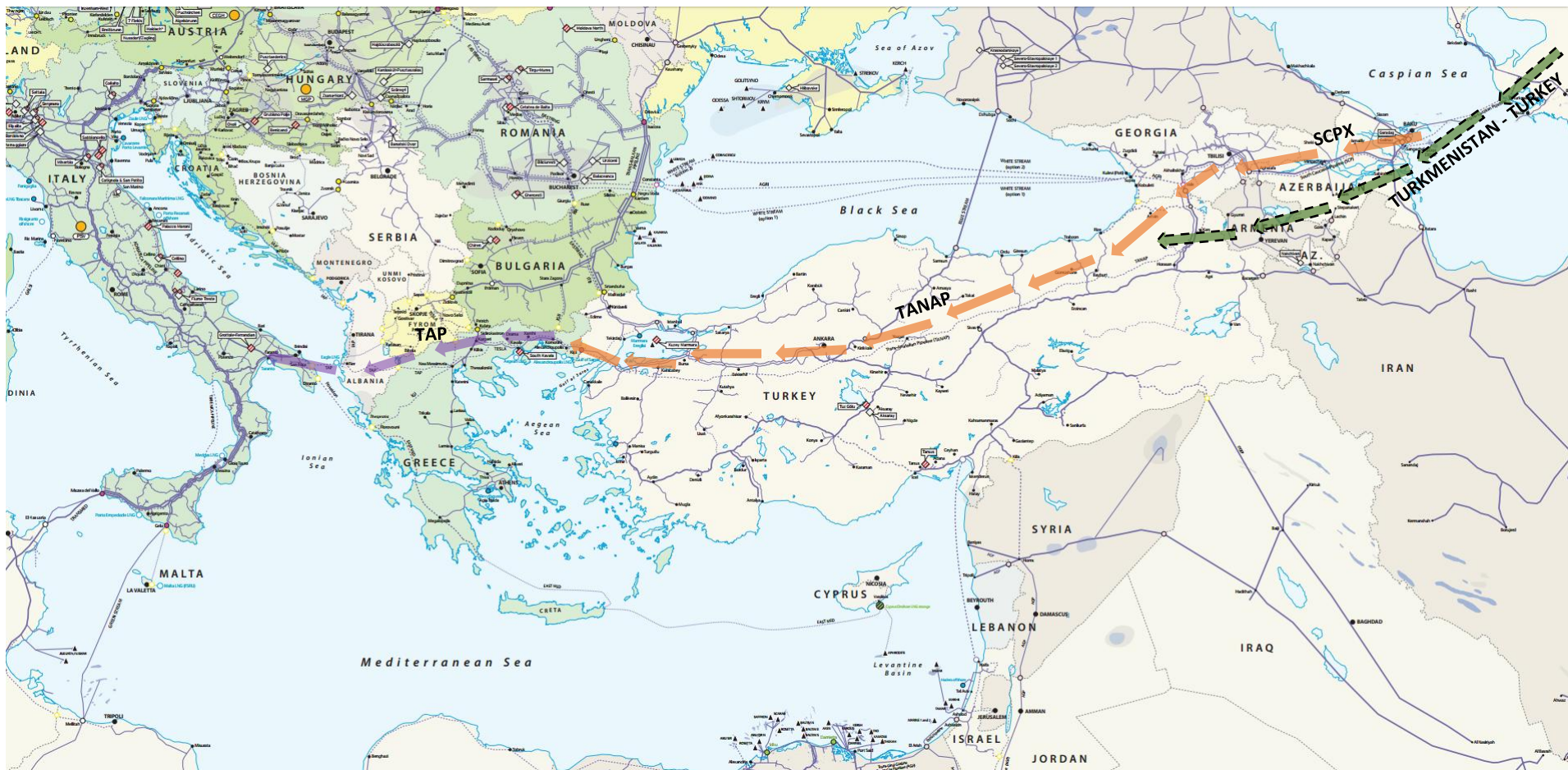
❑ The transportation from Russia to the Balkans

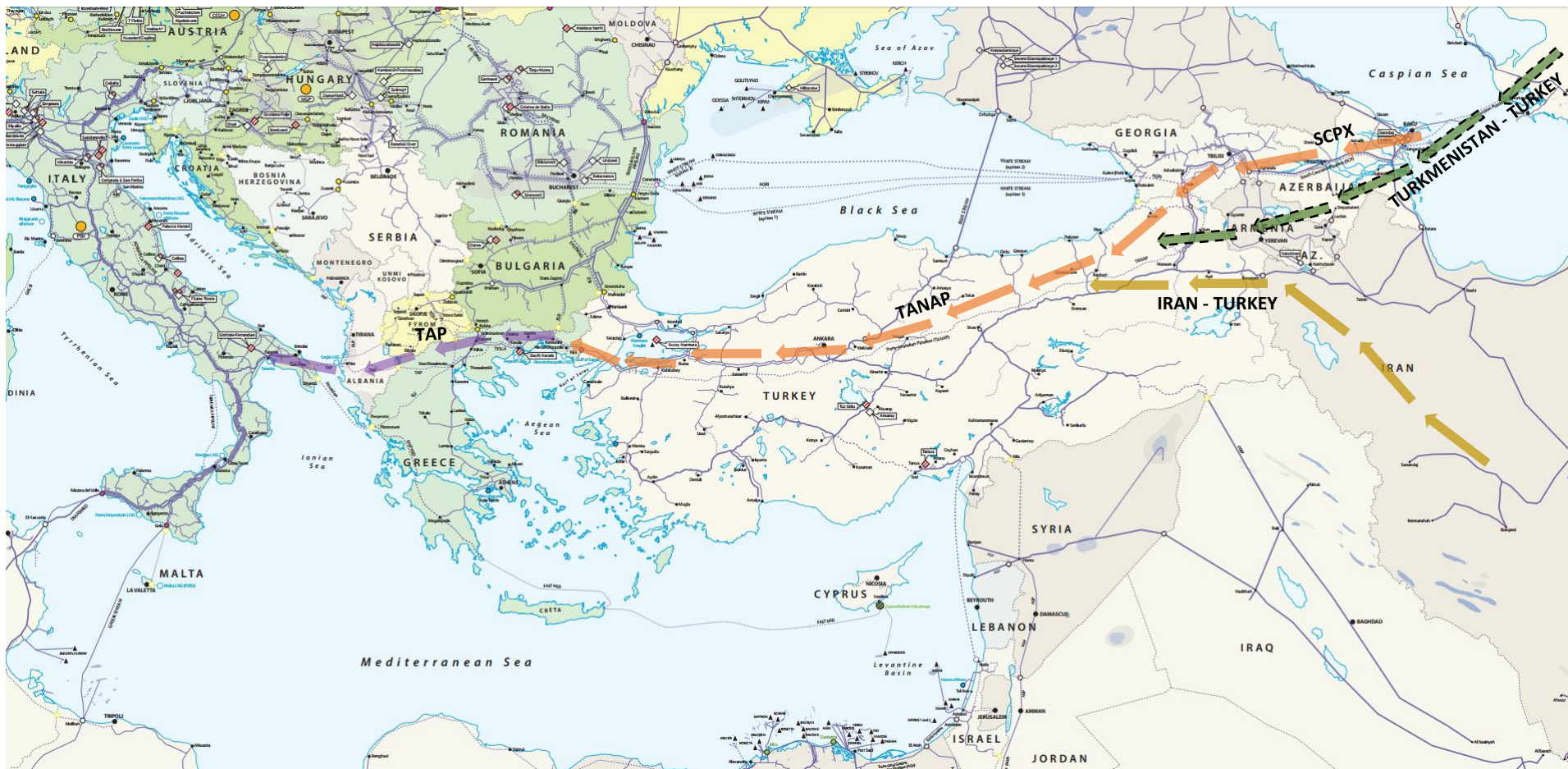
- Ukraine crisis – Discontinuing Russian gas transiting through Ukraine (2019)
- Cancellation of the South Stream Pipeline
- Signing of the Turkish Stream pipeline; 1 or 2 branches
- New routing of Russian gas to the Balkans (Greece, Bulgaria, FYROM) through Turkey
- Potentially more gas to the West (new pipeline of TAP phase II?)

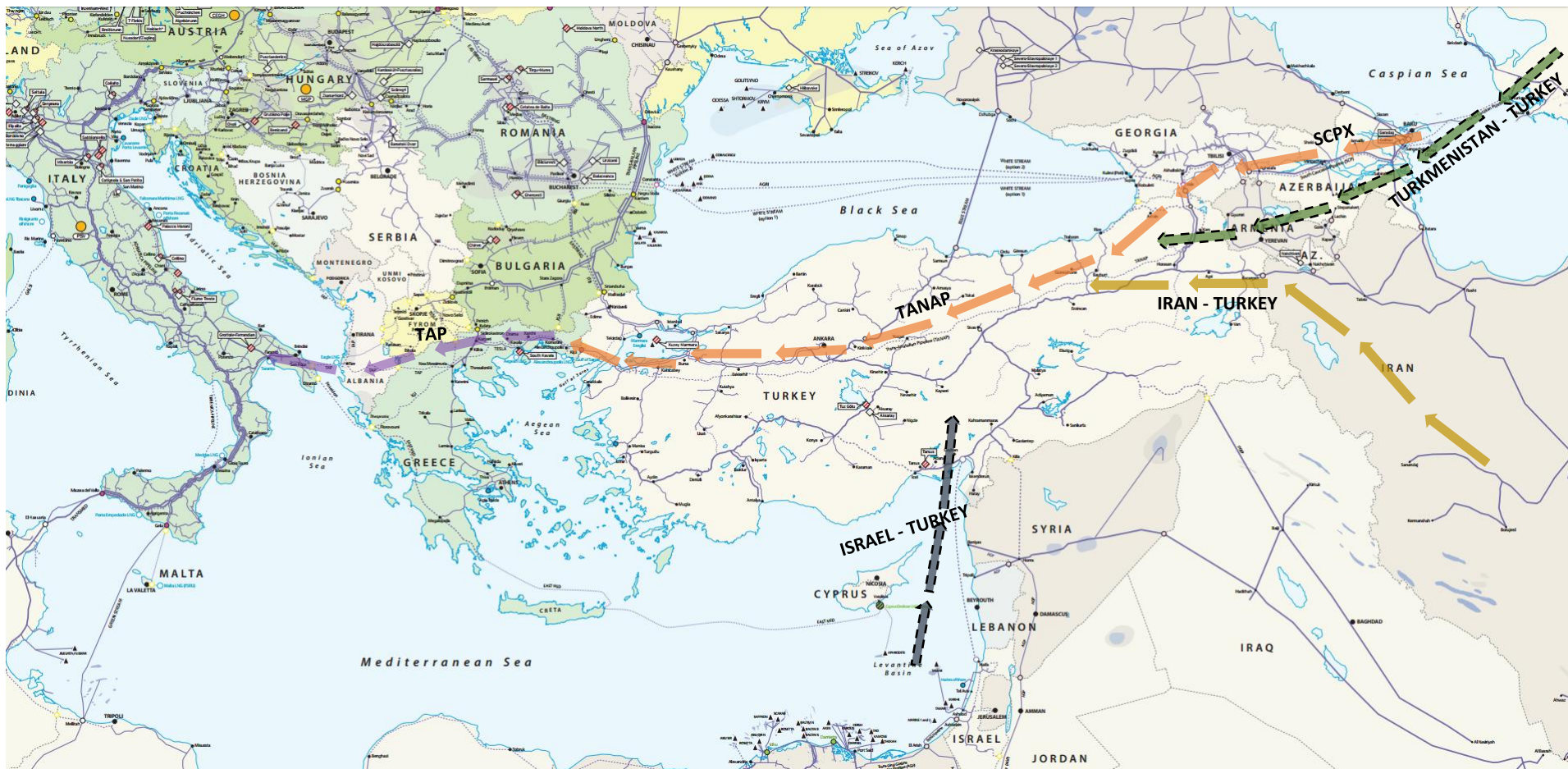
❑ Growing dependence of the European Markets from Turkey





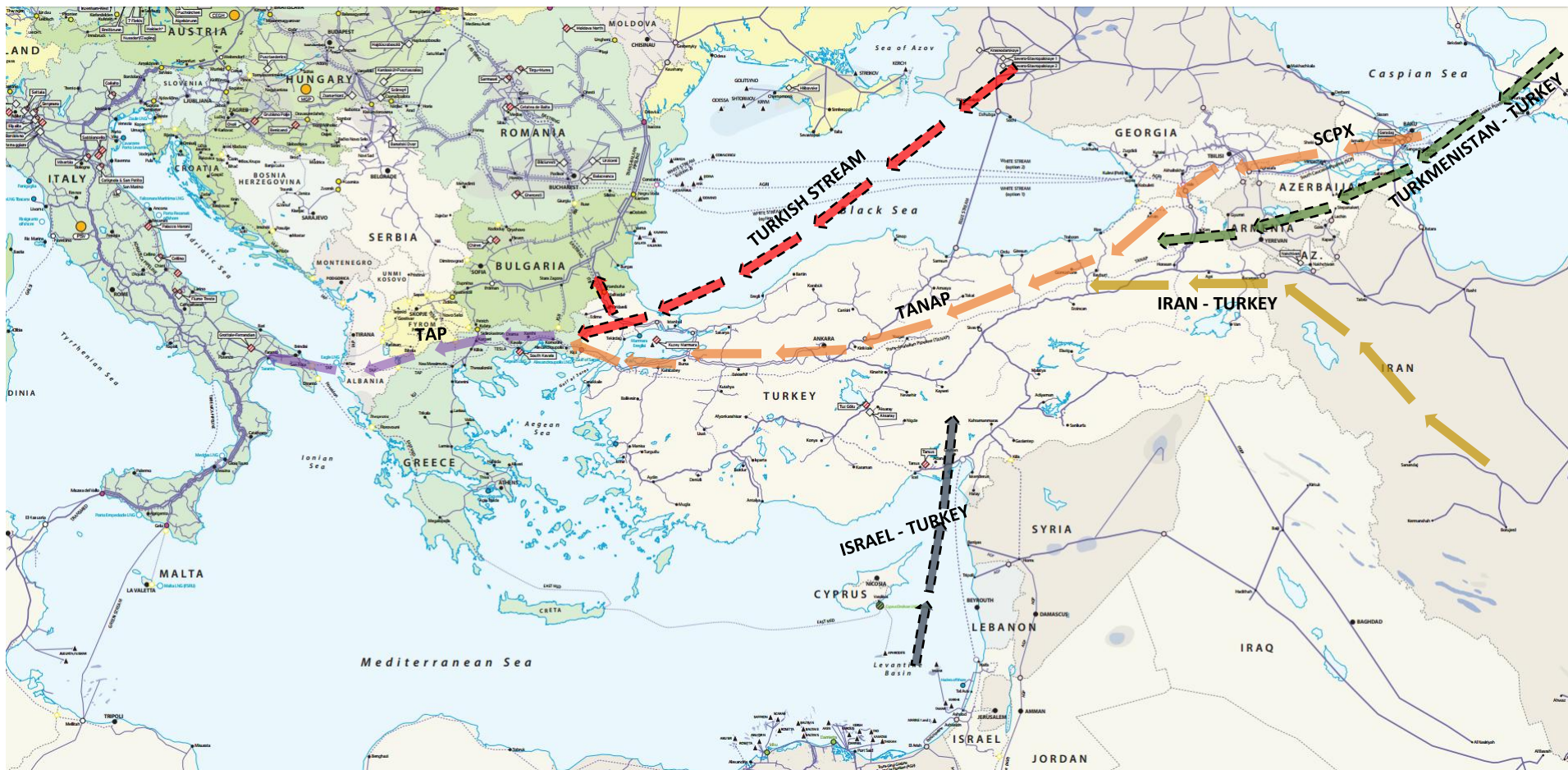












LNG the only realistic alternative to differentiate

- ❑ **Multiple and independent supply sources**
 - Security of supply
- ❑ **Outside of Turkish territory**
- ❑ **Opportunity for US gas to be marketed in SE Europe**
- ❑ **Enhances pricing flexibility**
- ❑ **Safer gas transportation**
 - Offers political security
- ❑ **Lower-cost, easier-to-develop infrastructures**
 - Flexible and scalable
- ❑ **Can support underperforming pipeline projects**

The opportunity for a Gas Hub in Alexandroupolis

- **Why in Alexandroupolis**
 - Increasing liquidity (ITG/NGTS, LNG Alexandroupolis, IGB, TAP, IGI, South Kavala UGS)
 - Access to Vertical and Southern Gas Corridors (IBS, IBR, IGFYR)
 - No other hub in the SE European region
 - Regulatory framework harmonized with EU rules
 - Targeting markets with increasing demand (GR, BG, RS, FYROM, RO, HU)
- **Roadmap to materialization**
 - Infrastructure development (in the country, in the region)
 - Introduction of Balancing Point
 - Virtual Trading Point (with the participation of multiple suppliers and traders/shippers)
 - Creation of the Hub

Speed of implementation is critical



New LNG Terminal in Northern Greece - Alexandroupolis

Project components

The project comprises 3 distinct components:

CAPEX: €370 mln

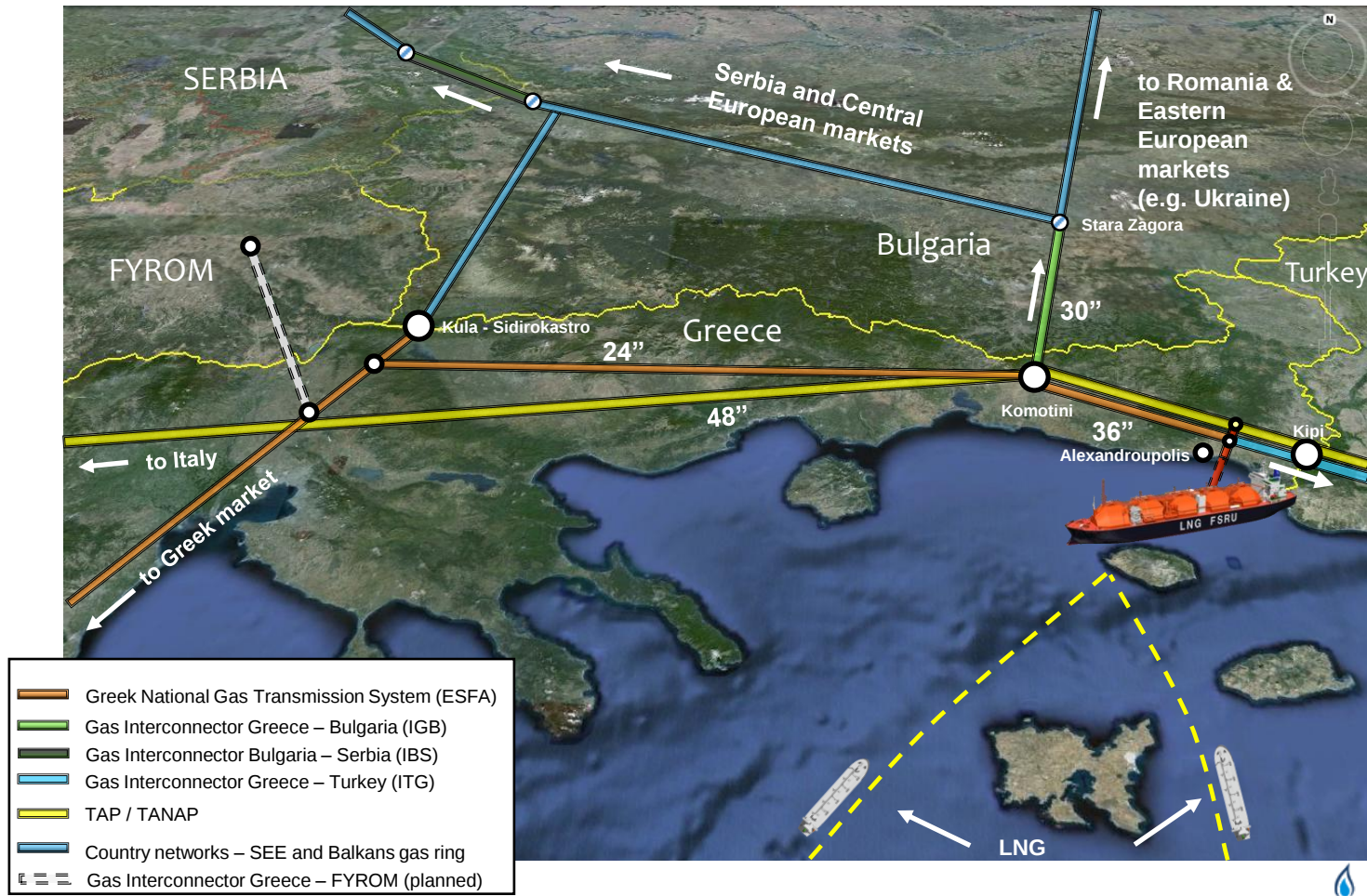
1. The Floating LNG Storage and Regasification unit
2. The permanent offshore structures, including:
 - The Mooring system
 - The Flex Risers and the Pipeline End Manifold (PLEM), transmitting gas from the floating unit to the subsea pipelines
3. The two sections of the natural gas pipeline transmission system, i.e.:
 - The subsea section of total length 24 km
 - The onshore section of total length 4 km and the M/R station connecting the offshore terminal to the Greek National Gas Grid (NNGTS)



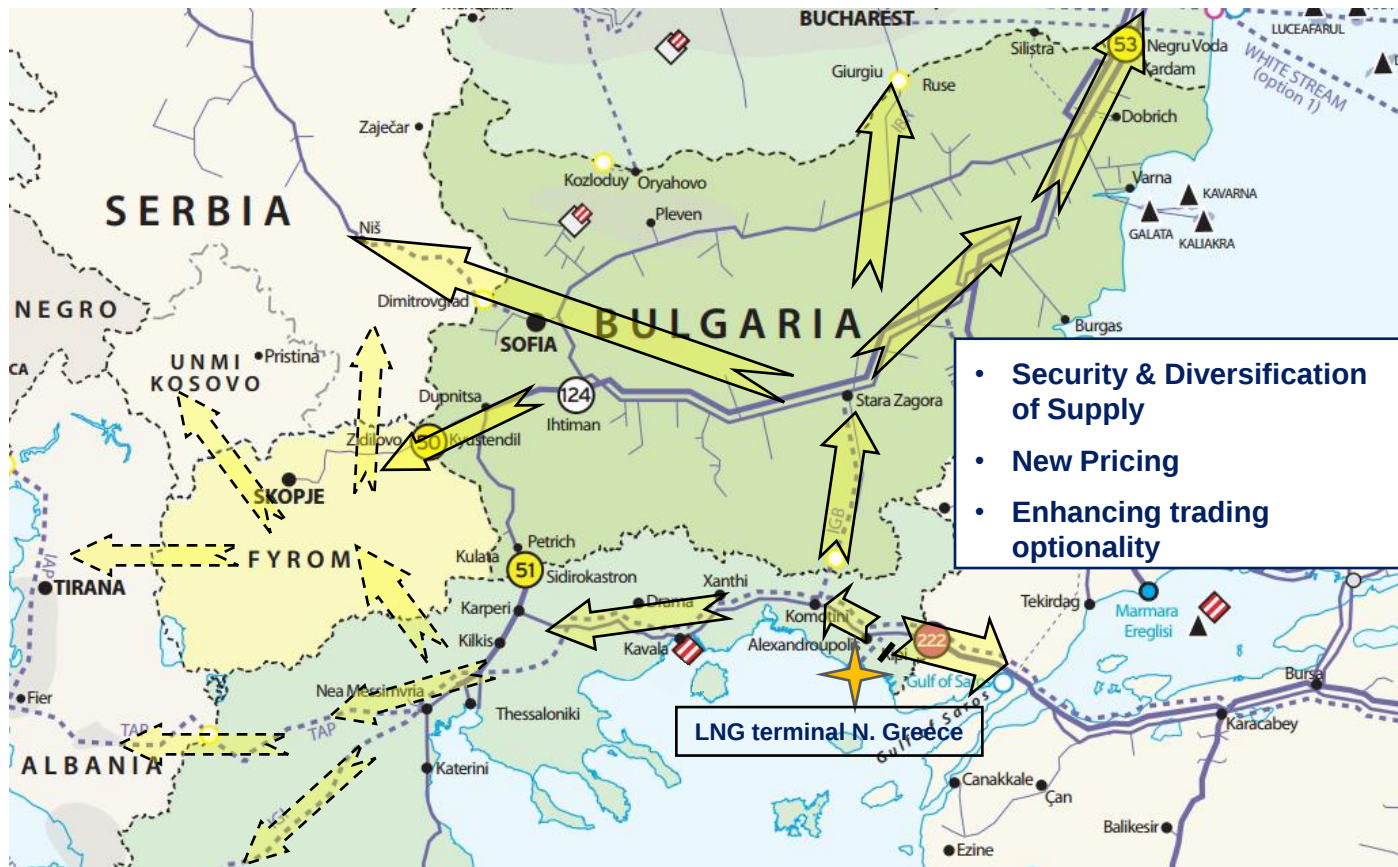
A pipeline system comprising a subsea and an onshore section connects the floating unit to the NNGTS and potentially to TAP



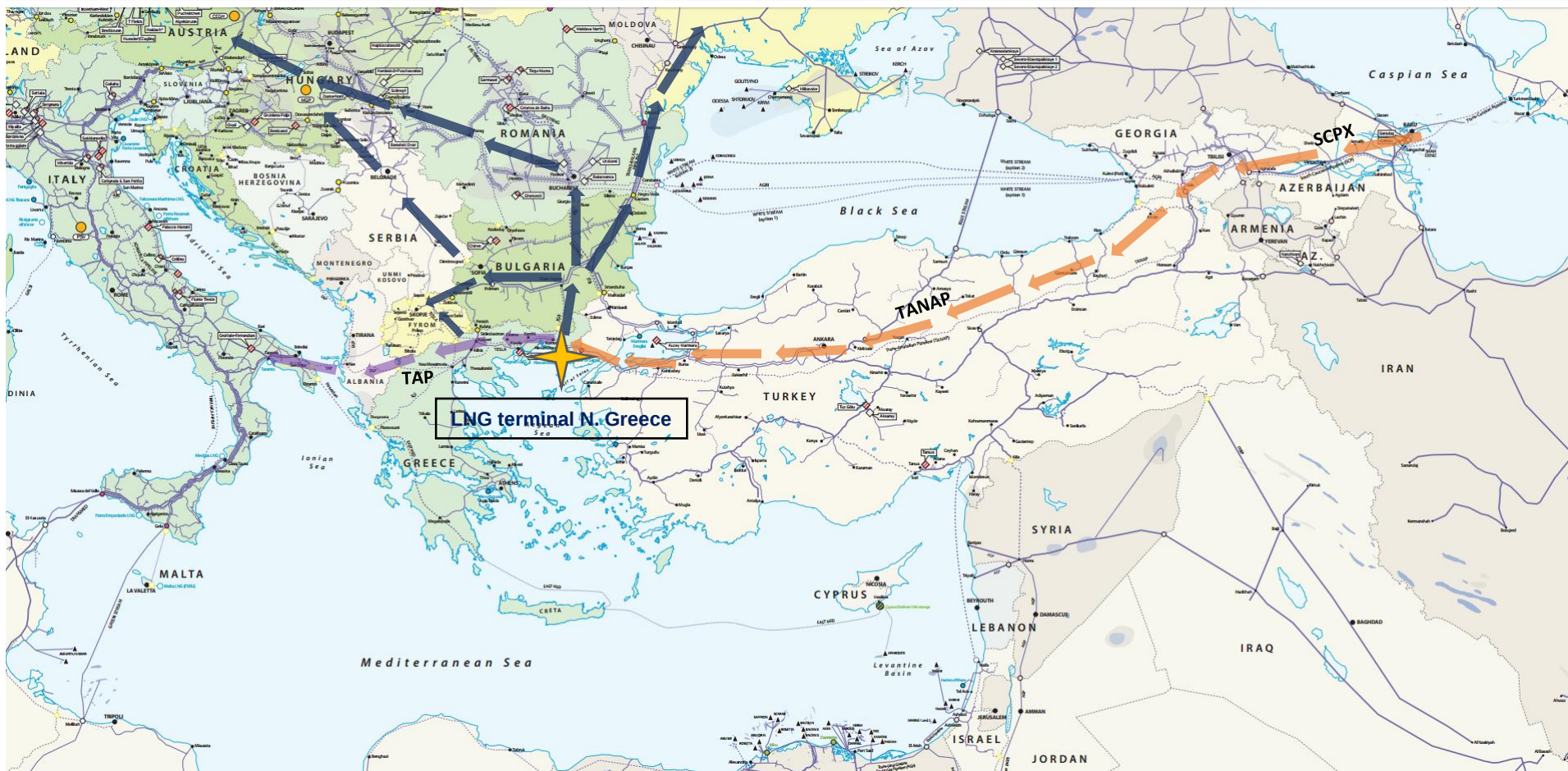
A new energy gateway to Europe



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

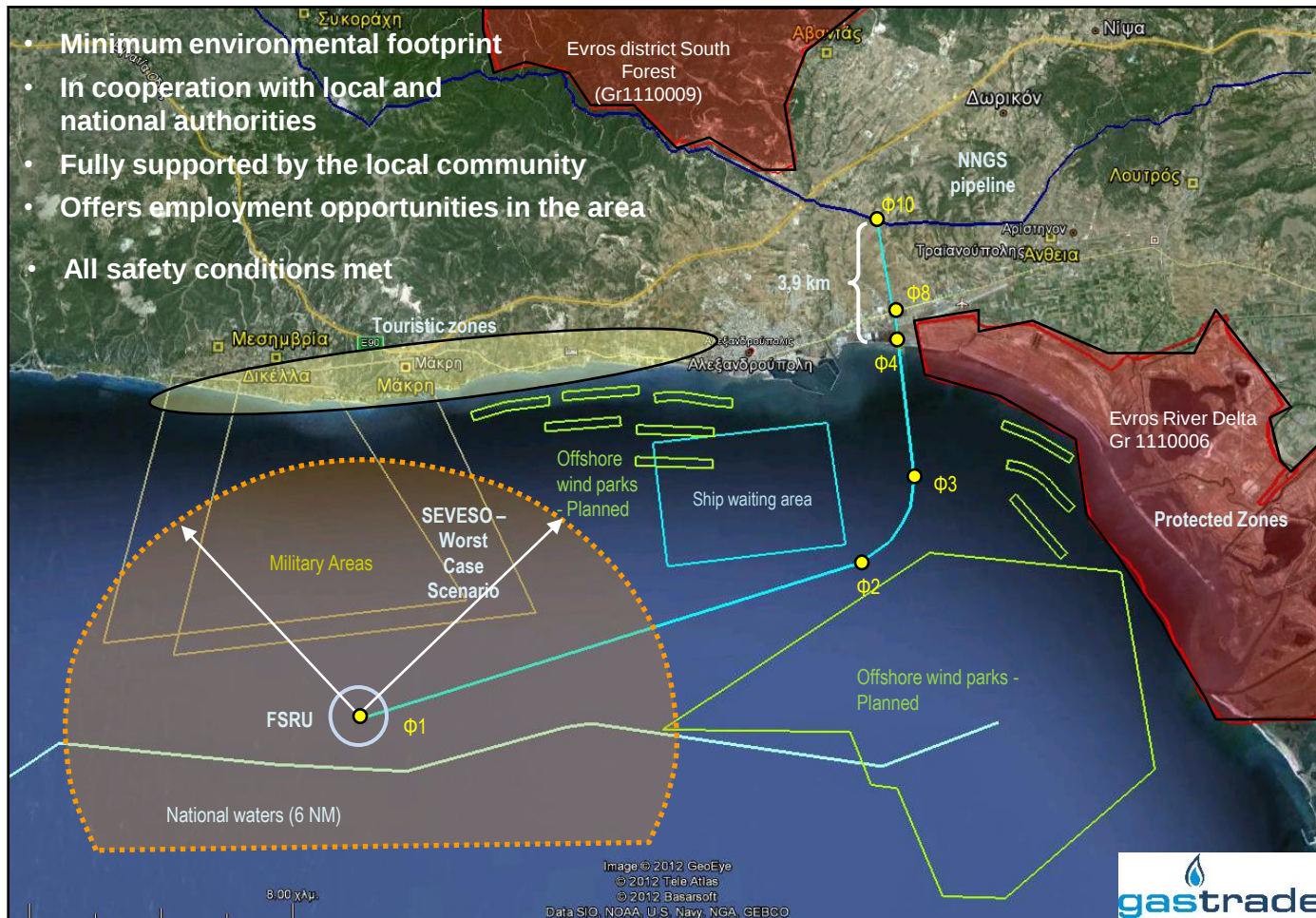


Backbone of the Vertical Corridor – Enhances the South Corridor



Careful consideration of safety, social & environmental aspects

- Minimum environmental footprint
- In cooperation with local and national authorities
- Fully supported by the local community
- Offers employment opportunities in the area
- All safety conditions met



A project of European priority - Enhances supply security and market integration

- ❑ **Projects of Common Interest (PCI)**

Included in the 1st and 2nd list (2013 & 2015) of PCI Projects

Will be included also in the 3rd list

- ❑ **Connecting Europe Facility (CEF)**

Project was awarded grant for FEED study and Preparation of EPC/ITT Dossier

Study Completed: August 31, 2017

- ❑ **Included in the European Energy Security Strategy**

- ❑ **CESEC Initiative**

Included as “Conditional Priority Project” (New LNG Terminal N. Greece)

GasLog joining the Project

- ❑ On February 9, 2017, GasLog Cyprus Investments Ltd. a fully owned subsidiary of GasLog Ltd. acquired 20% in the share capital of Gastrade S.A.
- ❑ GasLog is an international owner, operator and manager of LNG carriers providing support to international energy companies as part of their LNG logistics chain. GasLog's consolidated fleet consists of 27 LNG carriers (22 ships on the water and 5 on order). GasLog Ltd. is listed in the New York Stock Exchange
- ❑ GasLog will undertake:
 - the Operations and Maintenance of the Alexandroupolis LNG FSRU
 - the supervision of the Shipbuilding Contract for the Alexandroupolis LNG FSRU

Project status update & Key Milestones

Licensing completed

FEED completed Aug 2017

DEPA & BEH join the Project Dec 2017

Terminal Use Agreements finalized Dec 2017

Final Investment Decision (FID) 30.03.2018

Shareholding structure and TUAs completed

Financing lined up

EPC contracts signed

Project construction completed Oct 2019

FSRU delivery from yard Nov 2019

Operations License obtained Feb 2020

Commercial Start 27.03.2020

Thank you