

Towards a Regional Gas Marketplace

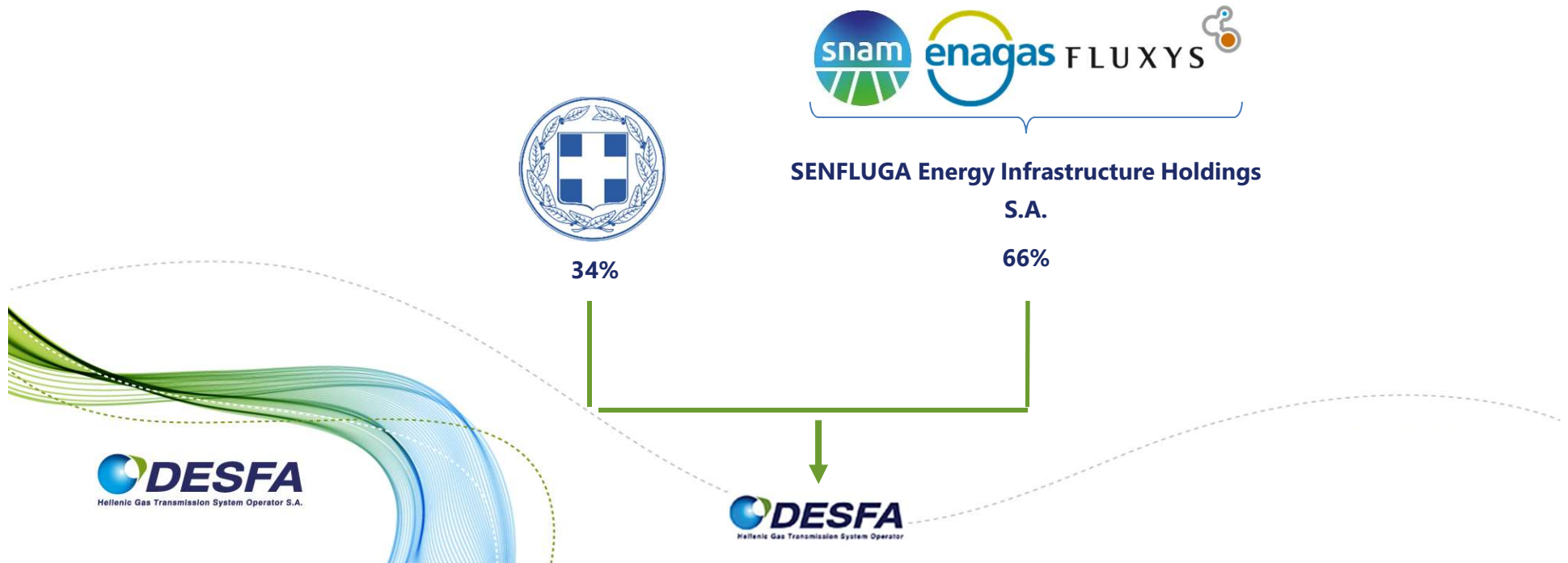
Gerasimos Avlonitis

2nd IENE Colloquium on "The Geopolitics of Energy Transition" | March 5, 2019



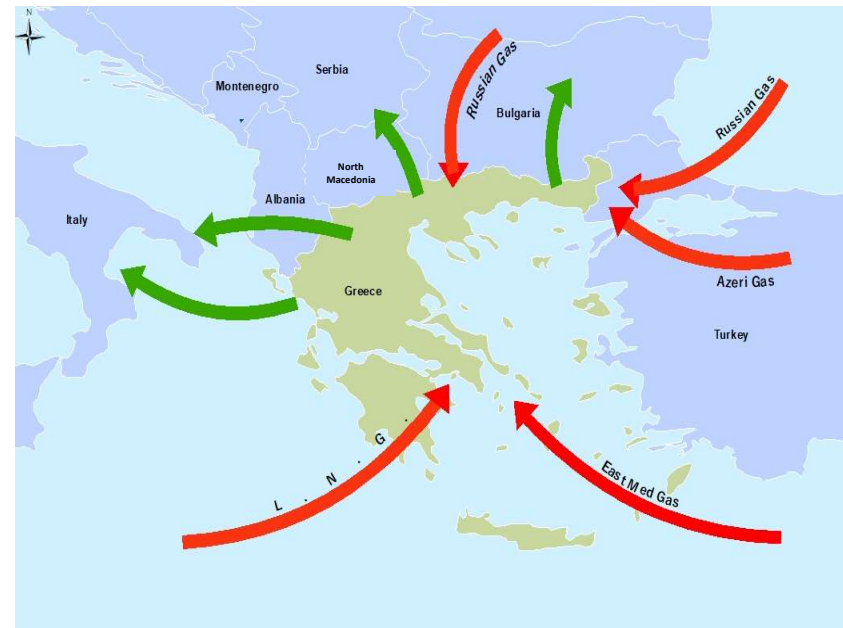
INTRO: THE HELLENIC GAS TRANSMISSION SYSTEM OPERATOR (DESFA)

- ❑ Established in **March 2007**, DESFA owns and operates the **Greek National Natural Gas System (NNGS)**, which consists of the **National Natural Gas Transmission System** & the **LNG Terminal in the islet of Revithoussa**.
- ❑ After the completion of a privatization process in the **20th of December 2018**, DESFA was certified as an **Ownership Unbundled Operator** under the 3rd EU Energy Package
- ❑ DESFA operates, maintains and develops the National Natural Gas System in a safe, reliable and economically efficient way and offers (a) regulated Third Party Access services in a transparent and non-discriminatory way and (b) a range of non-regulated services to a number of national and international clients



INTRO: OPENING UP NEW ROUTES FOR GAS - AT THE HEART OF THE SOUTHERN GAS CORRIDOR

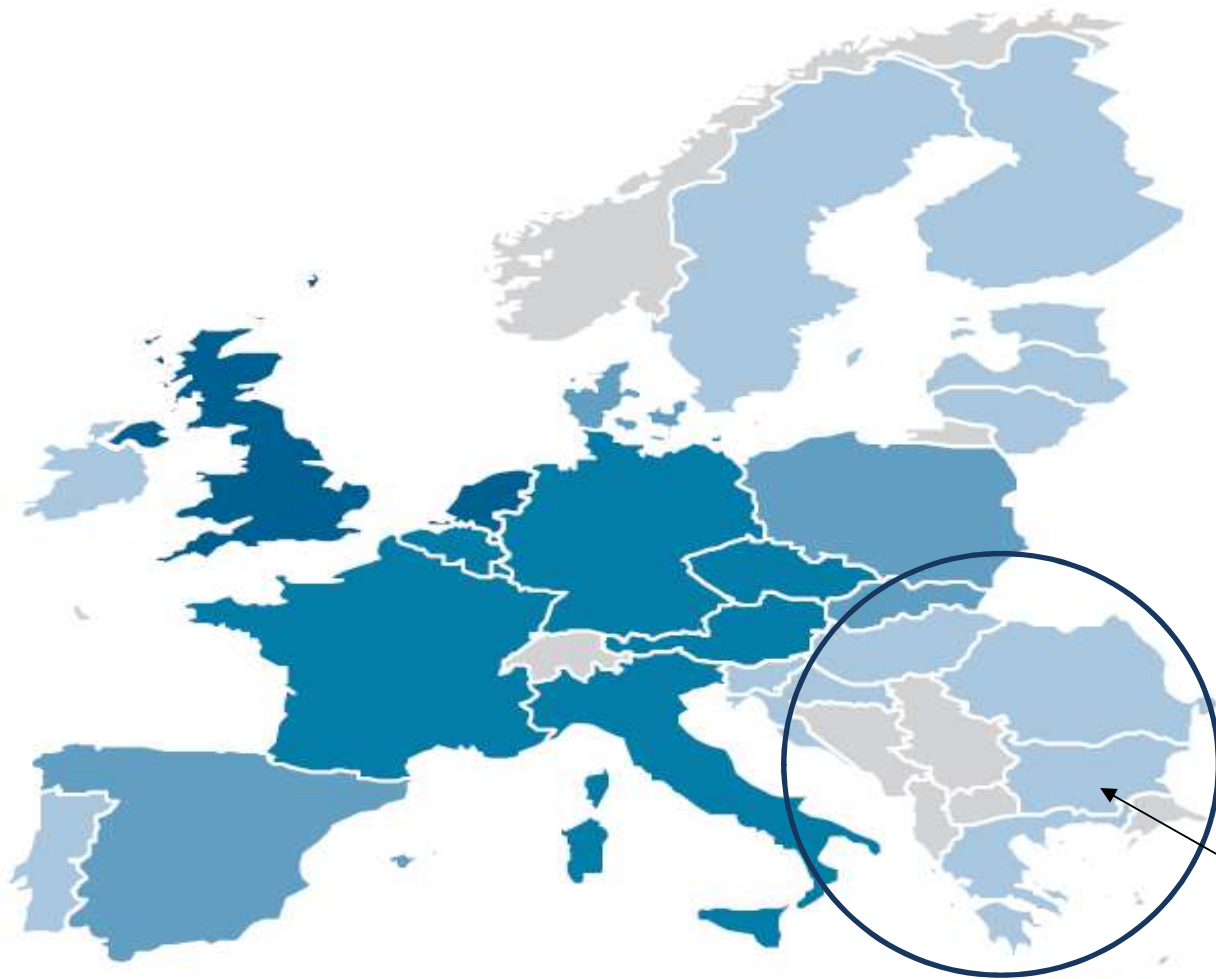
- Possibilities for transport of gas from Revithoussa or other entries to our neighbors and beyond through:
 - Projects promoted by CESEC:
 - the Vertical Gas Corridor
 - Trans Balkan Pipeline physical reverse flow
 - New future interconnections of the DESFA system:
 - with TAP
 - with IGB and any other independent projects
 - Existing interconnections after signing Interconnection Agreements
 - Bulgaria: Completed 2017
 - Turkey: Ongoing work
- Potential for being part of new transit routes (e.g. Levantine and new Russian gas) to Europe in the future



Development of a Regional Gas Marketplace



WHERE DO WE STAND TODAY?



■ Established hubs

- Broad liquidity
- Sizeable forward markets → supply hedging
- Price reference for other EU hubs & for long-term contracts indexation

■ Advanced hubs

- High liquidity
- More reliant comparatively on spot products
- Progress on supply hedging role but relatively lower liquidity levels of longer-term products

■ Emerging hubs

- Improving liquidity from a lower base taking advantage of enhanced interconnectivity & regulatory interventions
- High reliance on longer-term contracts & bilateral deals

■ Illiquid-incipient hubs

- Embryonic liquidity at a low level & mainly focused on spot
- Core reliance on long-term contracts & bilateral deals
- Diverse group with some jurisdictions having:
 - Organised markets in early stage
 - To develop entry-exit systems

DESFA STRONG POINTS FOR REGIONAL HUB DEVELOPMENT

Prerequisites	Status
Open, transparent and non-discriminatory Third Party Access regime...	Fully EU-compliant, modern and user friendly TPA and trading regime, facilitating activation of international players
Available capacity and interconnections	<ul style="list-style-type: none">• Capacity availability at LNG terminal• Physical and virtual reverse flow capability in the GR-BG IP• Interconnection with TAP by 2020 as well as with other future projects in the area• Ongoing discussions for Interconnection Agreements at all current and future IPs
Diversified gas sources	Most diversified supply options in the region (except possibly except Turkey)
Reliable price signals...	<ul style="list-style-type: none">• Balancing Platform and short-term market prices since 1st July 2018• Work starting on establishment of a Trading Platform

REFORM OF THE BALANCING REGIME

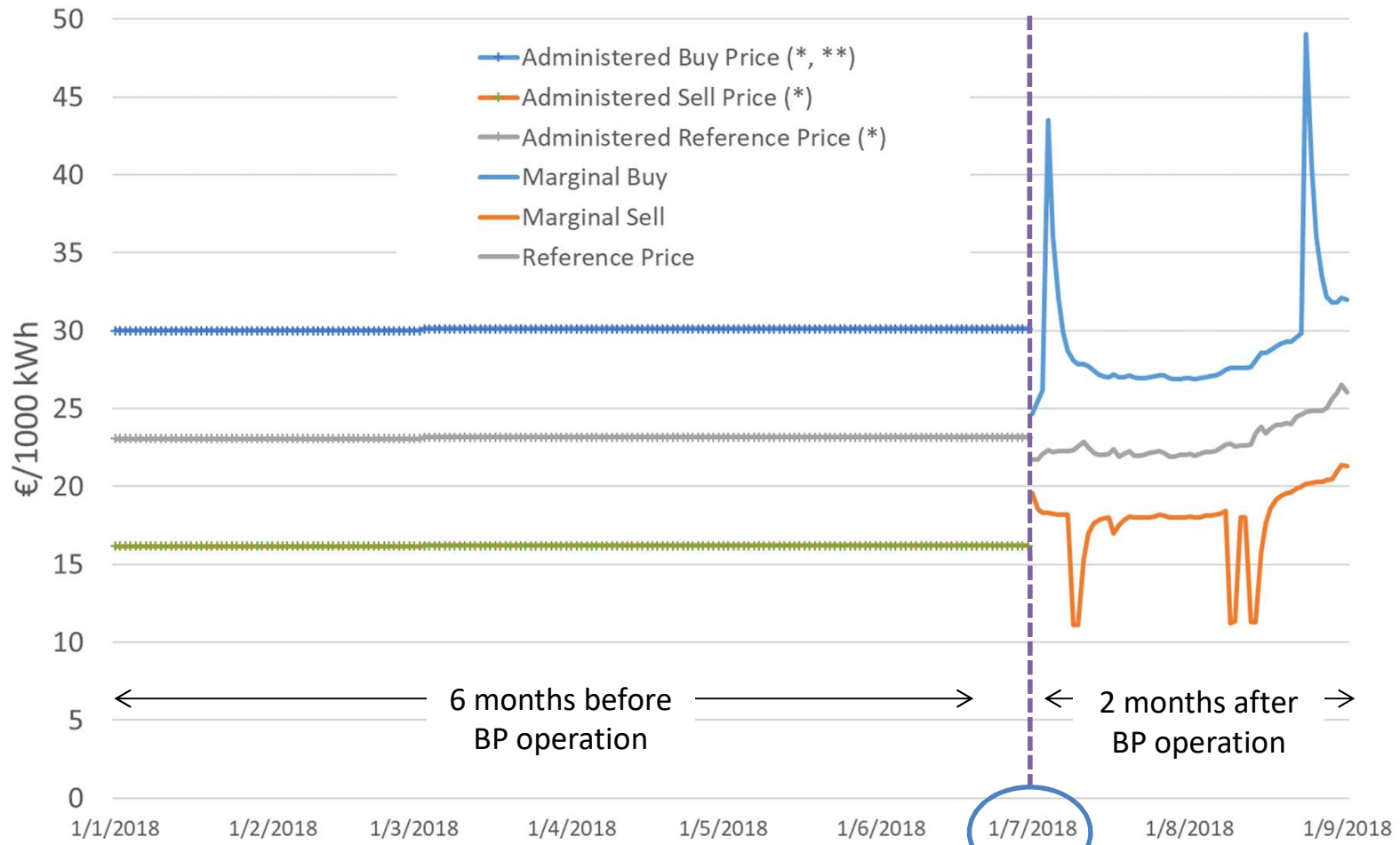
VTP, Balancing Platform, short-term price development



Since **July 1st 2018** The new system brings a series of **new and fundamental challenges in the gas market**, such as:

- ❑ **Virtual Trading Point:** Allowing access to the market of “paper” traders – **no need to book capacity in order to trade**
- ❑ **Introducing a market-based balancing regime and a respective Balancing Platform**, where trades between the TSO and the shippers/traders will take place
- ❑ **Establishing and publishing a reference daily price**, based on short-term fundamentals

IMBALANCE SETTLEMENT PRICES BEFORE AND AFTER BALANCING PLATFORM OPERATION

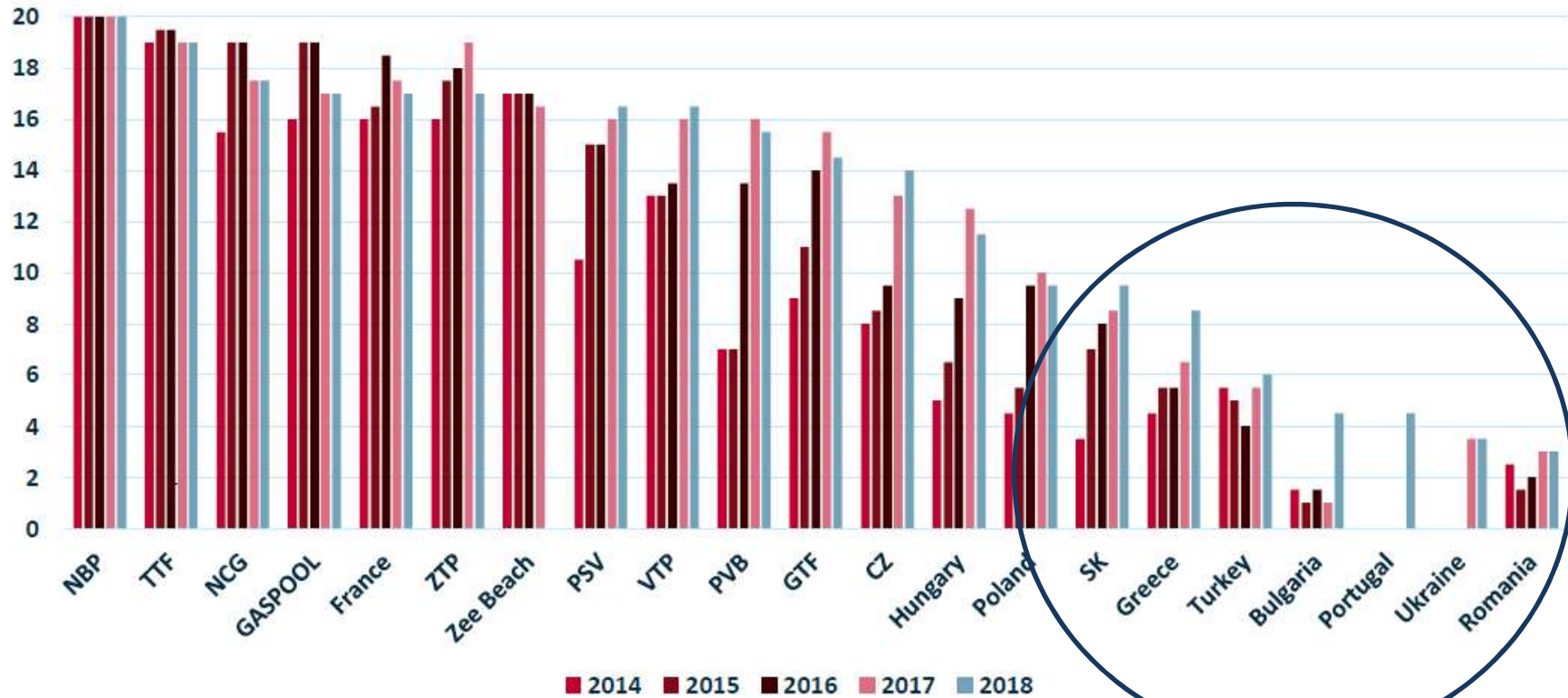


(*) Details on the mechanism for administered price calculation can be found in the Greek Network Code (3rd Revision, as well as RAE- approved relevant methodology on DESFA's website)

(**) This is the second (middle) of 3 different prices used for the negative imbalance settlement (130% of reference price) and was chosen for demonstration purposes.

HOW THE MARKET EVALUATES US...

EFET 2018 Gas Hub Benchmarking Study



NEXT CHALLENGE: REFORM OF THE TRADING ENVIRONMENT

The next phase in Balancing Network Code implementation:
Reform of the trading environment

- ❑ The next challenge includes the **introduction of anonymous, screen-based trading** in the Greek Gas Market.
- ❑ Both **DESFA, for balancing purposes** & the **market participants, for commercial purposes**, will use **the same trading platform** to exchange gas quantities



- ❑ Marginal gas prices will be based on the **transactions carried out at the trading platform** both by market participants and the TSO for balancing

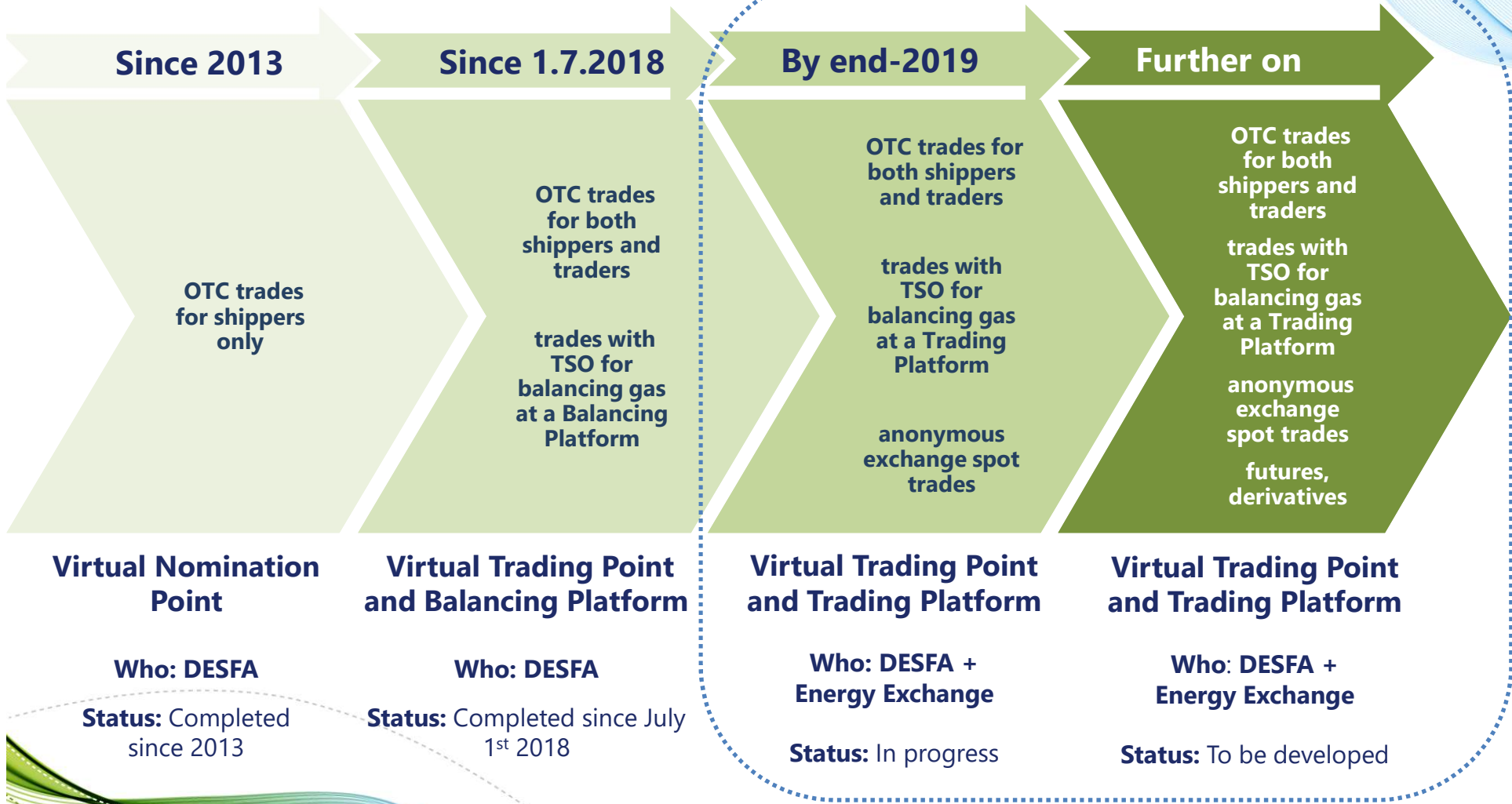
DESFA'S PARTICIPATION IN THE HELLENIC ENERGY EXCHANGE: EXPLORING SYNERGIES

- ❑ DESFA is **participating as a shareholder (7%)** in the **Hellenic Energy Exchange, established 18 June 2018**
- ❑ Through its participation, DESFA will have the opportunity to:
 - ✓ **Exploit economies of scale & promote efficiency** by sharing infrastructure & avoiding the duplication of efforts;
 - ✓ Make **use of the expertise of the rest of the current & prospective shareholders** in organized markets & their **commitment in delivering a well-functioning market not only for Greece, but also for the whole region**



HEnEx has already awarded a study for the development of its activities in the natural gas market, **with a regional perspective**, including necessary actions for **BAL NC implementation** and a **derivatives** market

IMPLEMENTATION ROADMAP



Thank you for your attention!



www.desfa.gr