



Hydrocarbon Industry Developments in Cyprus & the Eastern Mediterranean

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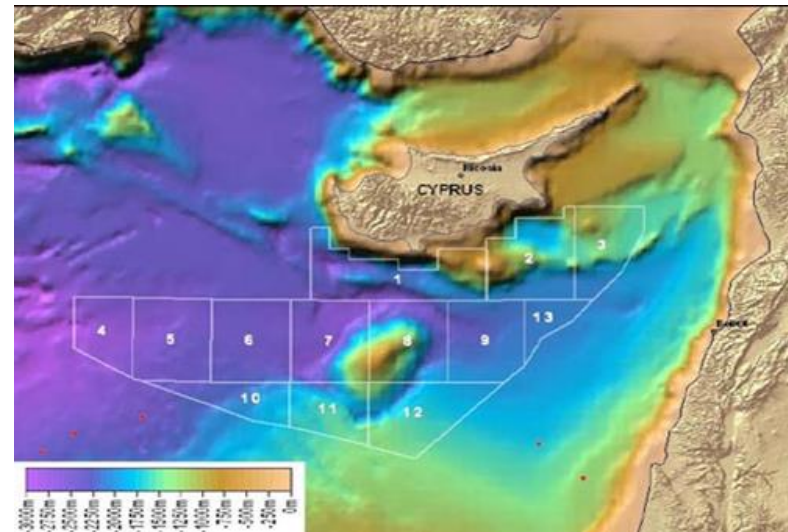


The Cyprus Hydrocarbons Company (CHC)

Cyprus' National Oil Company, operating as the **commercial and technical arm** of the Republic of Cyprus (RoC)

CHC:

- **Markets** RoC share of hydrocarbons production
- **Participates** in infrastructure
- **Supports** the Cypriot Authorities
- **Aspires** to be an operator (in the very long term)



CHC People – A Strong Diverse Team

Extensive relevant experience, specializing in every part of the Industry Spectrum

- Skillpools
 - Subsurface: Geology, Geophysics and Reservoir Engineering
 - Engineering: Subsea, Facilities, Midstream and HSE
 - Commercial: Business Development and Energy Trading
- International Oil and Gas Culture: Major IoCs, NoCs, Energy Hubs
- Organizational Management













✓ *Safeguard & Enabler for the Industry and the Republic*



Cyprus EEZ – An Overview



RoC and CHC Priorities

Block	Operator	Partners	Priorities
12		 	Aphrodite Discovery: Monetisation
11			1 st Drilling: Onisiphoros, ENI joined TOTAL in March 2017
6			3 rd Licensing Round – Awarded in April 2017 Exploration
8			3 rd Licensing Round – Awarded in April 2017 Exploration
10			3 rd Licensing Round – Awarded in April 2017 Exploration
2,3,9			Evaluation of Data, identification of prospects



Aphrodite: Monetisation

Key objectives are to ensure:

- Gas to Cyprus in a reliable and cost effective manner
- Long Term Contracts with Anchor Buyers (Via Egypt)

Status:

- Ongoing Negotiations with Potential Buyers
- Parallel progression of all agreements and plans required ahead of FID



Block 11: Onisiphoros

- Data re-evaluated at the back of new regional Geological Plays
- Prospect Identified
- Shore-base arranged – TOTAL Ready to Drill
- Drilling to take place within Q3'17
- ENI joined TOTAL in Block 11 in March 2107

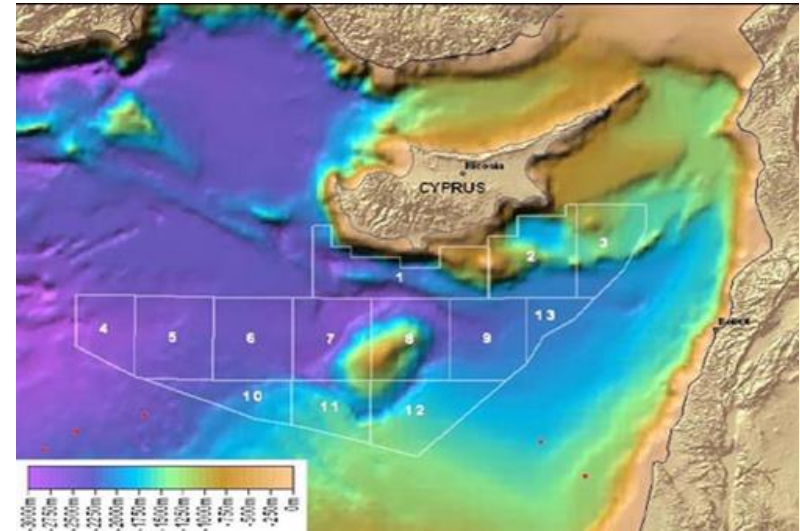


3rd Licensing Round

Zohr discovery in Egypt at 6km from Block 11 of Cyprus EEZ

- In different geological formations
- New prospects and renewed interest
- Re-evaluation of potential
- Developing new geological models
- Identification of new prospects
- Increased interest in Cyprus EEZ
- Existing and other oil majors

→ *3rd Licencing Round in Cyprus EEZ*



Cyprus 3rd Licencing Round

Eastern Mediterranean Hydrocarbon Plays

Four significant hydrocarbon plays offshore Cyprus

- **Cenozoic siliciclastic play in Levantine basin: PROVEN**
 - Leviathan, Tamar, Dalit and Aphrodite discoveries: ~ 40 TCF
- **Carbonate platform play on Eratosthenes Block: PROVEN**
 - Zohr discovery ~ 30 TCF
- **Cenozoic siliciclastic play in Herodotus basin: PROJECTED**
 - Similar discoveries in distal Nile Delta offshore Egypt by Shell, possible seismic Direct Hydrocarbon Indicators (DHI's)
- **Mesozoic siliciclastic play in Levantine basin: CONCEPTUAL**
 - Lower Cretaceous sands are exposed onshore Israel, Lebanon and Cyprus, not been tested by wells in the deep Levantine basin



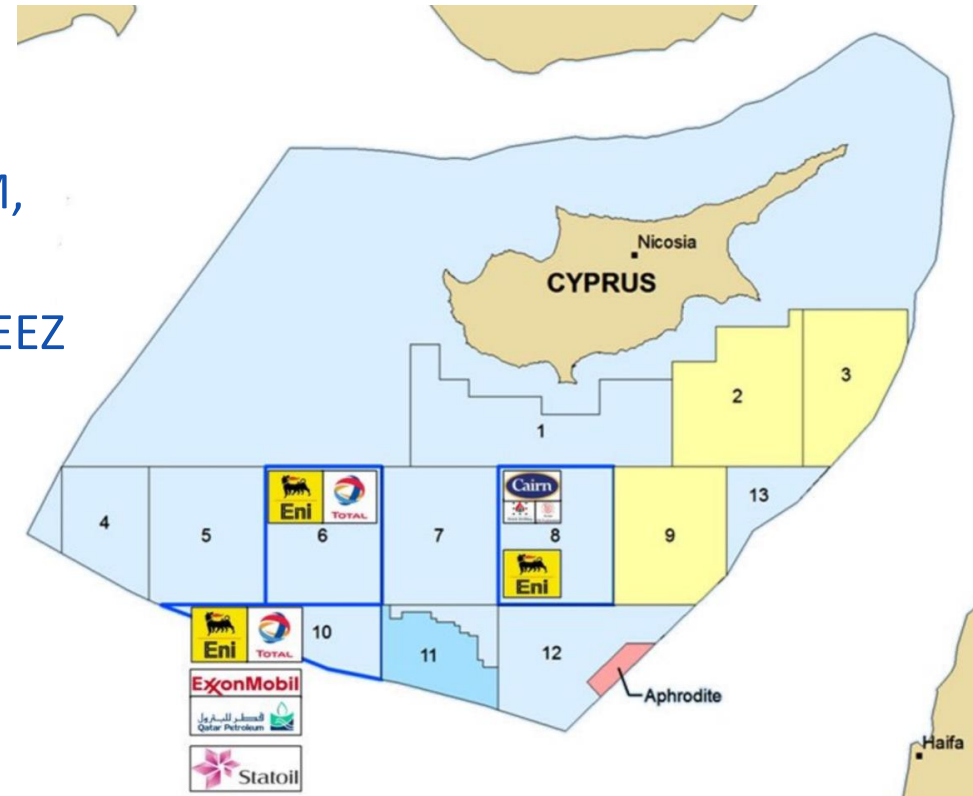
3rd Licensing Round (Blocks 6,8 and 10)

Interest:

- 3 Blocks, 6 Bids, 8 Companies
 - 4 Super Majors Coming Forward (XoM, Eni, Total, Statoil)
- Strong vote of confidence for Cyprus EEZ

Status:

- Negotiations concluded March 2017
- Contracts signed early April 2017



ExxonMobil

قطر للبترول
Qatar Petroleum

TOTAL

eni



3rd Licensing Round - Awards April 2017

Block 10:

- ExxonMobil, Qatar Petrol

Block 8:

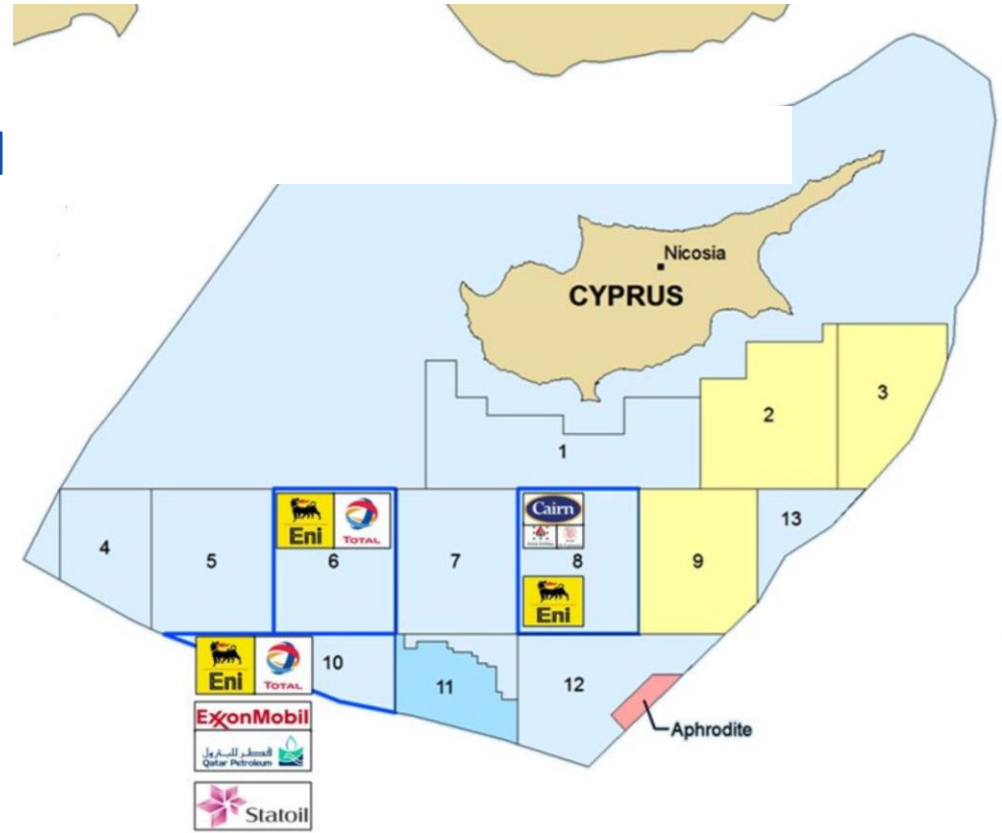
- Eni

Block 6:

- Eni, Total

Next:

- Exploration follows
- A total of 12 exploration wells will be drilled in 6, 8, 10



Potential Infrastructure to Support Export Activity – Longer term horizon

In a longer term horizon and depending on future gas discoveries in Cyprus and the region, potential export options include:

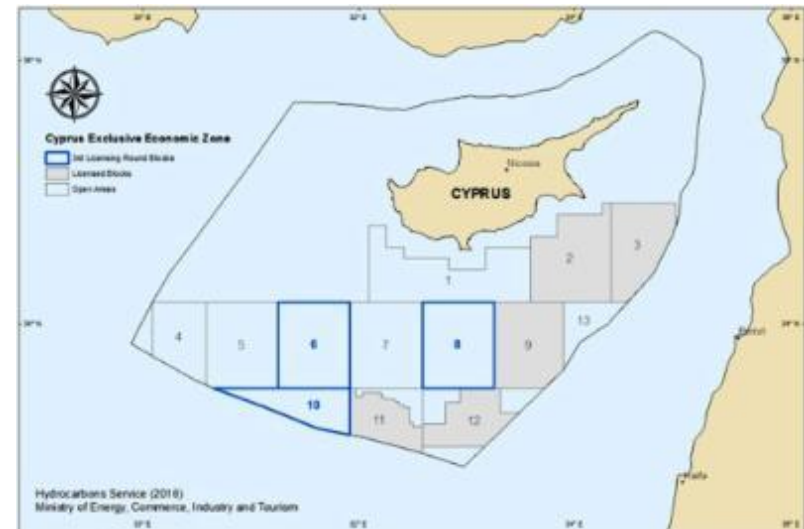
- Regional pipelines
- Onshore LNG
- FLNG
- CNG
- Eastern Med Pipeline

→ *Cyprus has the potential to serve as a regional energy hub and a corridor to Europe and world markets*















What next in Cyprus EEZ ?

- Block 12, Aphrodite - exploitation license, marketing and sales, production
- Blocks 11, 2, 3, 9 - TOTAL and ENI/COGAS continue the evaluation of the hydrocarbon potential, identification of prospects and drilling campaigns in 2017
- Blocks 6, 8, 10 – Total of 12 new exploration wells



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→ *These create many Business Opportunities for international collaborations and investments*



Why Cyprus ?

- First gas discovery in the only EU country in the region
- Development of appropriate business, licensing, regulatory environment and NoC
- Increased prospects for new discoveries following Zohr
- Strong interest from oil majors to obtain new licenses in Cyprus EEZ
- Successful 3rd licensing round with supermajors
- Recent awards open up these opportunities
- Regional collaborations established between the Cyprus Government and countries in the region
- Several bilateral and trilateral agreements signed create confidence
- Increasing need and desire for regional stability to support exploitation of hydrocarbon resources
- Potential benefit for the countries of the region and potentially EU



→ Looking beyond the direct benefits from the potential hydrocarbon discoveries

→ What do these prospects mean for a country like Cyprus?

→ How can Cyprus make the most of this opportunity ?

→ What are the business opportunities in this area?



This is a significant Opportunity for Cyprus to Reposition Itself

The discovery of natural gas offshore Cyprus is

- A significant development for the island and the region
- *As it is emerging out of a financial and economic crisis*

With the right policies and effective management

- Cyprus's energy resources can help the country
- To emerge from the economic crisis stronger

Cyprus can emerge as an advance economy and knowledge society by

- *Capitalizing on its strengths*
- *Modernizing existing key areas of the economy*
- *Investing in new strategic areas*
- *Forming strategic alliances to achieve these long term objectives*



A Multifaceted Strategy and Effective Management at Many Different Levels is Required

- To capitalize on this tremendous opportunity for Cyprus



Effective Management of Cyprus's Gas Reserves

Key elements of Management Strategy	Manage Findings and Developments	Develop the Right Business Environment	Strategies and Policies	Sustainable Economic Growth
	<ul style="list-style-type: none"> • Discoveries so far • Further licensing • Exploration and production 	<ul style="list-style-type: none"> • Regulatory regime • National Oil Company • Export infrastructure • Infrastructure for domestic gas distribution <p style="text-align: center;">-> STABILITY</p>	<ul style="list-style-type: none"> • Stimulate internal gas market • Energy strategy integrating renewables • Safeguard against Environmental Disasters 	<ul style="list-style-type: none"> • Investment Fund • Sustainable Development of Cyprus Economy • Human Capital Development

Strategic International Alliances



Key elements of effective management in establishing these processes



CHC is operating on these principles



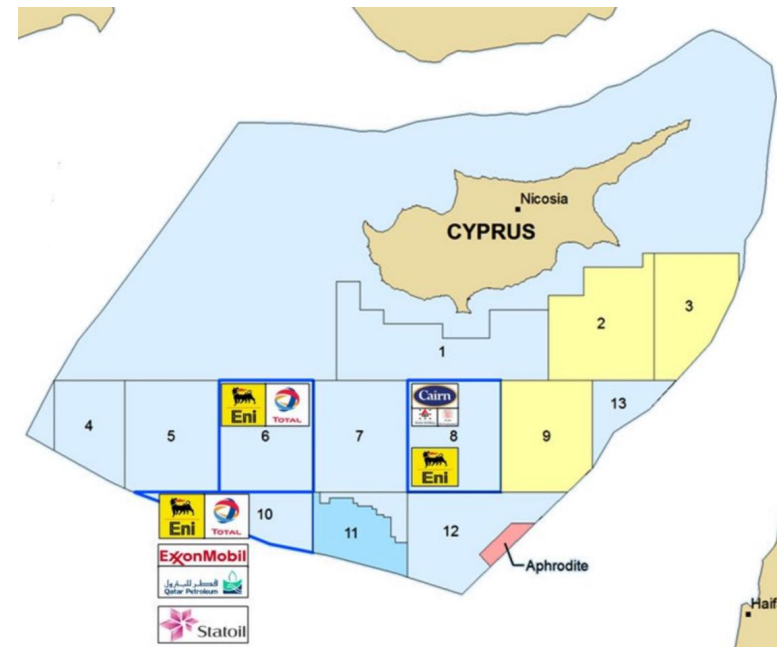
Key elements of effective management in establishing these processes

Many of these aspects rely on best international experience and practice thus creating many Business opportunities in these areas for international collaborations and investments



Opening up Many New Business Opportunities in Cyprus

- Development of hydrocarbon industry
- Exploration and production services
- Development of related infrastructure
- Regulatory framework
- Related support services
- Human capital development
- Education and training
- Research and Innovation
- Also building other strengths in the economy



Outward Looking Policy - Strategic International Alliances

Promote an Outward Looking Policy with Strategic International Alliances

At various levels, such as **government, industry, universities etc** to achieve the best in terms of:

- National security
- Environmental safety
- Joint infrastructure collaboration
- Human capital development
- Education and training
- Research and technology development



The Bigger Picture - Expected Regional Activity

Recent gas discoveries in the region

- Israel: Leviathan, Tamar
- Cyprus: Aphrodite
- Egypt: Zohr
- Lebanon: (Licencing round)

- Increased prospects for gas discoveries – Post Zohr
- Increased interest in Cyprus EEZ and the region
- Increased activity expected

➤ *Regional Competition or Potential Synergies?*



What are the Benefits of Joint Operations ?

Support safe and efficient development of regional resource for the benefit of all

- Coordinated developments and use of major infrastructures will **achieve economies of scale**, reduction of costs and increase in revenues
- It can bring countries together which would otherwise not be cooperating, providing **security and stability in the region**
- Develop confidence in the region and attract high level **international companies** to operate in the region
- Coordinated developments can make a difference in terms of **providing the region and Europe with an alternative source of energy** thus contributing to their energy security



The Role of Cyprus – The Big Picture

The outlook:

- ✓ Excellent prospects for new discoveries
- ✓ Catalyst for regional collaborations
- ✓ Creating effective business and regulatory environment
- ✓ Stability and Confidence

Cyprus has the potential to:

- Develop as an energy hub by promoting joint infrastructure developments, education, training & technology development
- Effective base for oil and gas services for the region
- Corridor to Europe and energy markets
- Support the EU energy strategy for diversification of energy supply





Thank you

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