

# The Contribution of Revithoussa LNG Terminal to the liberalization of the Greek Natural Gas Market and to the Security of supply of South East Europe

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WITHIN THE JURISDICTION OF THE MINISTRY OF ENVIRONMENT,  
ENERGY & CLIMATE CHANGE



Source of Development, Carrier of Energy





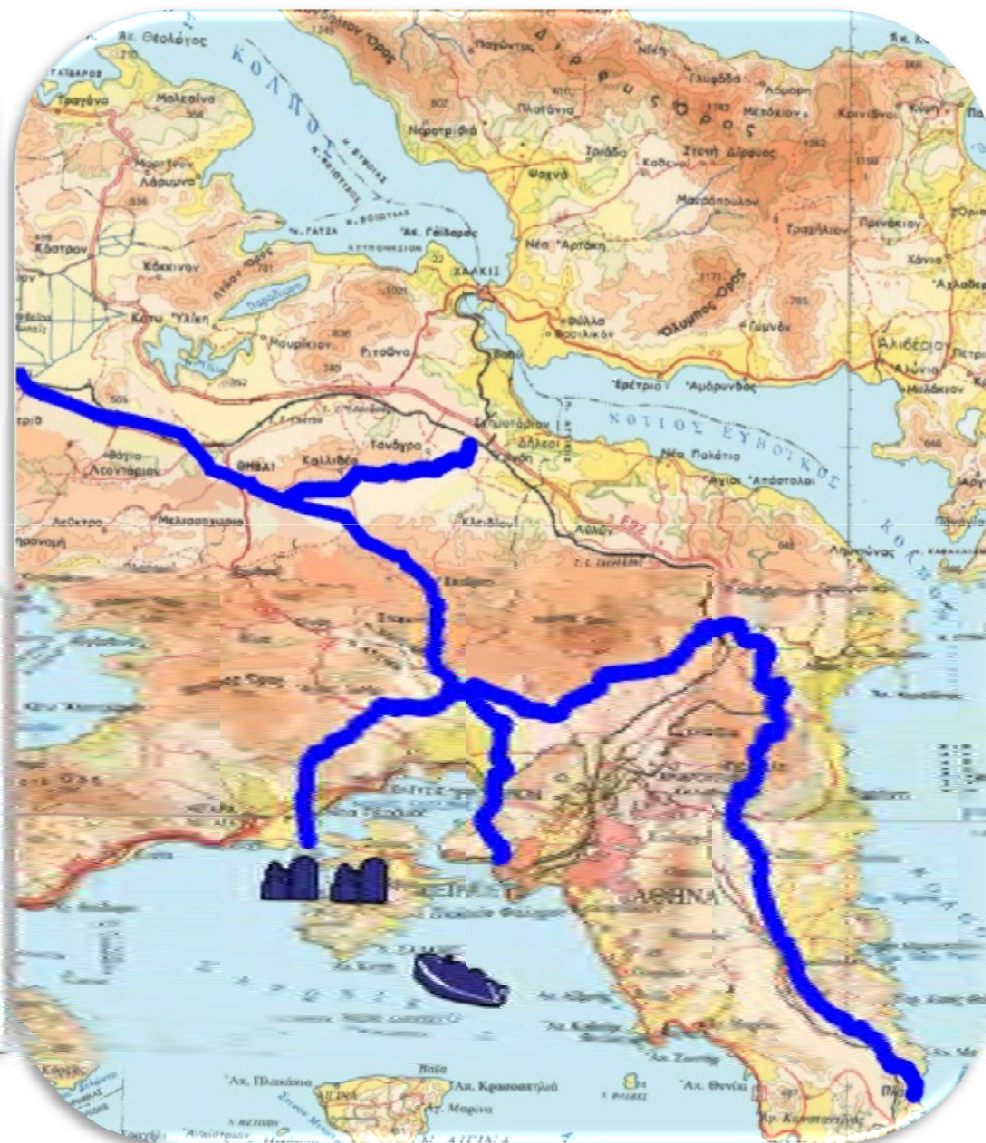
# Revithoussa LNG Terminal







# Revithoussa LNG Terminal





## Terminal Operation History

Commenced in 2000 with 0.69 bcm per year

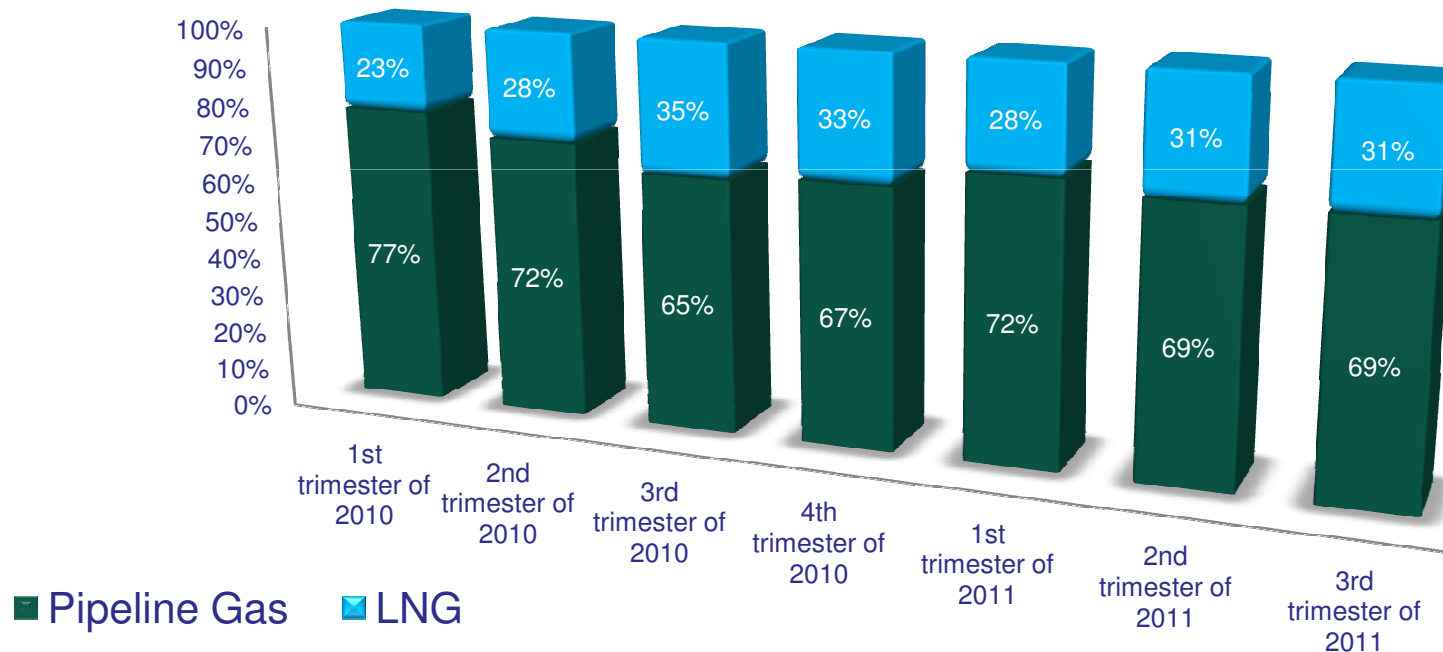


First LNG  
cargo  
unloaded on  
the 3/02/2000

First gas  
send out took  
place on the  
11/02/2000

October 2007  
1<sup>st</sup> Upgrade

May 2010 1<sup>st</sup>  
non DEPA  
cargo



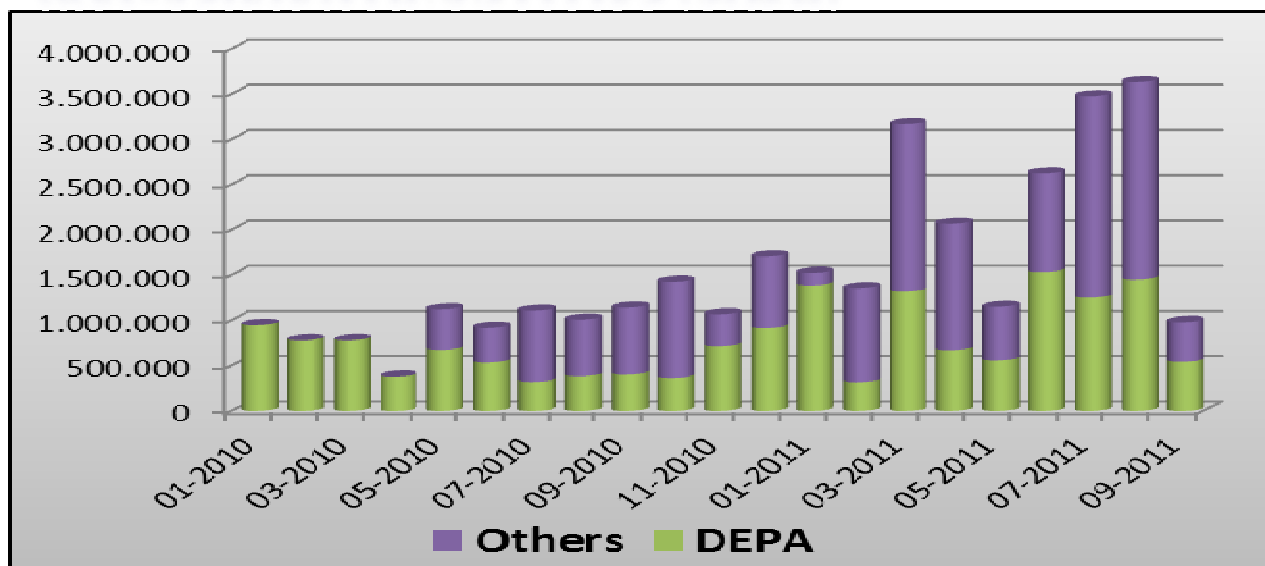
- 18% of total LNG cargos unload since 2000, has taken place during April 2010 and November 2011
- Arrived Vessels Capacity between 40.000 m<sup>3</sup> and 177.000 m<sup>3</sup> (unloading smaller cargos and in 2 phases)



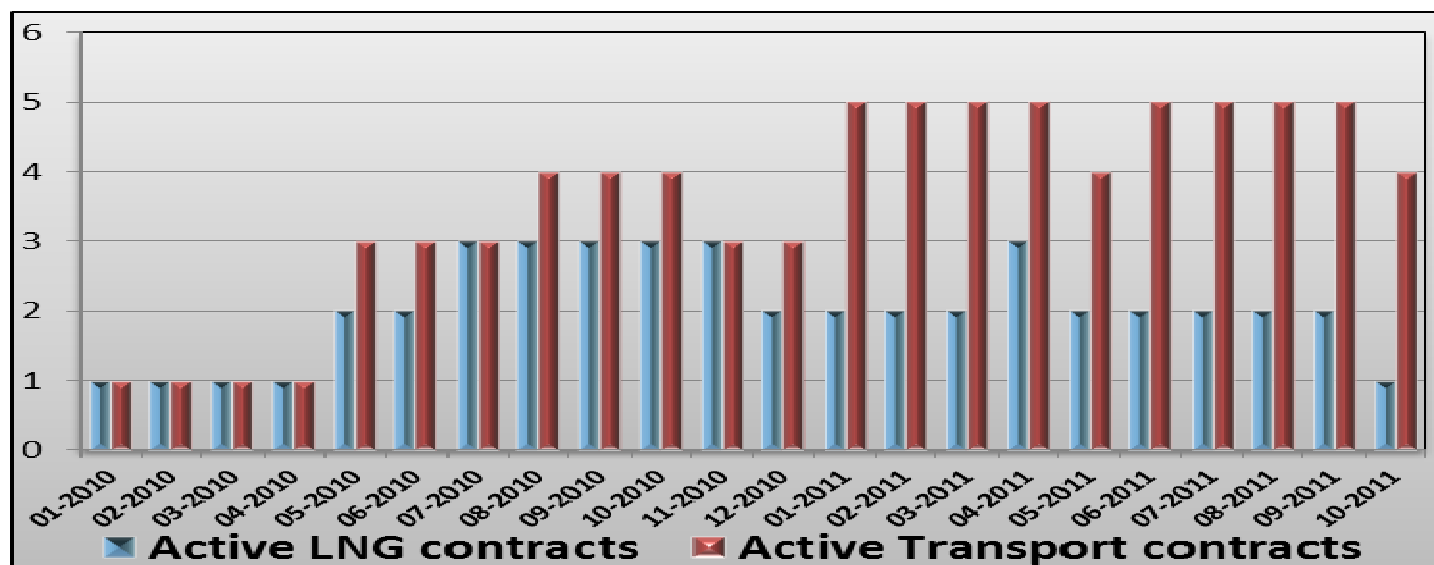


## Contribution of Terminal to the liberalization of Greek gas market

### •REGASIFIED QUANTITIES [MWH]

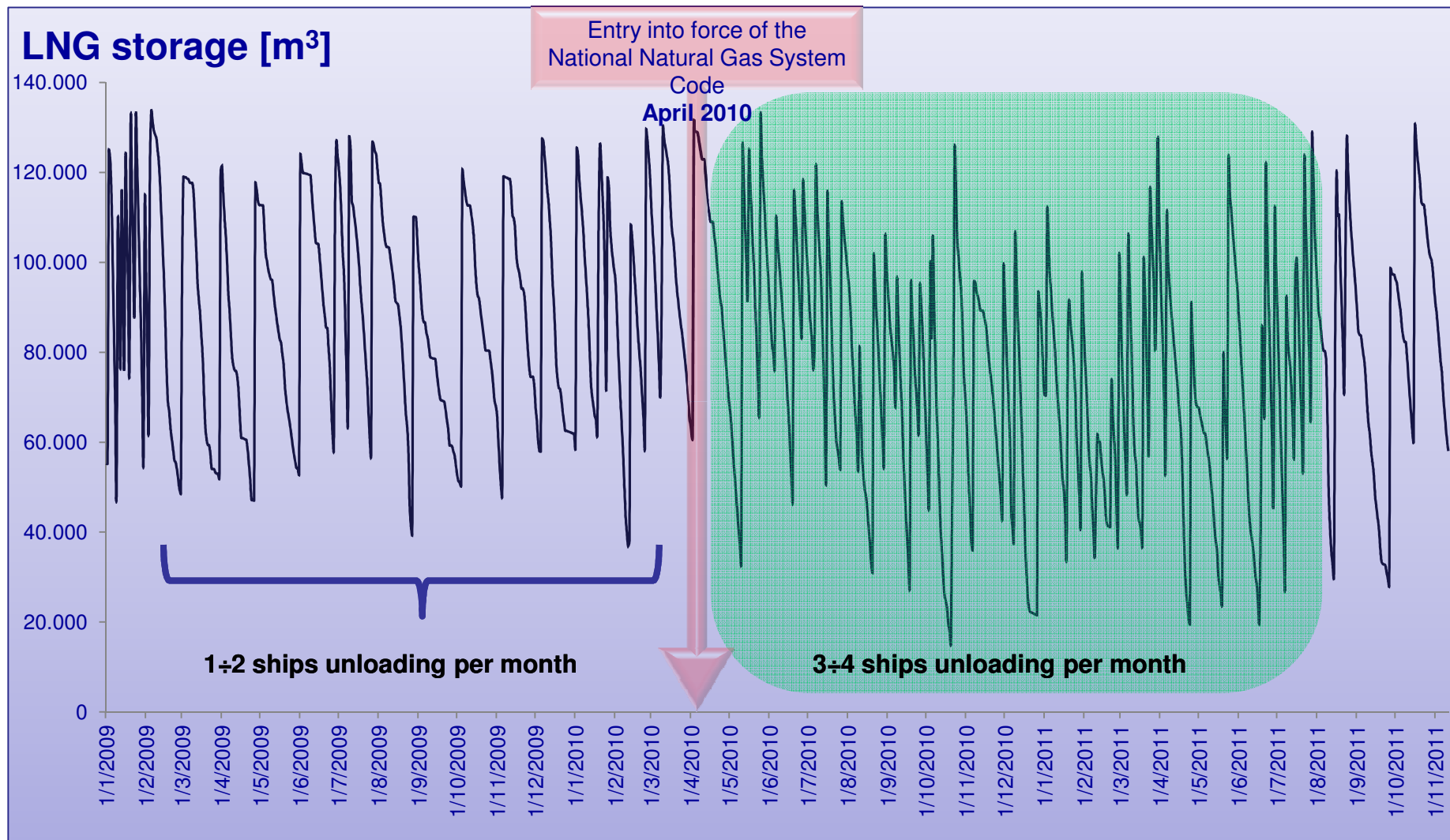


### ACTIVE CONTRACTS





## Contribution of Terminal to the liberalization of Greek gas market

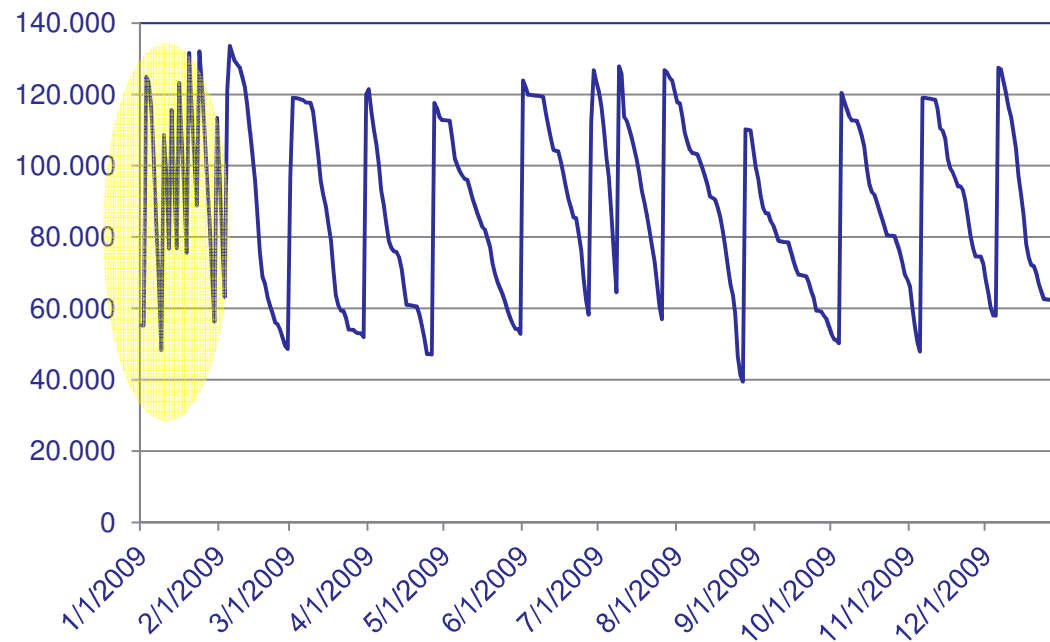






## Role of LNG Terminal for the security of supply

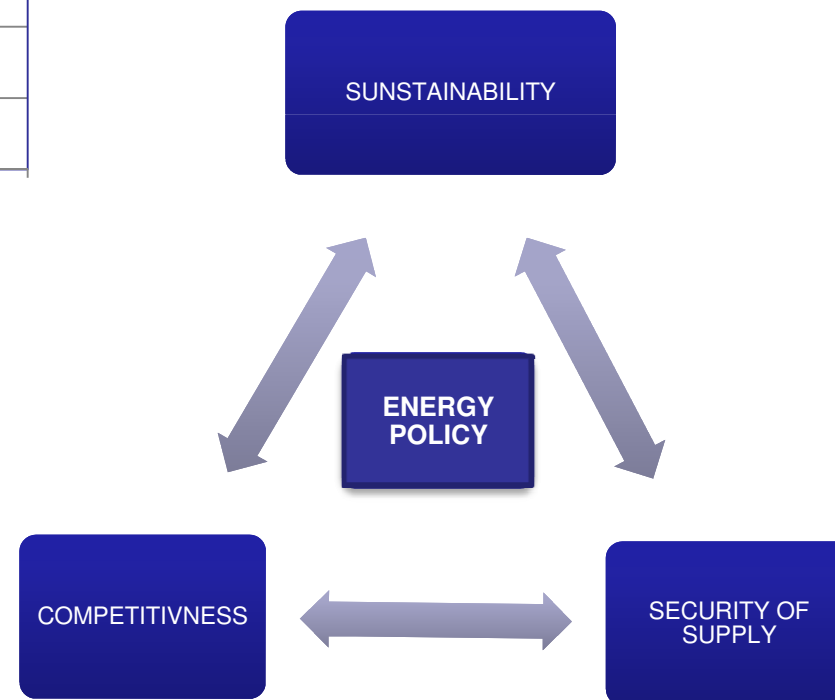
LNG storage [m<sup>3</sup>]



**Russia-Ukraine crisis - January 2009**  
Seven Ships of 480.000 m<sup>3</sup> LNG total

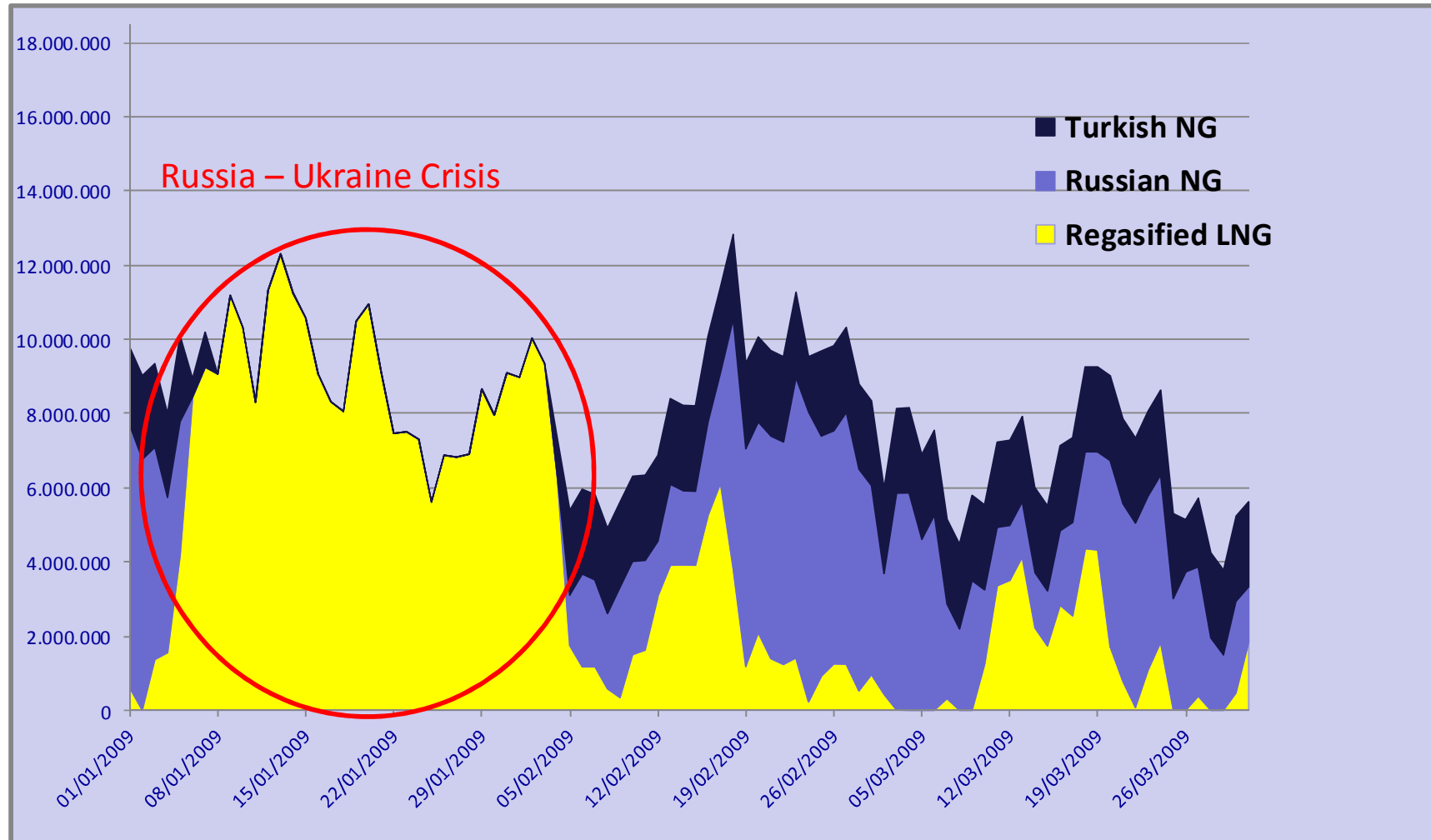
### Revithousa LNG Terminal

- ✓ Fully covered domestic consumption
- ✓ Supplied Bulgaria market for two days





## Contribution of Terminal to Security of Supply

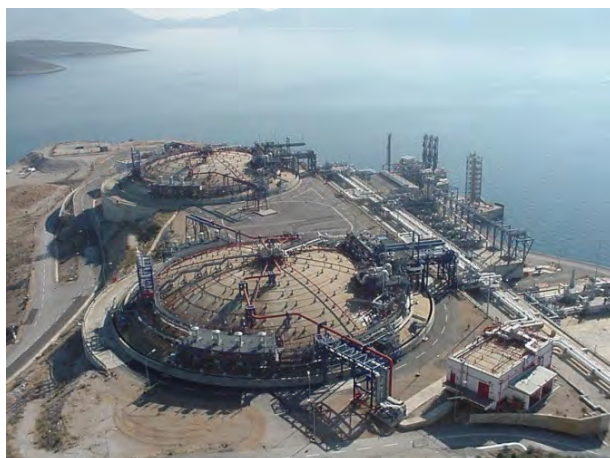






## Facility Unloading and Storage Data

### LNG Facility consists of:



- 2 tanks of 65.000 m<sup>3</sup>
- Connection pipeline with NGTS 600m and 24'' diameter
- Facilities for unloading ships with max length 290m

- Unloading Capacity of 7.250 m<sup>3</sup> LNG/h
- Gasification Capacity 1.000 m<sup>3</sup> LNG/h
- Storage Capacity up to 78 million Nm<sup>3</sup>





## Access to the Facility

### LNG Services

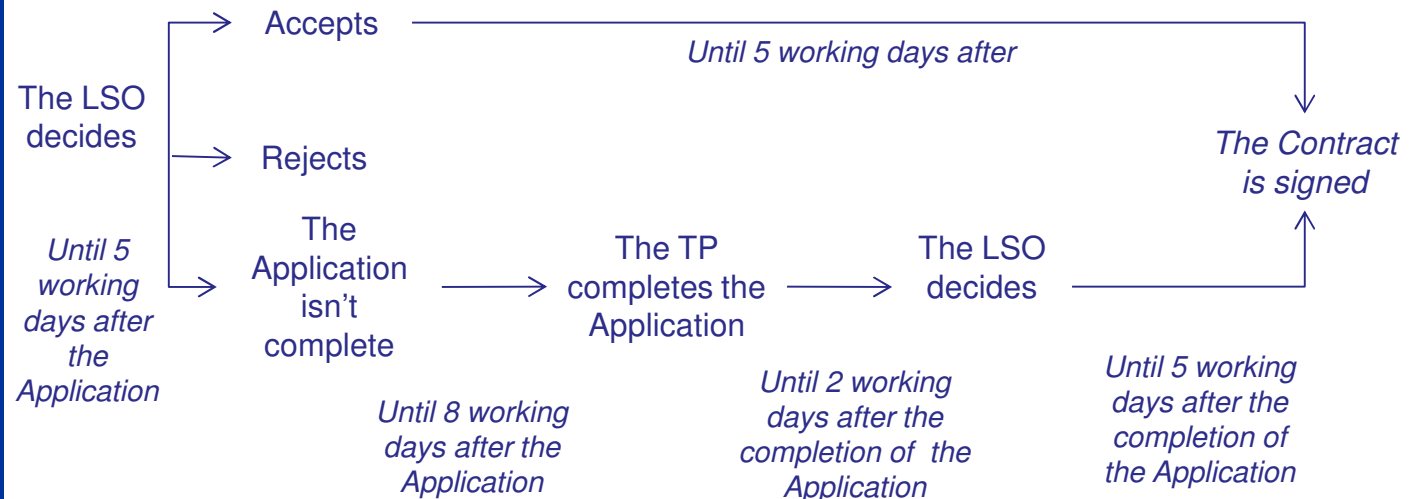
- Connect LNG ship, unload and disconnect
- Store the ship cargo for max 18 Days
- Re-gasify the LNG and inject NG to National Natural Transmission Gas System
- Execution of measurements

### LNG Contract

- National Natural Gas System Code specifies the Standard LNG Agreement
- Min duration = period of LNG storage plus unloading time  $\geq 1$  Day
- Signed between Operator and entities registered in the NNGS Users Registry
- Formal Ship Approval Procedure as published in DESFA website
- Operator provides to LNG Users services without discriminations

### Application for the Provision of the Basic LNG Service

45 Days before the begging of the Month the first LNG Unloading is to be taken place





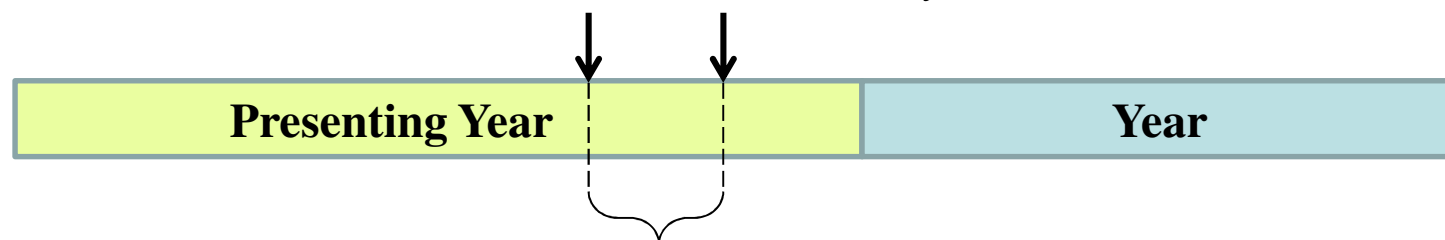


# LNG Terminal Schedule

## Yearly Schedule

**40<sup>th</sup> week:** Shippers who have been written in RAE submit schedule for next Year

**44<sup>th</sup> week:** The LSO publishes the LNG terminal Yearly schedule



## Monthly Schedule

**28<sup>th</sup> :** Shippers who have signed an LNG contract submit schedules for months M to M+2

**10<sup>th</sup> :** The LSO publishes the LNG terminal monthly schedule for months M to M+2

**Day D-1:** The LSO offers available additional storage capacity for day D





## Expansion Project 2<sup>st</sup> Upgrade phase

- Addition of Third Tank of 95.000 m<sup>3</sup> storage
- Total capacity raise to 225.000 m<sup>3</sup> LNG (from 130.000 today) – 200.000 available to Shippers
- Gasification Capacity raise to 1.400 m<sup>3</sup> LNG/h
- Upgrade of berthing facilities for ships up to 180.000 m<sup>3</sup>
- Is estimated to be completed in 2014



### Benefits:

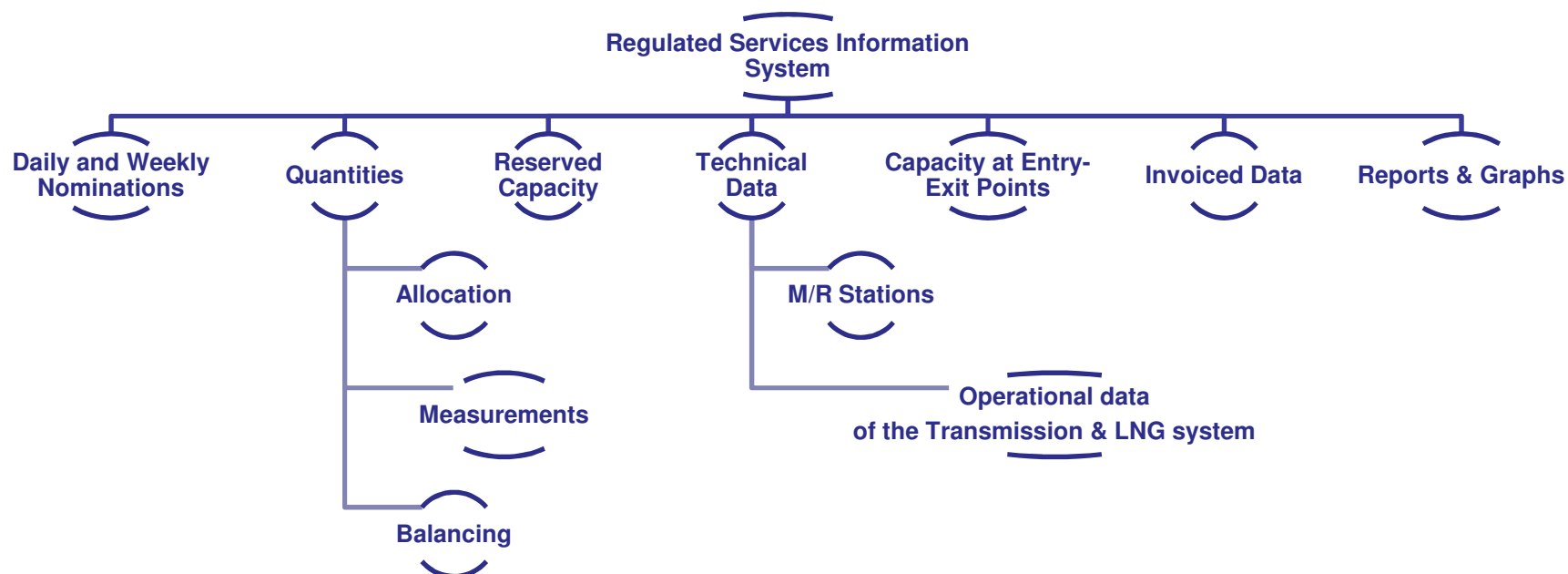
- Accept vessels up to 180.000m<sup>3</sup>
- Compatible with 87,5% of world LNG fleet
- Receive cargos from remote terminal worldwide
- Covers the domestic consumption for 3.8 days under circumstances of full request and 6.4 days under circumstances of average request





# Future Challenges for DESFA

- Greek Secondary Gas Market
- 1<sup>st</sup> Revue of the Network Code was published in 4 October 2011
- Information System available from last summer in a trial period



**THANK YOU  
FOR YOUR ATTENTION!**

