GDF SUEZ

Southeast Europe as the gateway to European gas Security of Supply

Small is beautiful - The opportunity not to be missed

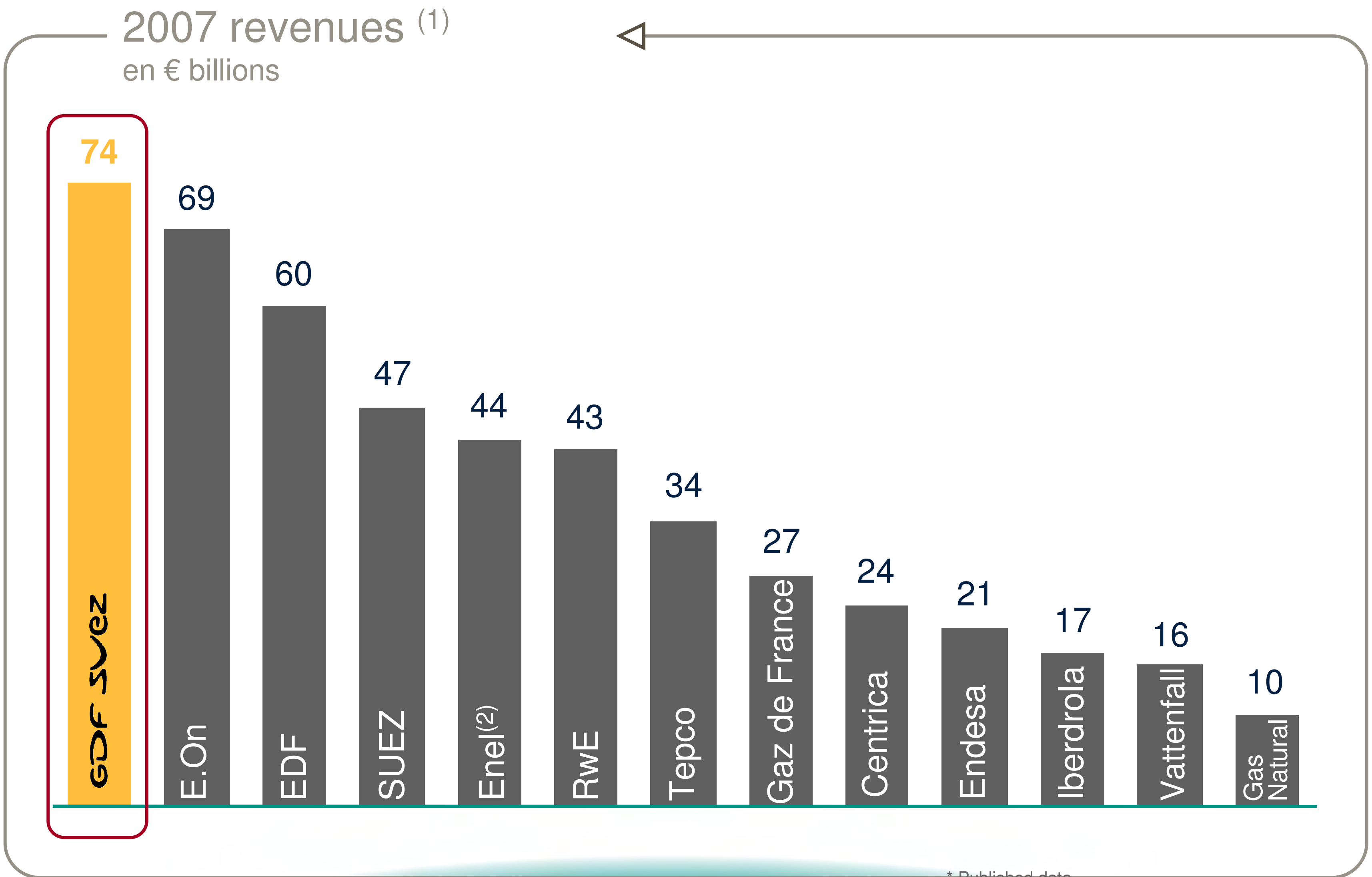
Tanguy Moulin-Fournier
Head of Strategy for South East Europe
GDF SUEZ South East Europe

Thessaloniki 19 June 2009

Sommaire

GDF SUEZ, a world leader in the utilities sector

after Gaz de France and Suez merged

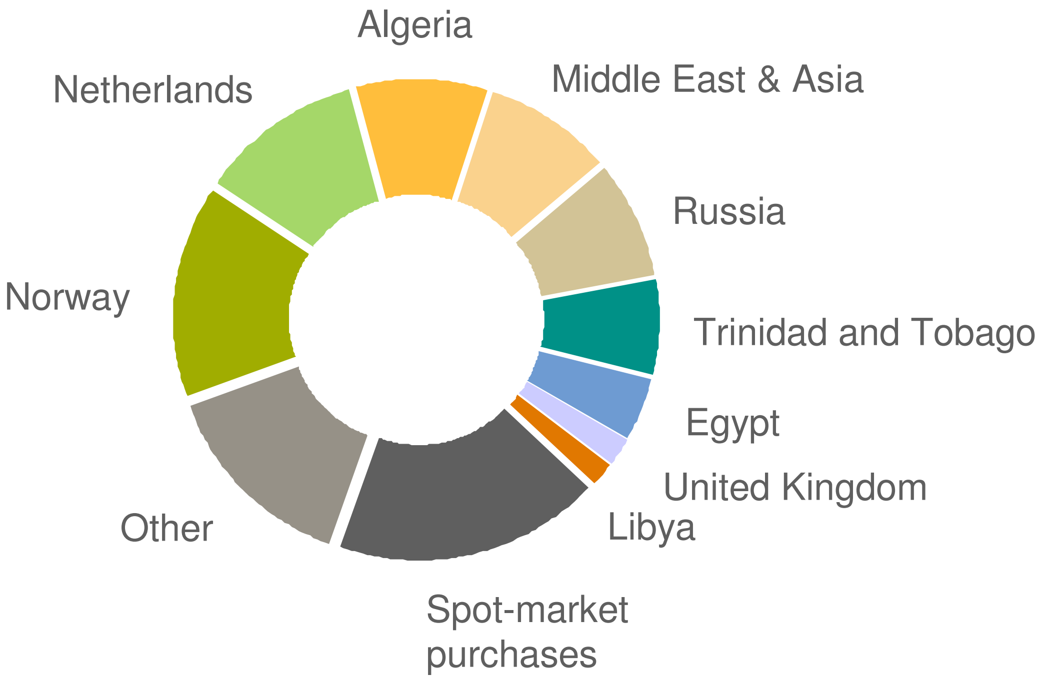


* Published data.

** Proportional consolidation of Endesa as of October 2007.

A streamlined and diversified natural-gas supply portfolio of more than 100 bcm

GDF SUEZ gas supply portfolio*

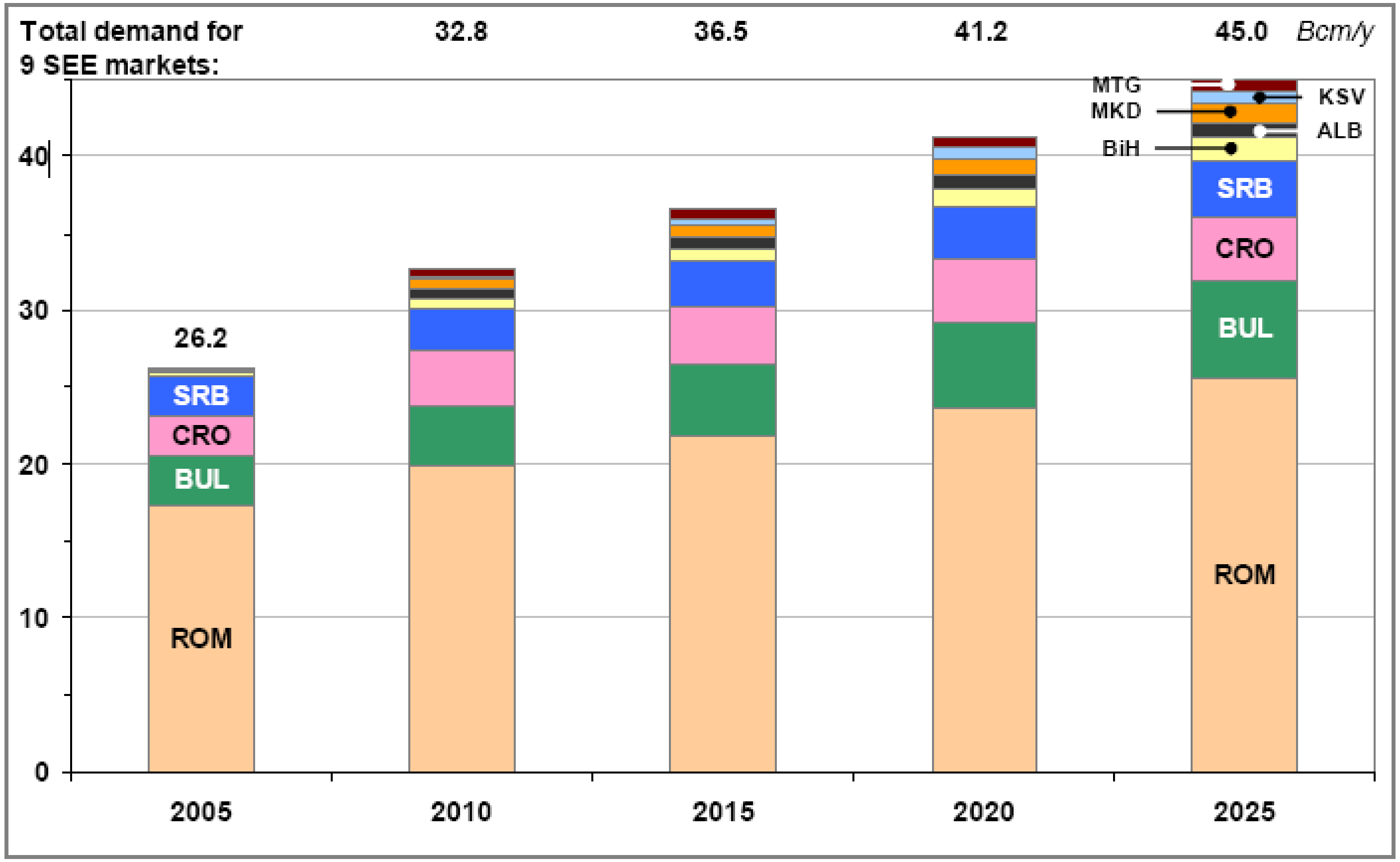


* 2007 pro forma unaudited.

1. GDF SUEZ
2. South East Europe gas market
3. Several big projects
4. Easier and smaller projects deserve attention
5. EU support

1 - South East Europe is a growing gas market (before crisis)

Expected 2010-2015 growth : 2 / 3 % y/y



Source: ECA (Economic Consulting Associates) : SEE Regional Gasification Study (Oct 2007)

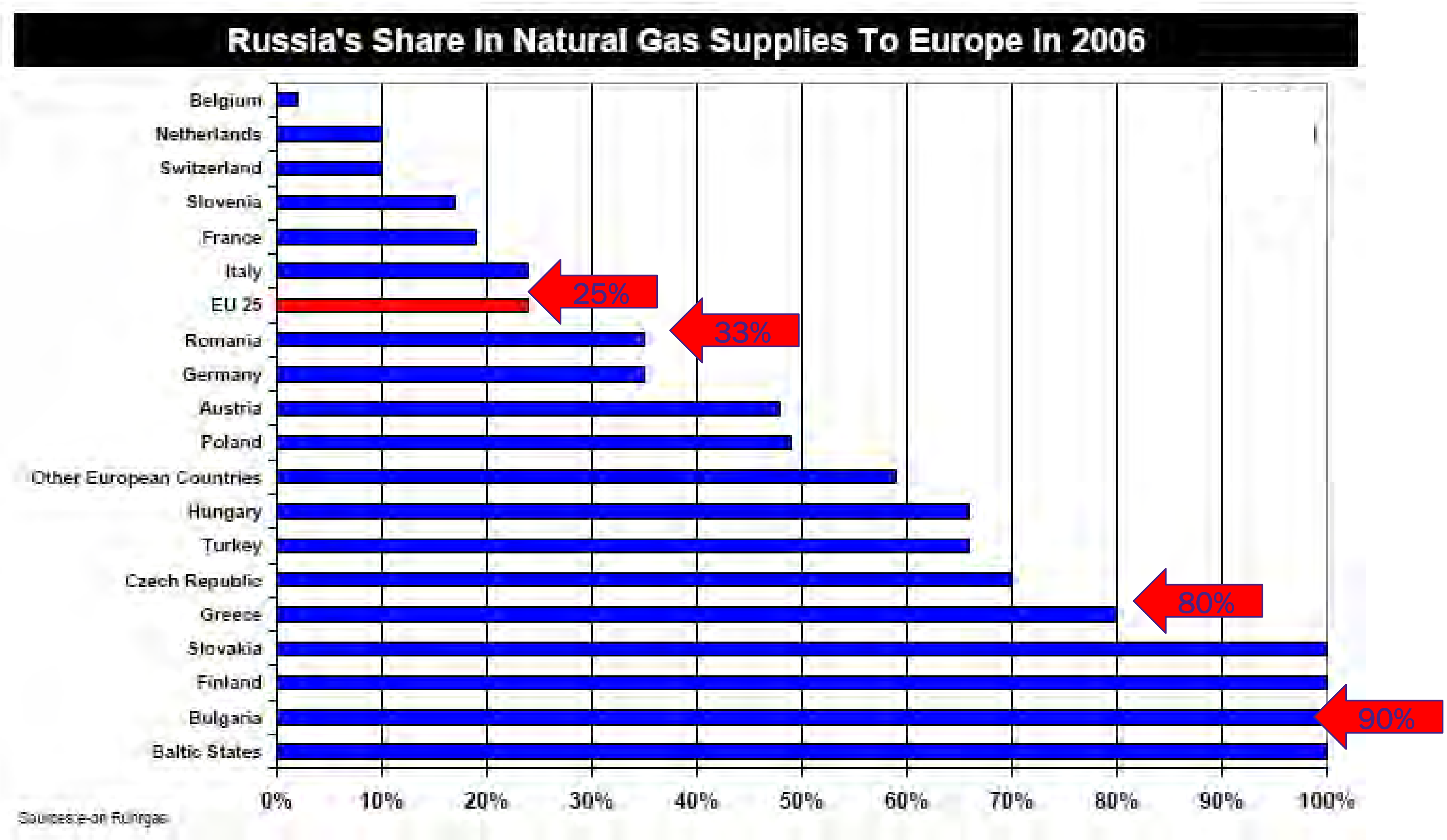
2 - SEE gas dependence is a fact, as for the rest of Europe…

EUROPEAN DEPENDENCE ON NATURAL GAS

Source: Stratfor

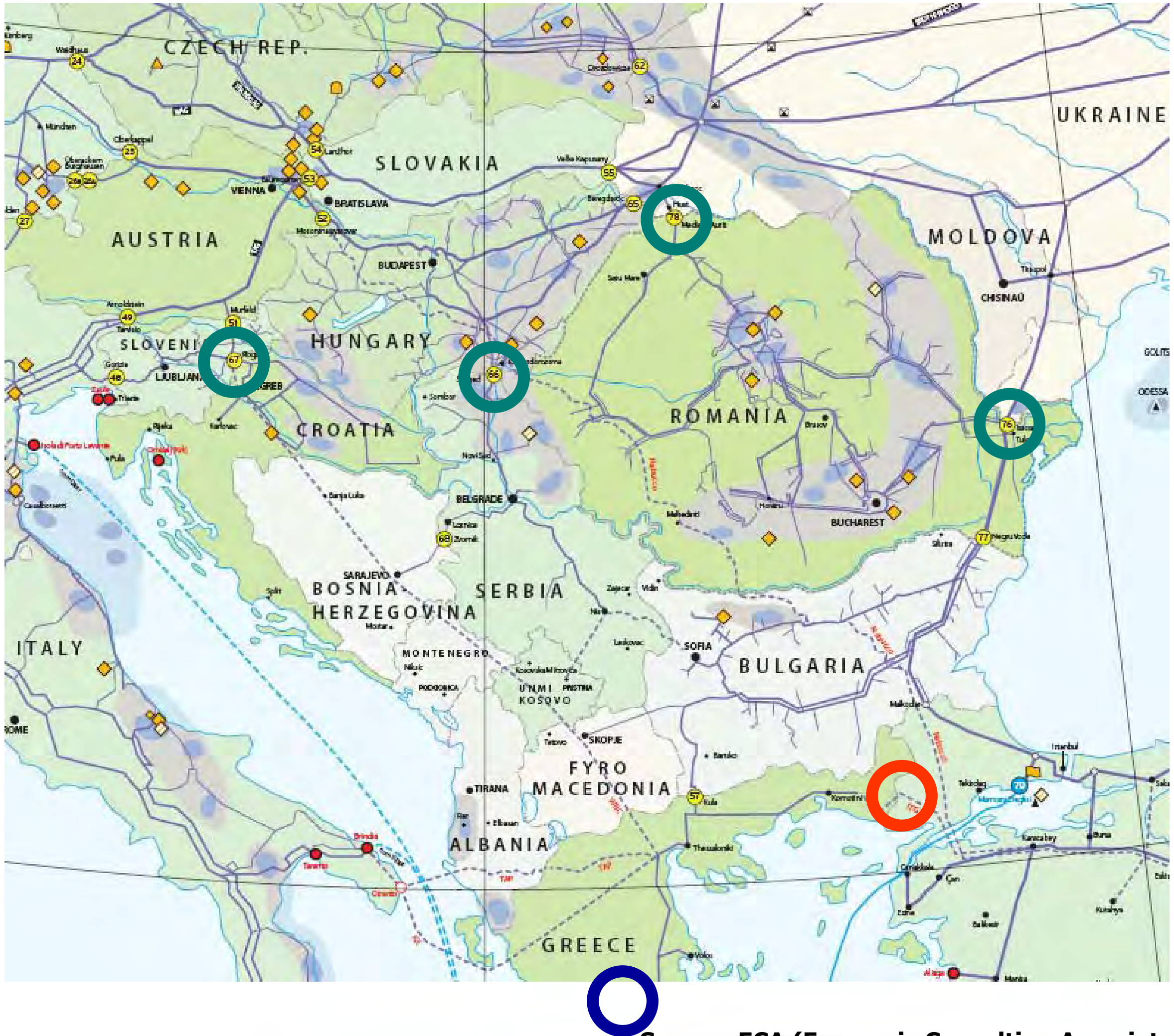
...but situation is quite different among the countries

From nearly 0 to almost 100%



3 - SEE : Few entry points, few routes..

Gas sources is not the only key factor: routes also matter



Existing imports points for Russian gas

Existing imports point from TGI

Existing Revithoussa's LNG terminal

Source: ECA (Economic Consulting Associates) : SEE Regional Gasification Study (Oct 2007)

Focus - January 2009 gas crisis

Diverse experiences, one common concern

Crisis was not equally supported:

-Romania :

- » main CHP switched fuell
- » UGS capacity is a plus
- » economic crisis had already reduced the consumption

-Bulgaria :

- » Chiren UGS helped
- » But situation was more critical
- » Regional cooperation – agreement with Greece

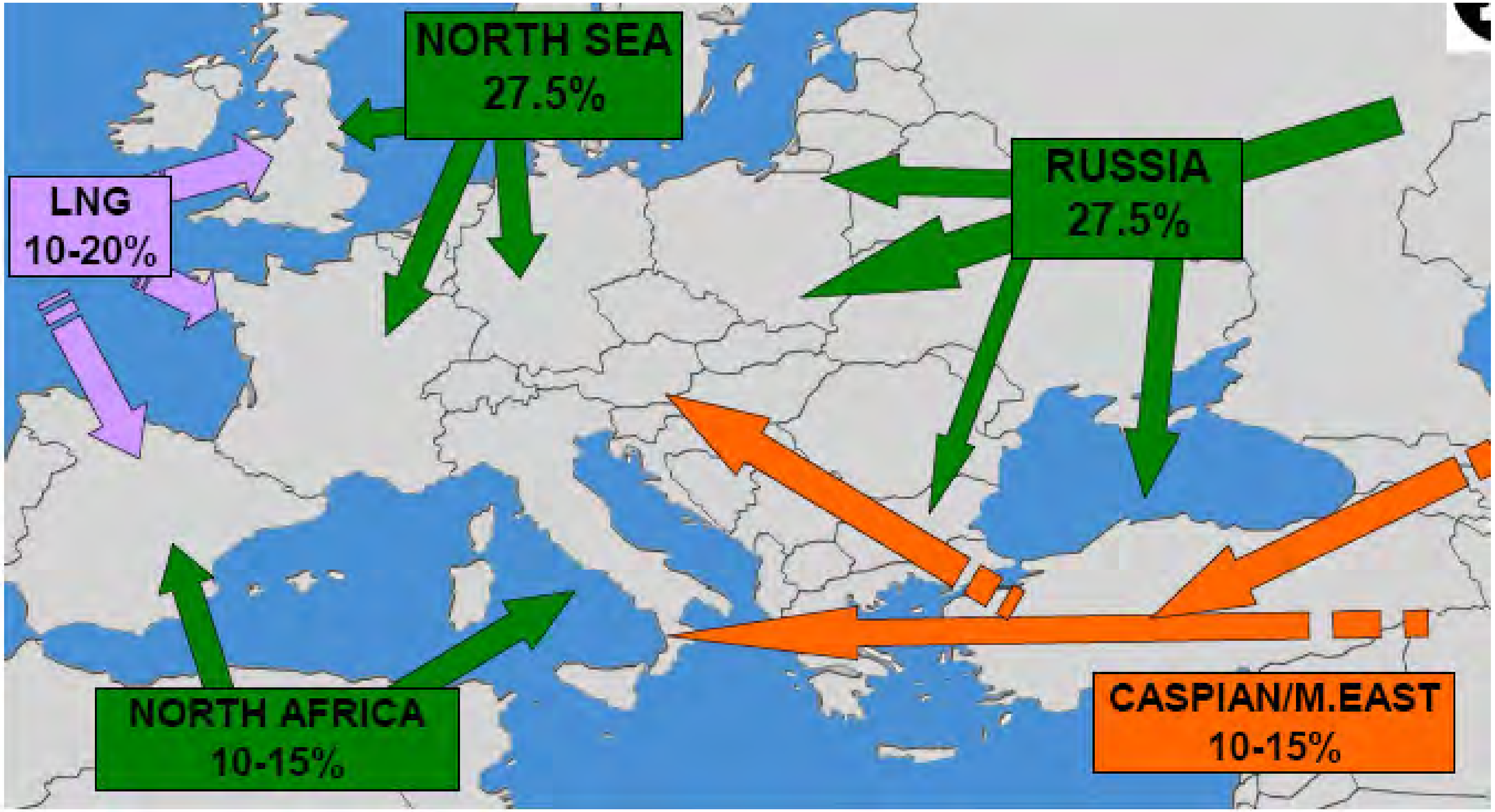
Concern is now general with SEE and political support is a plus
Security of Supply has become a strategic point

Long term **and** short term solutions should be implemented

1. GDF SUEZ
2. South East Europe gas market
3. Several big projects
4. Easier and smaller projects deserve attention
5. EU support

SEE , a gateway to Europe

One of the 5 gas doors to Europe



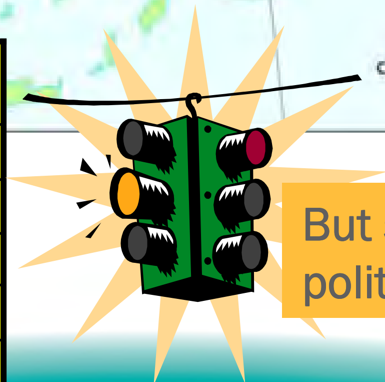
"Southern Corridor is the new Silk Road"

Prague Summit. May 8th 2009

South East Europe concentrates big gas projects

Source: ECA (Economic Consulting Associates) : SEE Regional Gasification Study (Oct 2007)

Nabucco	OMV, MOL, Romgaz, Bulgargaz, Botas, RWE	30 bcm
Southstream	Gazprom-Eni	30 bcm
Whitestream	GUEU	8 / 32 bcm
ITGI	EDISON-BOTAS-DEPA	11.5 bcm
TAP-	Statoil-Hydro / EGL	10 bcm
IAP	EGL-PLINACRO	5 bcm

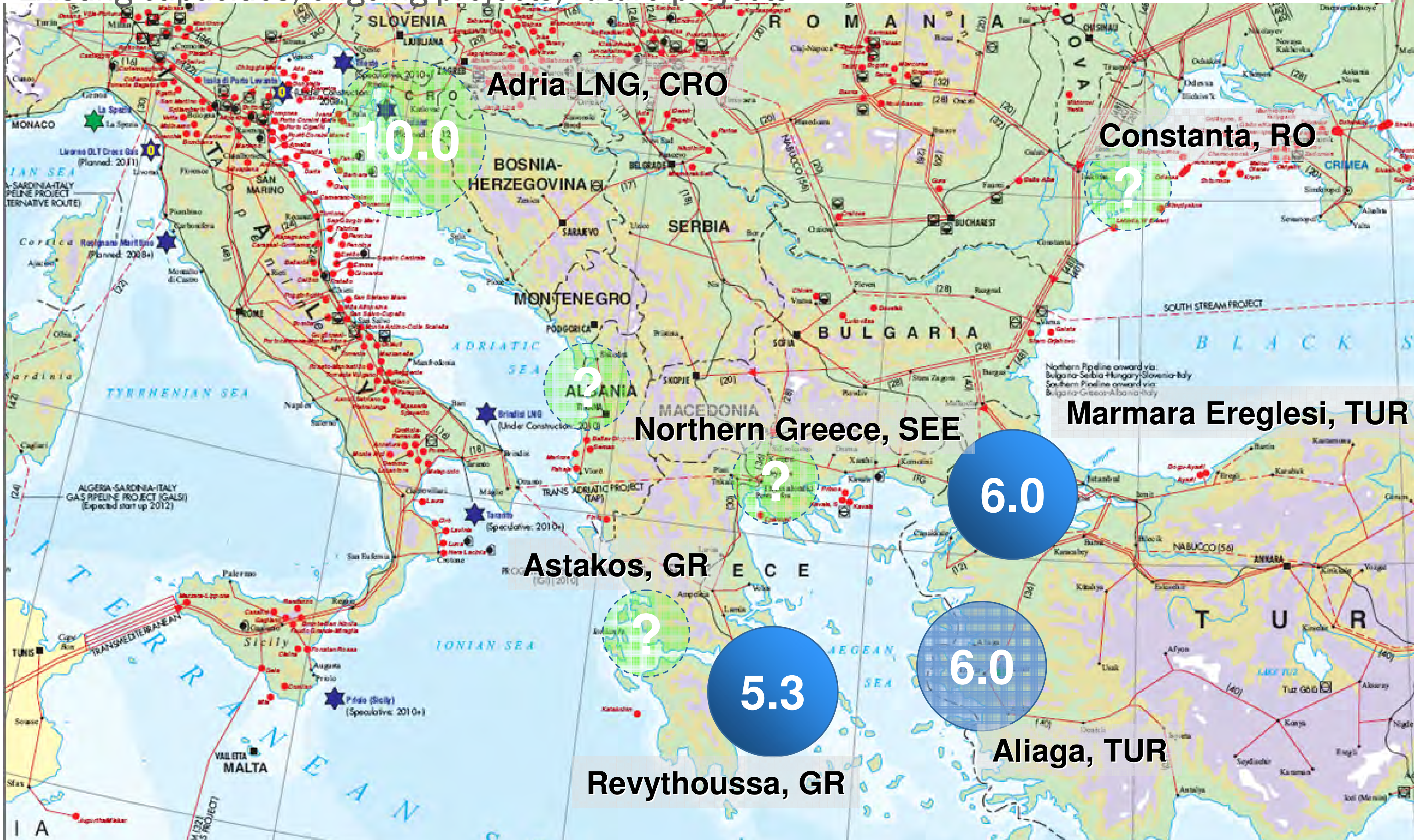


But schedules are unpredictable, politics is crucial

1. GDF SUEZ
2. South East Europe gas market
3. Several big projects
4. Easier and smaller projects deserve attention
5. EU support

The LNG factor

Existing capacities, ongoing projects, future projects



"The pipelines are necessary, definitely. But the complementary solution to the problem is LNG". (Makis PAPAGEORGIOU, CEO DEPA)

CNG solutions ?

The Balkan Ring (Energy Community)

Several small investments to develop a consistent global project

- The ring would gasify 7 ungasified or less gasified countries
- Major infrastructure project in the region estimated at ≈ $1 billion
- Partially uses existing infrastructure or projected infrastructure
- Enable the development of CCGT in FYROM, AL, MO, and HR

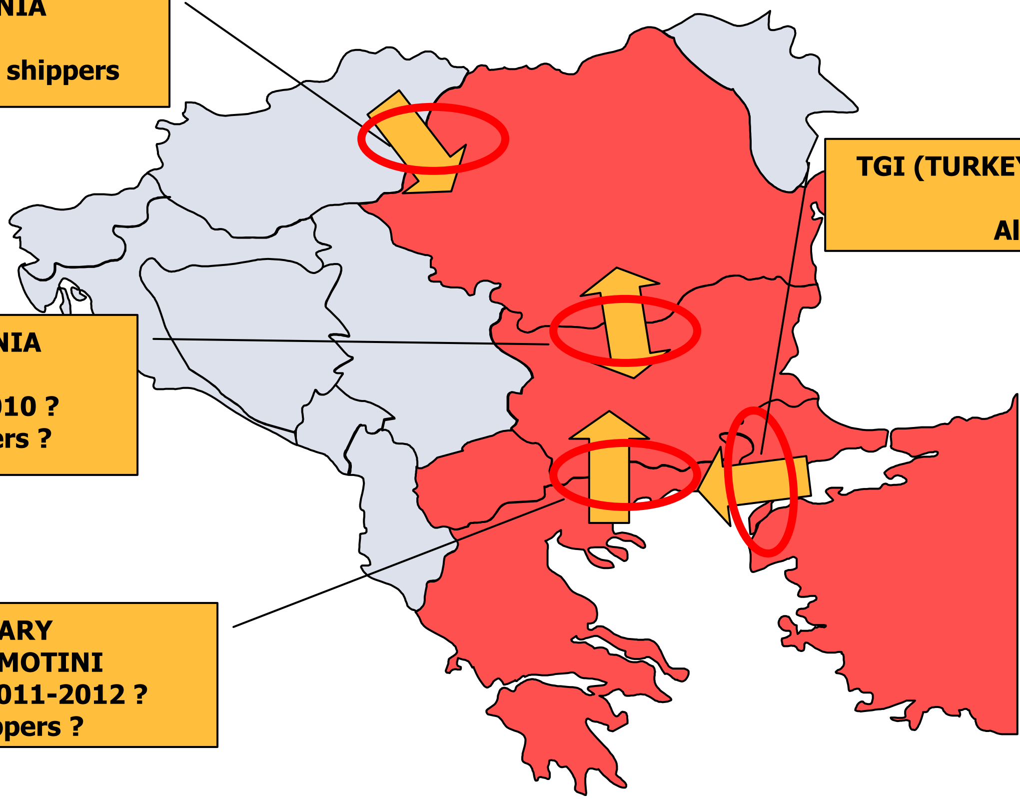
Source: ECA (Economic Consulting Associates) : SEE Regional Gasification Study (Oct 2007)

Regional gas interconnections

Supported by Governments and EU

HUNGARY → ROMANIA
ARAD-SZEGED
MID 2010 – Local TSOs + shippers

TGI (TURKEY GREECE INTERCONECTOR)
EDISON – DEPA
Already in operation

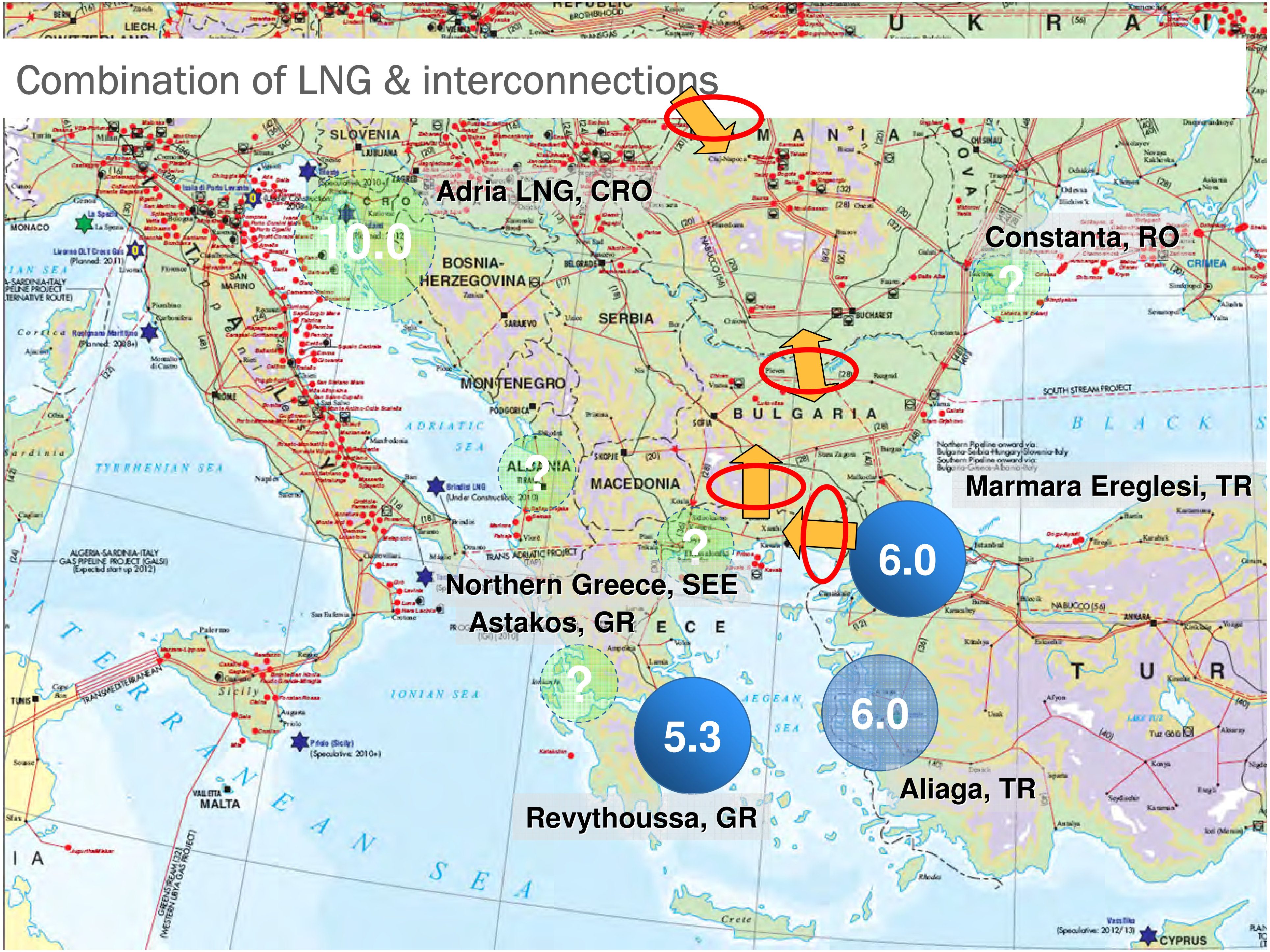


BULGARIA → ROMANIA
GIURGIU-RUSE
15 km / 20 MEUR / 2010 ?
Local TSOs ? + shippers ?

GREECE → BULGARY
DIMITROVGRAD-KOMOTINI
100 km / 150 MEUR / 2011-2012 ?
Local TSOs ? + shippers ?

And then: Romania/Serbia, Bulgaria/Serbia,Greece-FYROM, Bulgaria-FYROM ...

Combination of LNG & interconnections



1. GDF SUEZ
2. South East Europe gas market
3. Several big projects
4. Easier and smaller projects deserve attention
5. EU support, 2009 Spring momentum

The TEN-E program: good but not sufficient

Decision 1364/2006 European Parliament and Council

- Covers only gas and electricity
- Identifies:
  - 9 major axes for electricity
  - 164 projects of Common interest
  - 32 projects of European interest
- Identifies:
  - 6 major gas axes
  - 122 projects of Common interest
  - 10 projects of European interest

Table 3: TEN-E commitments in the period 2002-2006 (M€)

		2002	2003	2004	2005	2006	2002-2006
TEN-E Budget		21,0	21,62	21,5	21,5	21,55	107,170
Commitments		14,505	18,498	20,106	20,585	20,032	93,726
Electricity		*3,427*	*6,133*	*10,205*	*9,042*	*11,223*	*40,030*
	Studies	*3,427*	*6,133*	*9,199*	*6,042*	*11,223*	*36,024*
	Works	*0*	*0*	*1,006*	*3,000*	*0*	*4,006*
Gas		*11,078*	*12,365*	*9,901*	*11,543*	*8,809*	*53,696*
	Studies	*11,078*	*12,365*	*9,901*	*11,543*	*7,089*	*51,976*
	Works	*0*	*0*	*0*	*0*	*1,720*	*1,720*

EU 2nd Strategic Energy Review (Autumn 2008)
EU Economic Recovery Plan (2009-2010)

2nd Strategic Energy Review:

- Focus on **Security of Supply** (of all fuels)
- Green paper on **TEN-E guidelines**
- **Evaluation report of Directive** 2004/67/EC on **Security of Gas Supply**
- Study on **Gas Storage** in the EU
- Development of **indigenous production**
- Update on the state of **implementation** of the 1st Strategic Energy Review
- Definition of **external energy policy**

3 priorities for infrastructure concern SEE:

(i). South Gas Corridor.
(ii). North South gas and electricity interconnexions within Central and South East Europe
(iii). LNG.

Economic Recovery Plan

- **4 Bn EUROS** for ENERGY
- **2,4 Bn EUROS** to Fund Energy Infrastructures, focusing on "missing links" to reach solidarity for Security of Supply and to integrate the gas markets
- **1,4 Bn EUROS for gas infrastructures**

Economic Recovery Plan

Up to 160 MEUR for the region "small projects" ?

Devices and equipments for reverse flows

80 MEUR

HUNGARY → ROMANIA

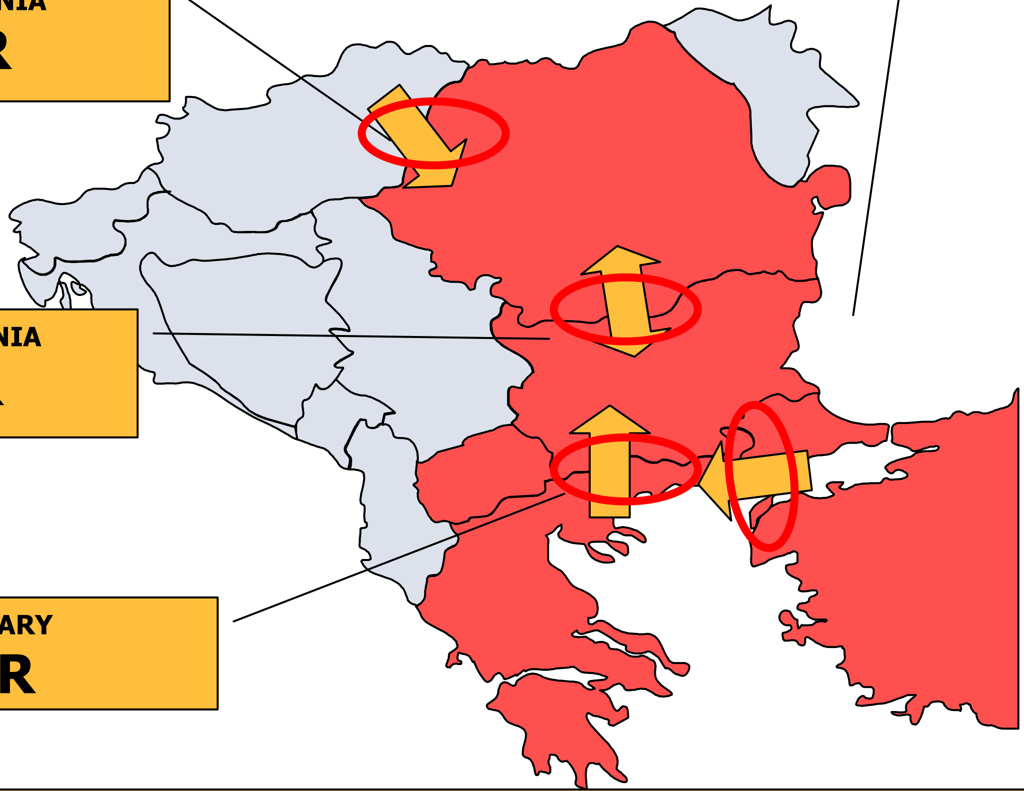
30 MEUR

BULGARIA → ROMANIA

10 MEUR

GREECE → BULGARY

45 MEUR



+ NABUCCO (200 MEUR), POSEIDON (100 MEUR)

MISSING:

- **GAS STORAGE SOUTH EAST EUROPE (GALATA, CHIREN, ROMANIAN STORAGE..)**
- **LNG IN SOUTH EAST EUROPE (NORTHERN GREECE, REVITHOUSSA, ..)**

The agenda is extremely stressed

This is the key factor

1st proposals from Commission: January 2009
Final joint approval : April 2009
Call for projects = mid May
Expected projects = mid-July
Selection = September
Decision = December
First payments = January 2010

Time is key :

MATURITY CRITERIA “maturity, defined as reaching the **investment stage**, and incurring **substantial capital expenditure by the end of 2010”**

We could miss the opportunity :

ALTERNATIVE PROJECTS “The Commission has declared its intention to **propose**, if appropriate, **when reporting in 2010** on the implementation of this Regulation, measures allowing for the financing of projects consistent with the Recovery Plan, such as projects in the area of energy efficiency and energy from renewable sources, **in case it would not be possible to commit all funds by the end of 2010**.”

And then…

This is the key factor

✓ TSO may develop the access to the transport network
✓ TSO may develop regional cooperation (they have started with good results)
✓ Countries may have mutual back-up MOUs (see Bulgaria-Greece)
✓ Operators should start business on a regional basis

✓ The small interconnections are a first step in a global move toward and integrated market
✓ LNG may provide additional flexibility
✓ Step after step we are creating South East Europe

✓ Let's not miss the Summer 2009 opportunity to get EU funding to the gas interconnections
✓ Let's congratulate the SEE TSOs who started that process

ευΧαριστώ !!!!

Tanguy MOULIN-FOURNIER
Head of Strategy for South East Europe

GDF SUEZ ENERGY SOUTH EAST EUROPE

Tanguy.moulin-fournier@gdfsuez.com