



25th world gas conference  
"Gas: Sustaining Future Global Growth"

# The MEDGAZ pipeline

The new direct gas entry to Europe via Spain

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Date: 6<sup>th</sup> June

Venue: WOC3, Study Group 3.1



Patron



Host

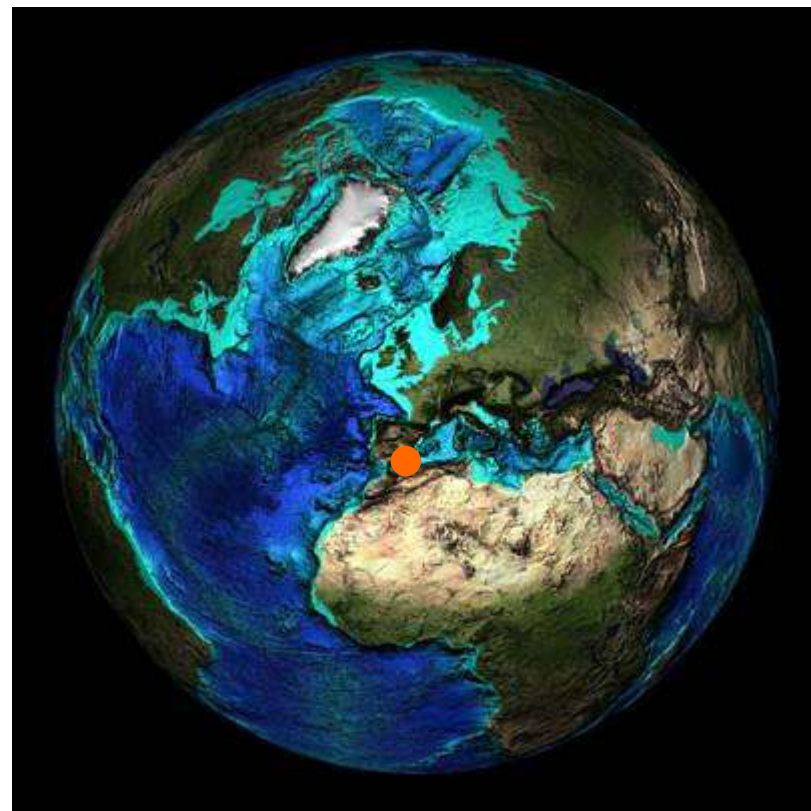


Host Sponsor



# Who is MEDGAZ

- New direct gas link between Algeria and Europe, via Spain
- MEDGAZ S.A. – company incorporated in Spain
  - Responsible for the design and construction– Completed in 2011
  - Since April 2011, operator of the MEDGAZ pipeline system, comprising:
    - a compression station in Beni-Saf, Algeria
    - an offshore pipeline from Algeria to Spain
    - and a reception terminal in Spain.
- Geographical location:
  - North Africa – Southern Europe
  - West Mediterranean
  - Algeria to Spain pipeline

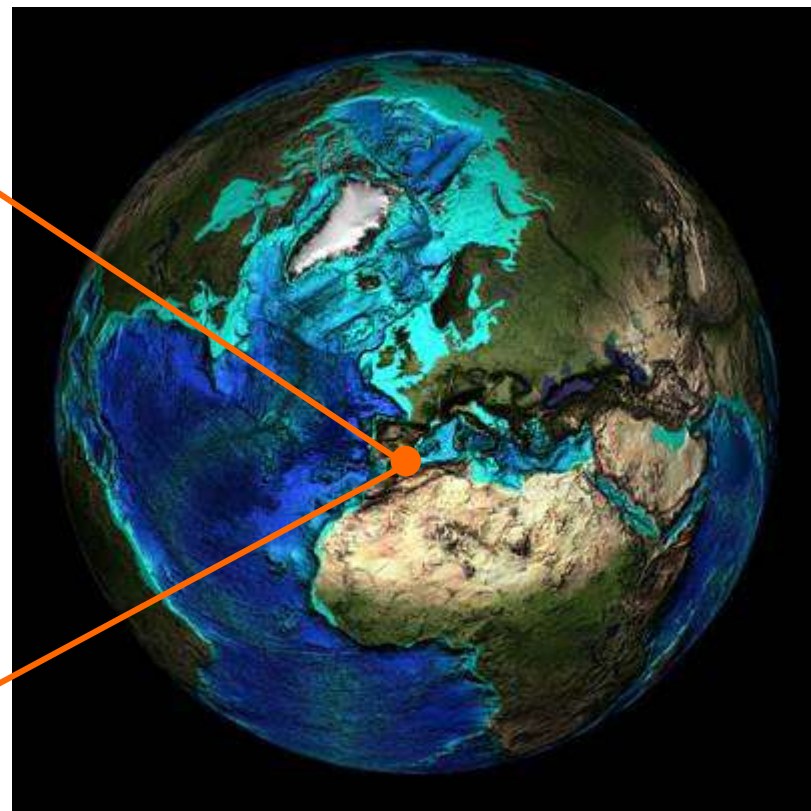


Geographical location – North Africa – South Europe

# Who is MEDGAZ



West Mediterranean satellite view – Gibraltar straight  
Location of the MEDGAZ pipeline.  
Source: NASA



Geographical location – North Africa – South Europe

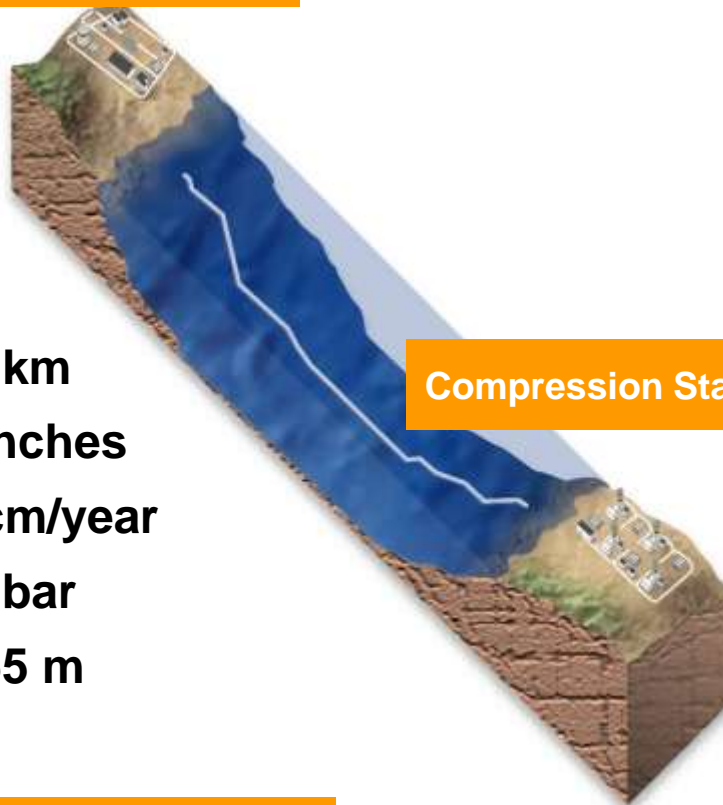
Reception Terminal, Almeria - Spain

## OFFSHORE PIPELINE

- ✓ Length: **210 km**
- ✓ Internal diameter: **24 inches**
- ✓ Capacity: **8 bcm/year**
- ✓ Design pressure: **220 bar**
- ✓ Maximum depth: **2.155 m**

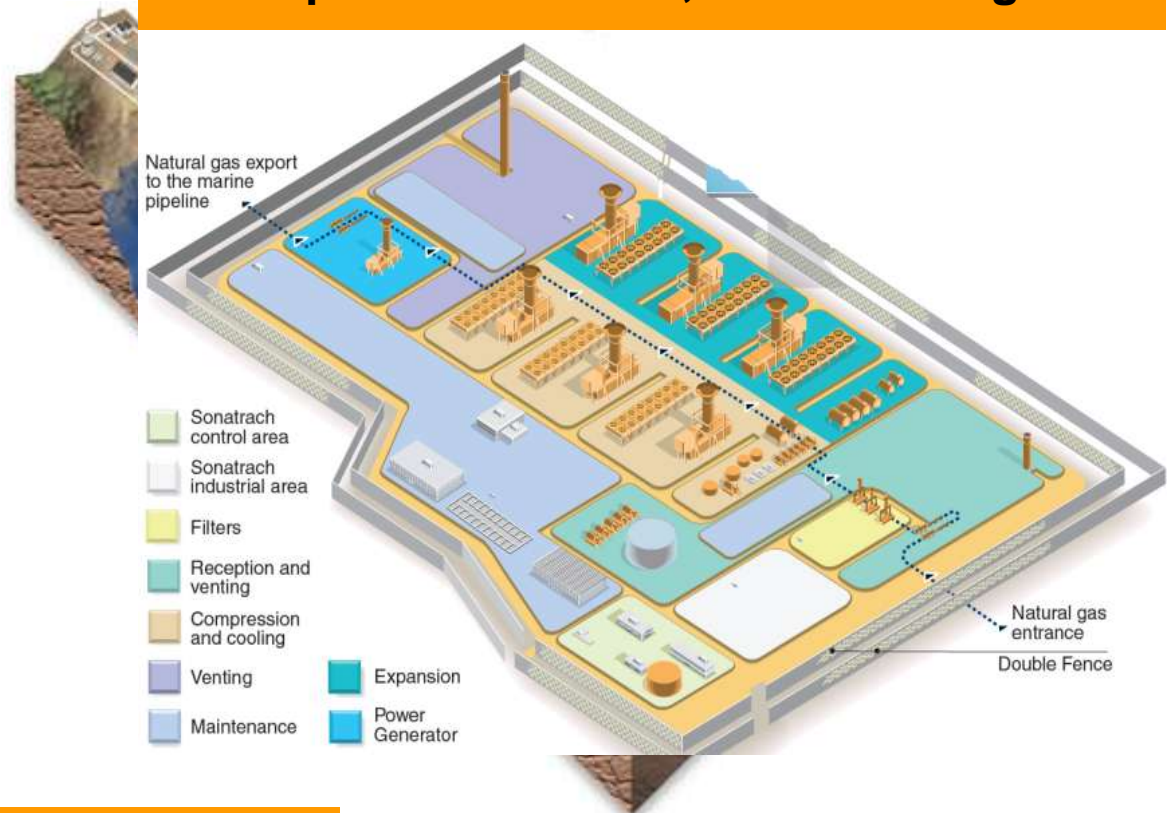
Compression Station, Beni-Saf - Algeria

Total investment: **1.018 M€**



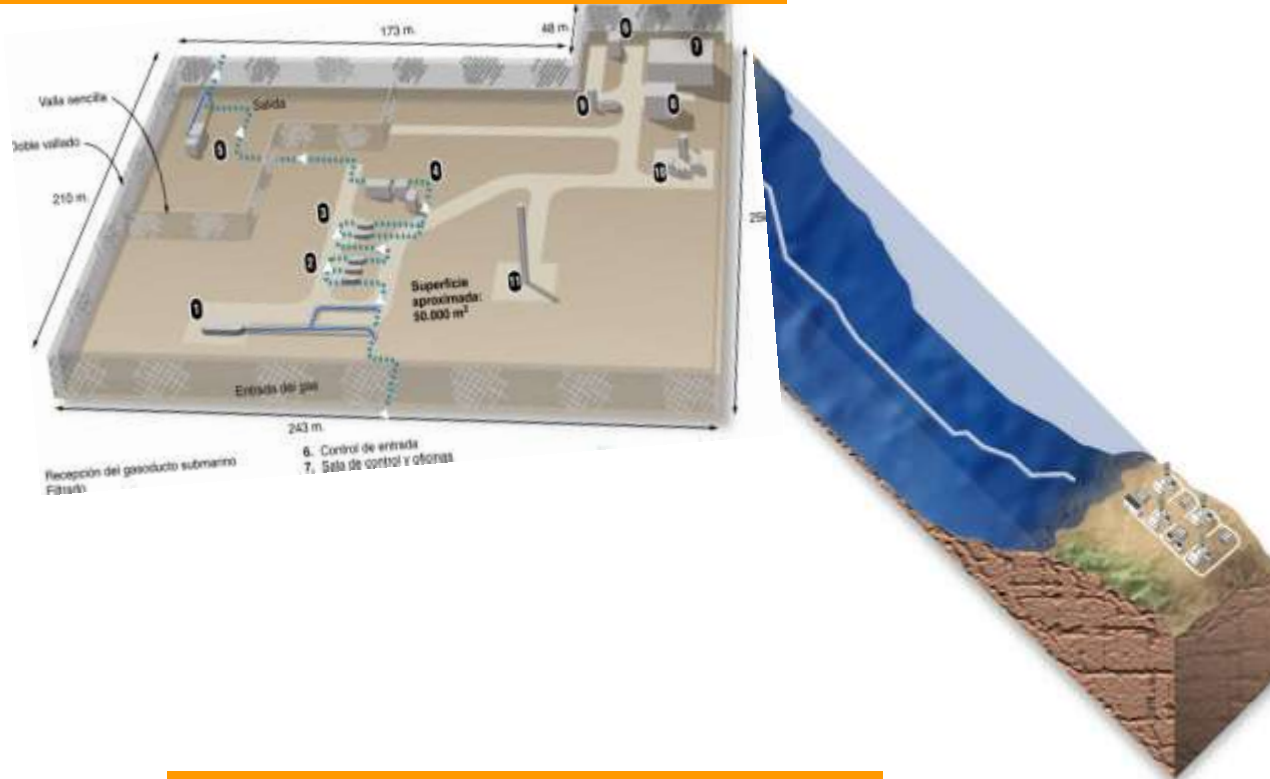


## Compression Station, Beni-Saf - Algeria



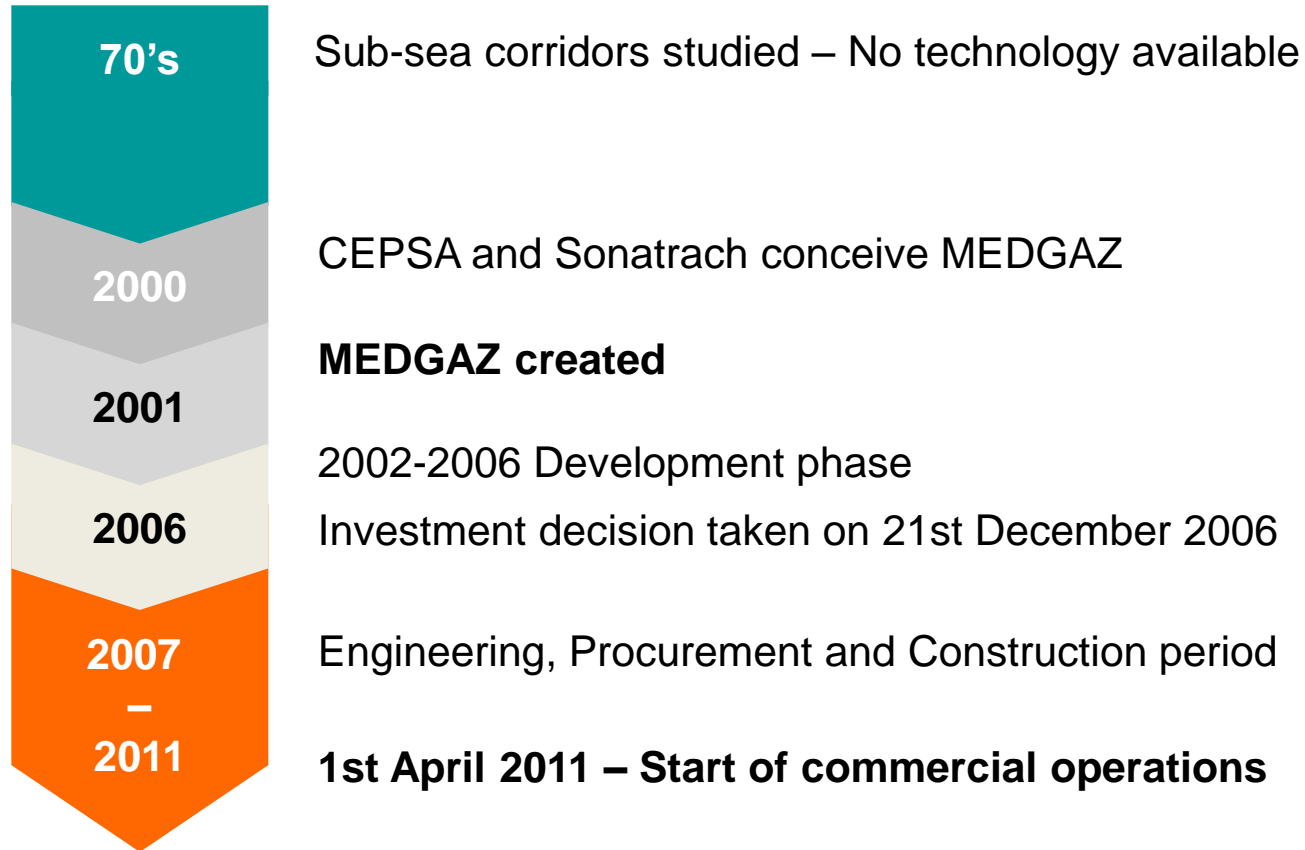
Total investment: 1.018 M€

## Reception Terminal, Almeria - Spain

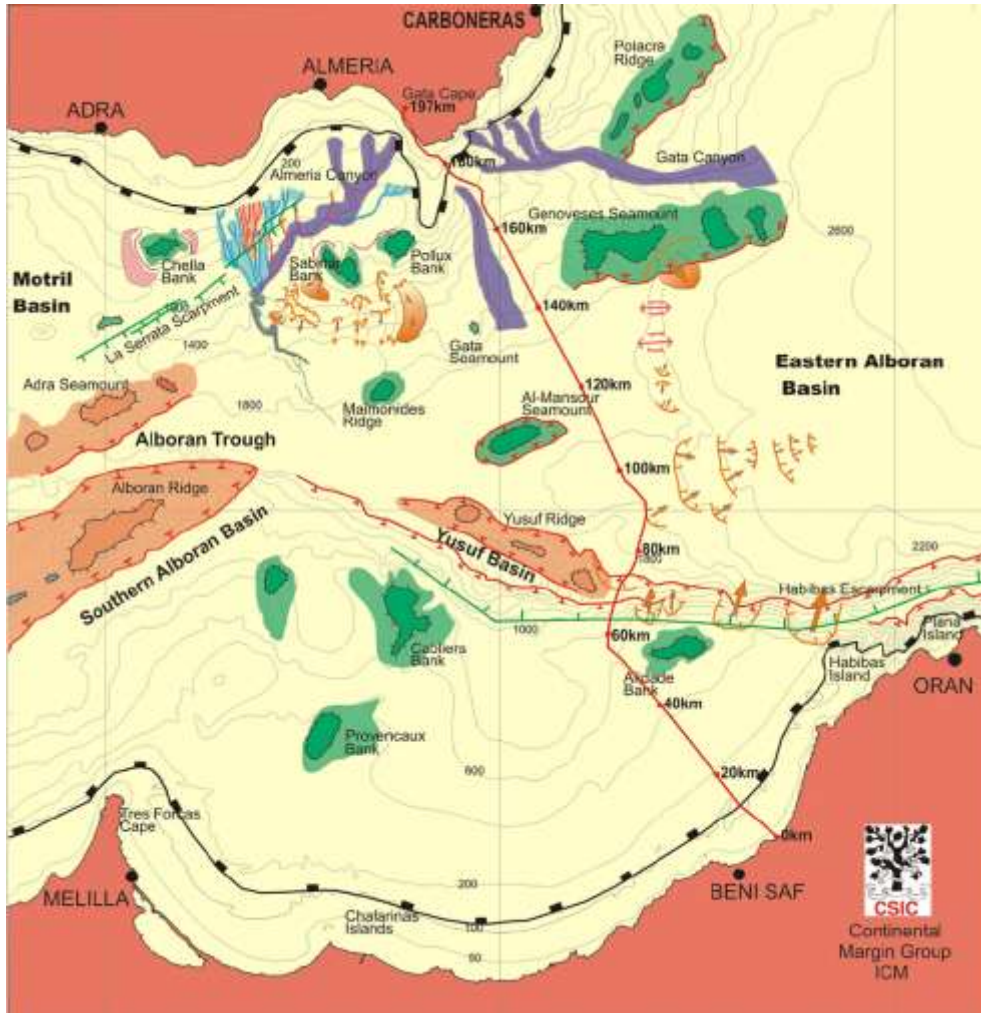


**Total investment: 1.018 M€**

# Project background



# The offshore project: route selection



## 2001 – 2004 Feasibility studies

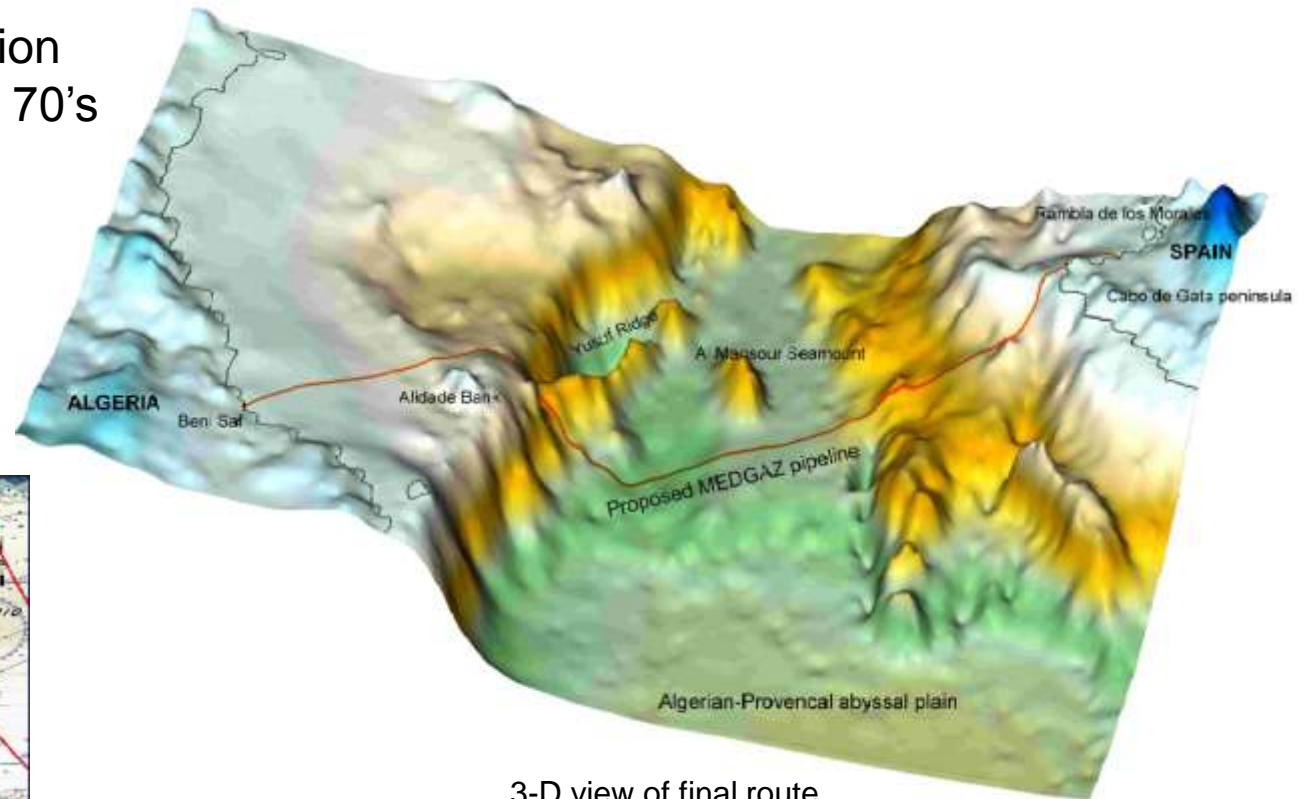
- Alternative routes
- Geohazard study
  - Faults
  - Slopes
  - Landslides
- 3-D sea floor mapping

Geohazard map in the Alboran Sea  
Produced by CSIC for MEDGAZ - 2004



# The offshore project: route selection

- Final route optimization
- Not so different from 70's route

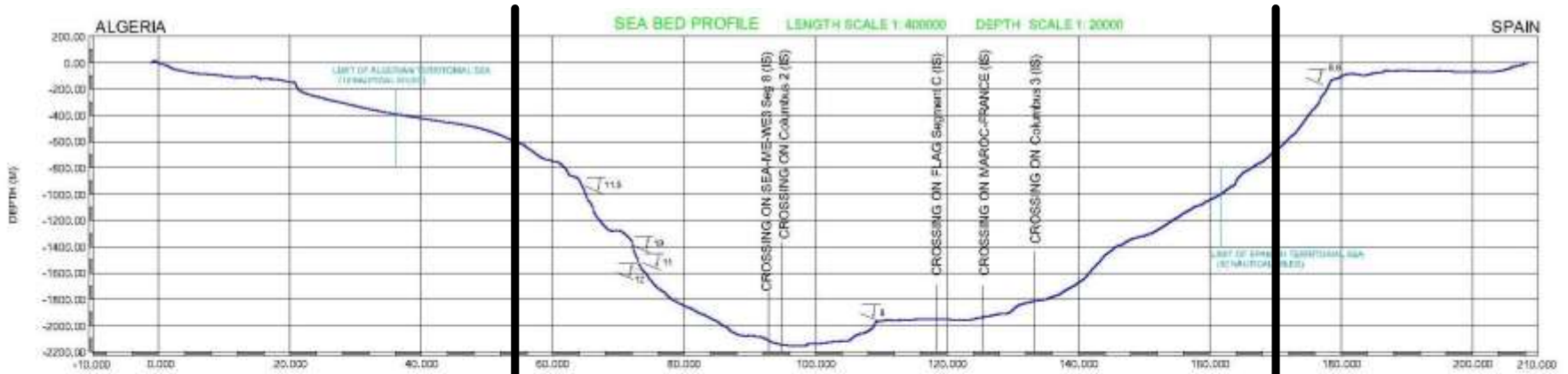


3-D view of final route

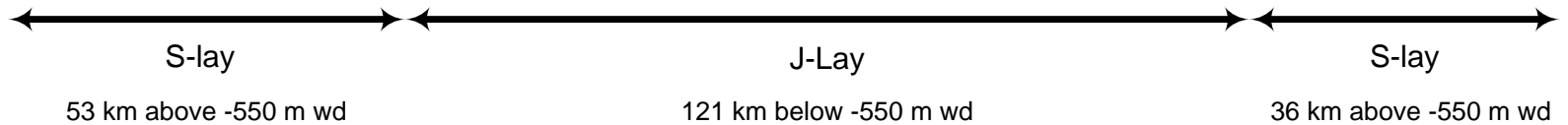


Routes studied in the 70s

# The offshore project: pipe lay



	ALGERIA					SPAIN					
WT	22.9		28.5		29.9		28.5		22.9		
CONCRETE COATING	80/2400	45/2400								45/2400	80/3000
BUCKLE ARRESTORS			29.9/12.2/160		41.5/4/160		55.6/4/160		41.9/4/160		29.9/12.2/160



# The offshore project: pipe lay



Spanish side landfall



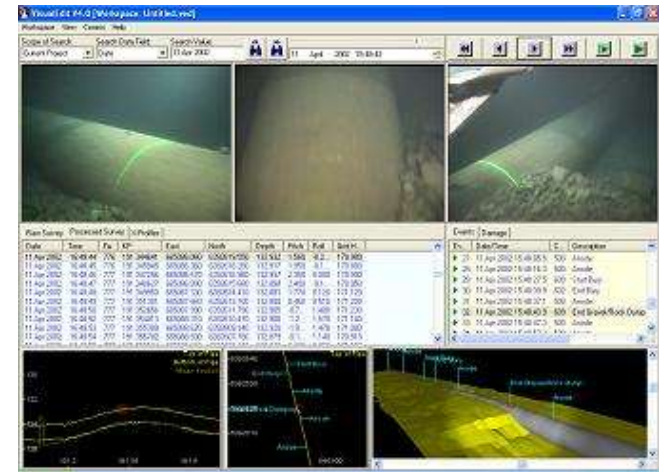
Algerian side – S-lay close to the coast



# The offshore project: pipe lay



J-lay – Saipem 7000  
Depths beyond -550 m wd



Live pipe lay touch-down survey

# The offshore project: pipe lay



Last offshore pipe weld



# The “non-technical” project

## Milestones:

- 2001-2004:
  - MEDGAZ part of EU TEN
- 2004-2006:
  - Included in Spanish and Algerian gas infrastructures' plans
  - Algerian Concession
- 2007-2011:
  - EIB financing up to 500 M€



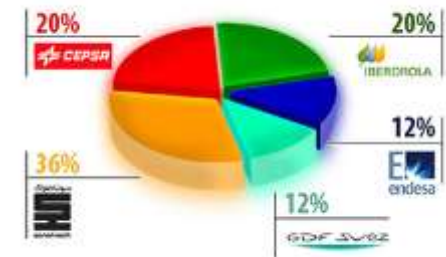
Signature of the Algerian Concession – Oran 2006



Financing agreement signed with EIB

## Key project support levers:

- ❖ Shareholders
- ❖ Spain, Algeria
- ❖ European Union
- ❖ Sonatrach participation



MEDGAZ Shareholders



Thank you for your attention



[www.medgaz.com](http://www.medgaz.com)