

43RD ANNUAL ECC CONFERENCE

engineering and construction contracting association



JOURNEY INTO UNCHARTED TERRITORIES

September 7-10, 2011

JW Marriott Desert Ridge, Phoenix, AZ

How are owners, contractors and suppliers adapting to successfully execute projects and reposition their businesses in the ever evolving project environment?

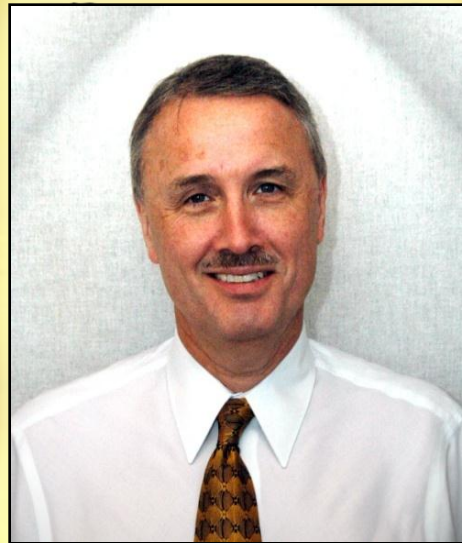


REPOSITIONING THE PROJECTS BUSINESS IN A WORLD WITH CHANGING BOUNDARIES

Presentation Title

**NEIL
MACKINTOSH**

Technip USA, Inc.



Sr. VP Offshore Unit

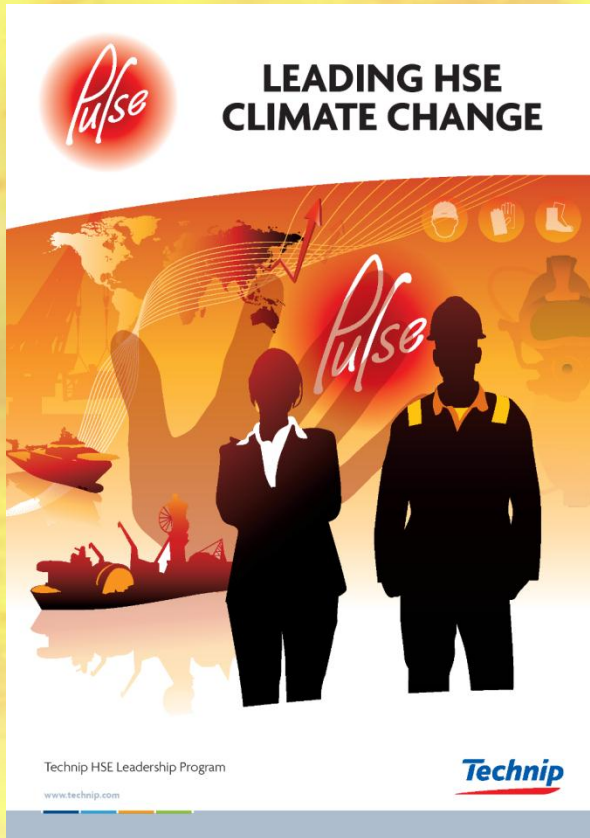
**JOURNEY INTO
UNCHARTED
TERRITORIES**

GENERAL SESSION



REPOSITIONING THE PROJECTS BUSINESS IN A WORLD WITH CHANGING BOUNDARIES

Local Content and Sustainable Development



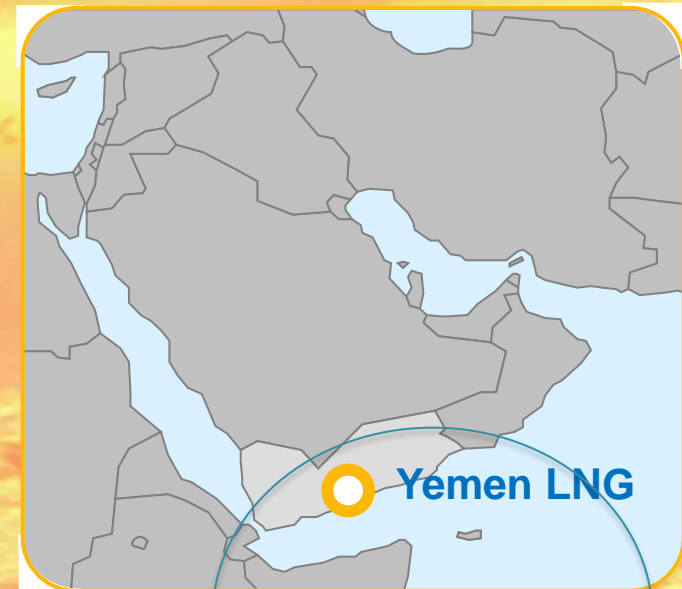
- The health and welfare of our personnel is a core value and an absolute commitment, no matter where in the world our employees are located
- Values
- Commitment
- Training
- Focus
- Management Visibility

Security



Technip and its partners have built Yemen's first LNG plant.

- Information security
- Travelers security
- Emergency response planning
- Training
- Communications



Somali Pirates

World Presence

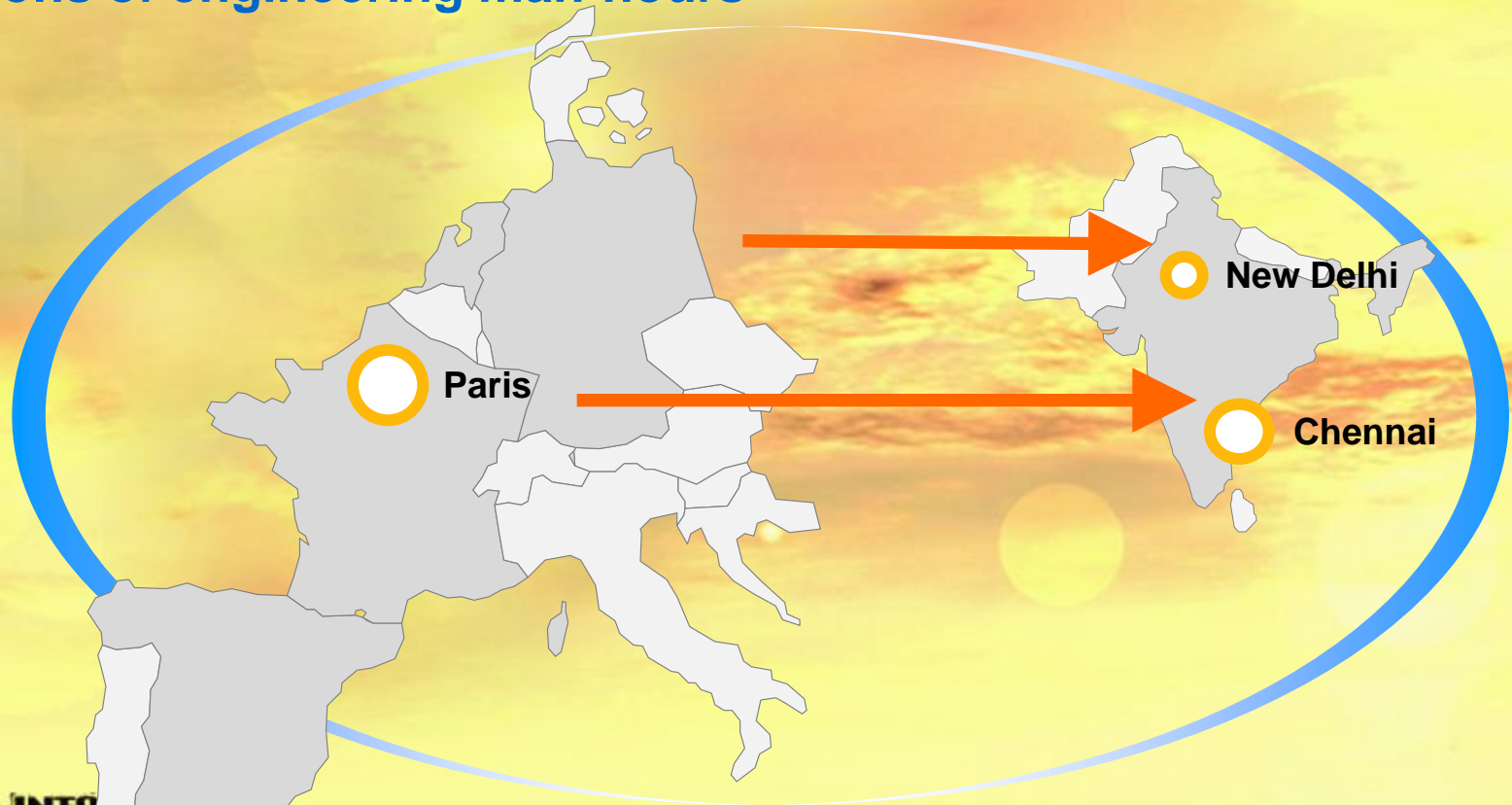


**JOURNEY INTO
UNCHARTED
TERRITORIES**

43RD ANNUAL ECC CONFERENCE

Traditional Model for Local Content

Movement of man-hours from HQ to India, or similar center
Low Cost Engineering
Millions of engineering man-hours



The Kuala Lumpur Story

- Established as low cost engineering center 30+ years ago
 - Detailed engineering
 - Onshore plant
 - Offshore facilities
 - Ex-Pat Management
- 2011
 - FEED
 - EPCI Execution
 - Construction
 - Local Management
 - Developing additional local operations

Investments in Malaysia

- Office facilities
- Manufacturing Facilities
- Fabrication Facilities



Asiaflex Products
Tanjung Langsat, Johor
170 employees



Asiaflex Products



MMHE - Pasir Gudang,
Johor, Malaysia

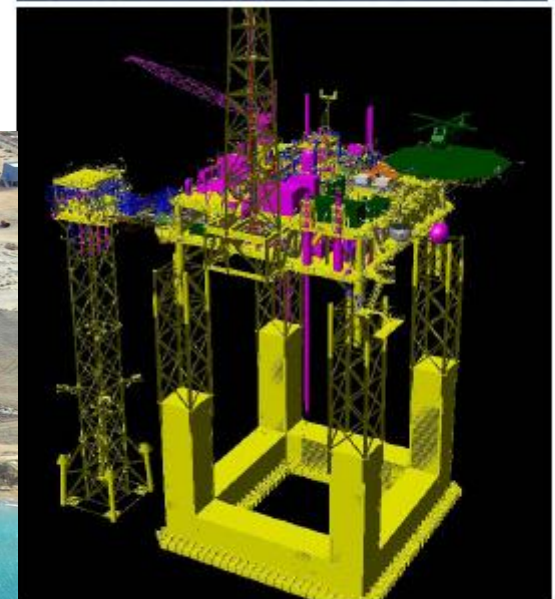
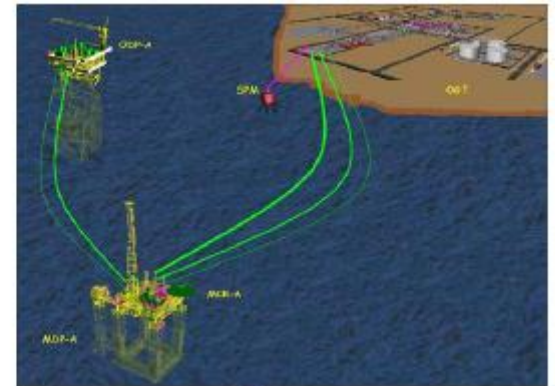
**JOURNEY INTO
UNCHARTED
TERRITORIES**

43RD ANNUAL ECC CONFERENCE

Petronas Turkmenistan Gas Field

PETRONAS CARIGALI (TURKMENISTAN)
SDN BHD, Offshore Turkmenistan, Caspian Sea,
Nov 2004 – 2011

Facilities: Two wellhead/riser platforms, 12-slots in about 55m water depth, export submarine pipelines from wellhead platform to Onshore Gas terminal (OGT), Interfield pipelines and MEG supply pipelines from OGT to wellhead platforms.



TPaslapac_Offshore_13Jan2009.ppt

**JOURNEY INTO
UNCHARTED
TERRITORIES**

43RD ANNUAL ECC CONFERENCE

Sustainable Development

- Investment in intellectual capital across the globe
- Clients ever more ambitious local content objectives
- Encouraging a fair return for all
- Doing the right thing - transparency and credibility
- Signatory to UN Human Rights Global Compact
- Technip Italy SA 8000 certified
- Investment in local communities



**JOURNEY INTO
UNCHARTED
TERRITORIES**

43RD ANNUAL ECC CONFERENCE

The Subsea Business

■ Global Fleet

- Local logistics
- Central Controlled Fleet Management

Current fleet: 17 vessels

■ Local Content

■ Manufacturing Facilities

■ Spool Bases

■ Local Project Management

■ Local Vessels

Flexibras - Vitoria, Brazil



Deep Blue



Deep Pioneer



Sunrise 2000



Venturer



Constructor



Seamec Princess



Apache



Orelia



Wellservicer



Skandi

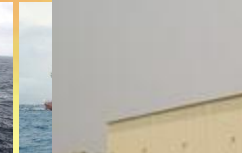
Angoflex - Angola



Alliance



Seamec 1



Skandi



Skandi Vitoria
Brazilian flagged
Pipelay vessel
Delivery in 2009



Skandi Nitteroi
Brazilian Flagged
Pipelay vessel
Delivery 2011

**JOURNEY INTO
UNCHARTED
TERRITORIES**

Today's Model, P-51 Platform, Brazil Deepwater

- Client: Petrobras
- Semi-submersible platform
- Capacity: 180,000 barrels of oil and 6 million m³ of gas per day
- Value: \$ 639 million
- First oil: January 2009



P-51 semi-submersible platform

P-51 is the first semi-submersible platform to be constructed entirely in Brazil. It is anchored at a water depth of 1,255 m.

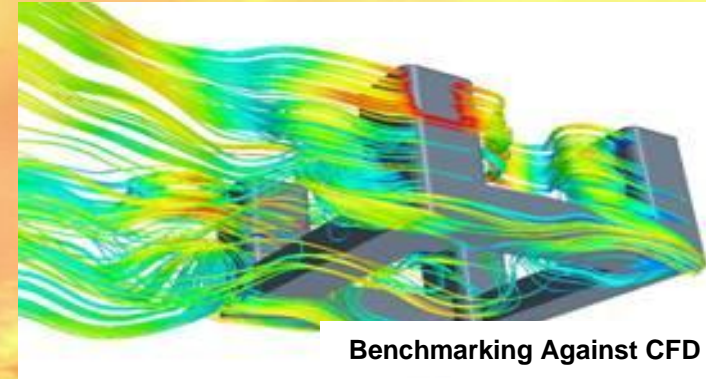
New Model for Local Content

- ▶ R & D
- ▶ Pre-FEED
- ▶ FEED
- ▶ Detail Design
- ▶ Execute
- ▶ Install
- ▶ Commission

**LOCAL
EXECUTION**

Tension Leg Platform (TLP)

- Design and Tools (IPAD) developed initially In Houston
- All work now moved entirely to Malaysia
 - Star CCM Software – Air Gap/Wave Run Up
 - Accusim - VIM
- Opportunity to collaborate with Shell Malaysia

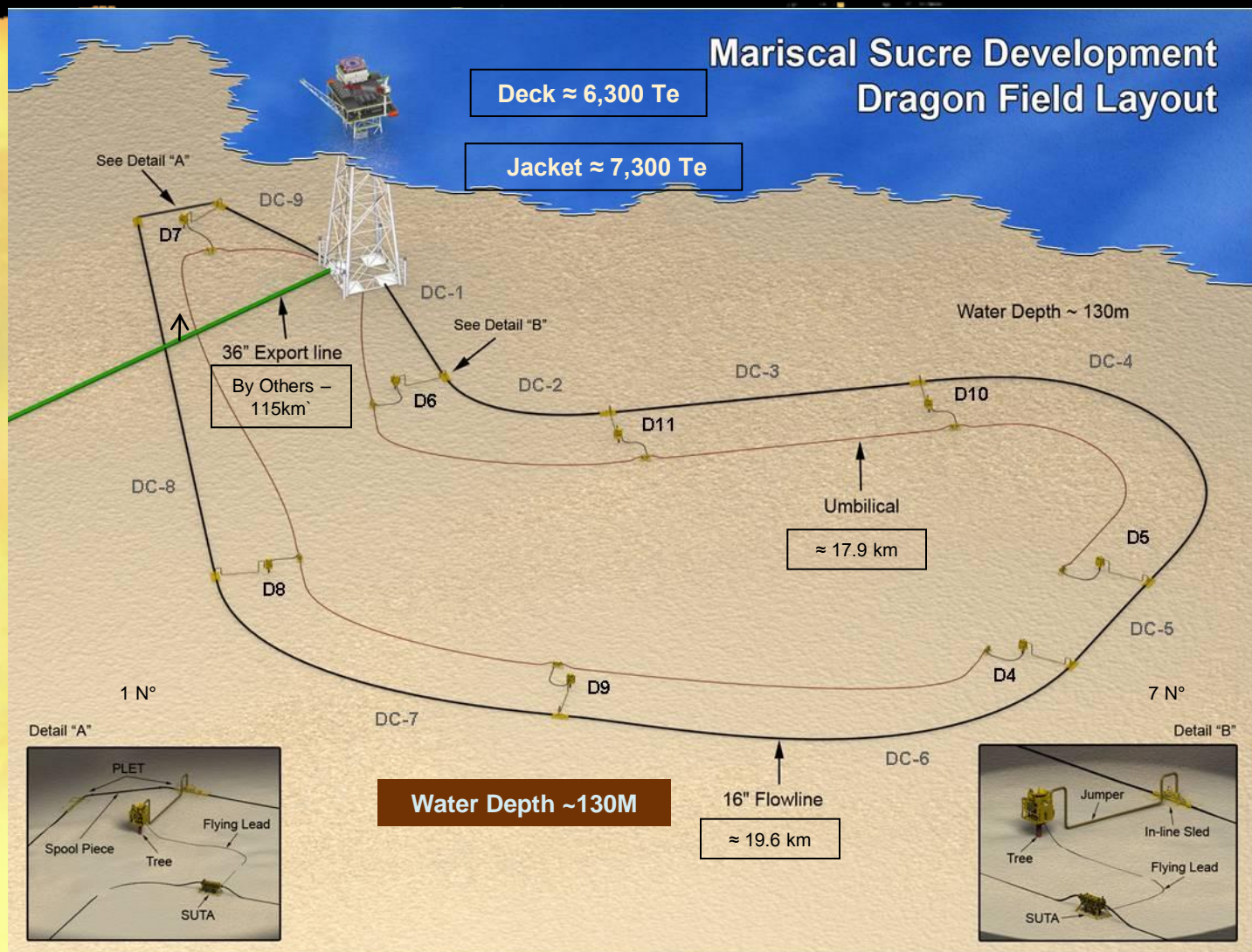


R & D Program

- Model Testing Underway
 - Working with local university
 - Managing model tests for Shell
 - Ballasting improvements, based on spar technology

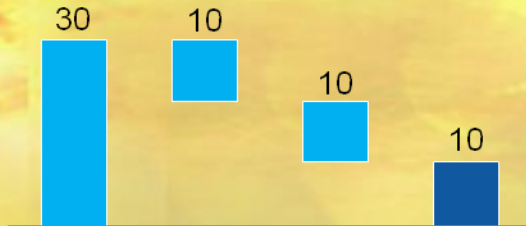


Where Next in Venezuela?



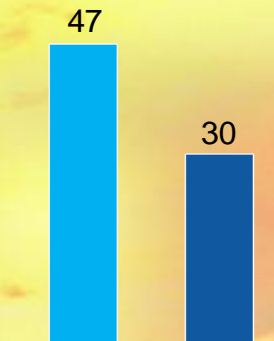
Where Next in Mexico?

3P Crude Oil Reserves¹
(In billion barrels)



3P Possible Probable Proven

Deepwater Resources
(In billion barrels)



U.S. Gulf Mexico³
of Mexico²

Lakach
Development



**JOURNEY INTO
UNCHARTED
TERRITORIES**

Market

- ▶ Cantarell peaked in 2004. Total oil production declined since then
- ▶ Majority of the proven reserves is made of heavy crude oil
- ▶ The deepwater holds massive potential reserves, but requires new technology

What Role Can Technip Play?

- ▶ Assist Pemex expand into deepwater
- ▶ Training of Pemex Personnel
- ▶ Pre-FEED Activities for Deepwater
- ▶ FEED Activities

Thank You



www.technip.com

**JOURNEY INTO
UNCHARTED
TERRITORIES**

43RD ANNUAL ECC CONFERENCE