



EXMAR

Emship Strategic Advisory Board 2/3 December 2010

Exmar group overview



From shipbuilder to an innovative shipowner

BOELWERF

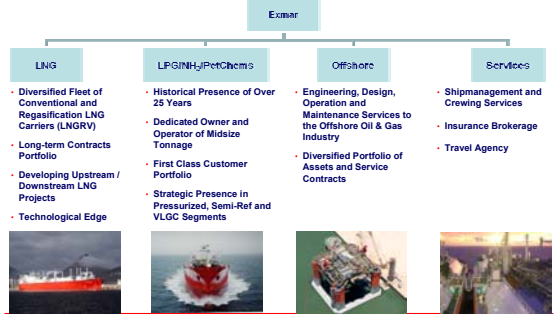
- 1828 Creation of BOELWERF
- 1978 Delivery LNG carrier "METHANIA"
- 1980 Delivery of first LPG vessel (51.000m³)
- 1989 Delivery of "YATZY" (drilling rig)

EXMAR

- 1981 Start-Up of Exmar's LPG activities
- 1986 creation of Midsize Fleet
- 1989 Purchase Arethusa (drilling rigs)
- 1991 Take over of / merger with CMB
- 2000 Order LNGC "EXCALIBUR"
- 2002 Order first LNGRV "EXCELSIOR"
- 2003 demerger from CMB



Company Profile



Exmar offices worldwide



LNG

Why liquefy gas?

1 m³ LNG ≈ 600 m³ Natural Gas
 1 m³ Liquefied Propane ≈ 310 m³ Propane Gas



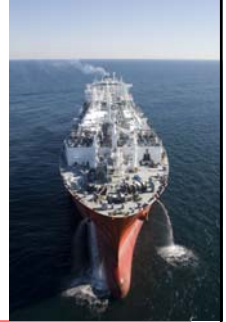
LNG Fleet & orderbook

CONVENTIONAL LNG CARRIERS

1. METHANIA (1978/131,000 m³) – under management
2. EXCALIBUR (2002/138,000 m³) – 50%
3. EXCEL (2003/138,000 m³) – 50%

LNGRV'S

1. EXCELSIOR (2005 / 138,000m³) – 50%
2. EXCELLENCE (2005/138,000 m³) – under management
3. EXCELERATE (2006/138,000 m³) – 50%
4. EXPLORER (2008/150,900 m³) – 50%
5. EXPRESS (2009/150,900 m³) – under management
6. EXQUISITE (2009/150,900 m³) – under management
7. EXPEDIENT (2009/150,900m³) – under management
8. EXEMPLAR (2010/150,900m³) – under management



LNG value chain

Traditional



The EXMAR Solution



→ One-Stop Solution for LNG Shipping, Storage and Regasification

Onboard Regasification

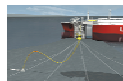
Applications

- For locations where permitting or other constraints prevent the development of onshore regasification terminals
- Emerging gas markets
 - Fast track solution
 - Low capital layout (jetty/buoy) with chartering of LNGRV
 - Stepping stone to future expansion of gas network
- Mature gas markets
 - Peak shaving during periods of saturated onshore capacity
 - Diversification of existing gas supply sources (spot trading)
 - Security of supply

Technological Edge – the RV Innovation

Three Distinct Cargo Offloading Systems

1. Discharge of LNG to a **conventional land-based import terminal**, like a conventional LNG carrier
2. Discharge of natural gas offshore (**Deep Water or Shallow Water Port**)
3. Discharge of natural gas along quayside onshore (**Gas Port™**)



Exmar/Excelerate LNG regasification terminals

Two Offshore deepwater regas terminals
 (Gulf of Mexico - US, Boston - US)



Three Dockside regasification terminals
 (Teesside - UK, Kuwait, Bahia Blanca - Argentina)





Continuous Development of Technology

Project Driven Technological Development



- Increase Cargo Capacity
138,000 ϕ 150,900 m³
- Increase Closed Loop Regasification Capacity
 - Added Auxiliary Steam Boiler
 - Heat Recovery System (HRS)
- Reduce Air Emissions
 - Dual Fuel burning diesel generator
 - Selective Catalytic Reduction (SCR)

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Continuous Development of Technology

LNG ship- to – ship transfer



STS technology allows uninterrupted send-out

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LPG / NH₃ / PetChems



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LPG Fleet

Major Player in LPG, Ammonia and Petchems Transportation

- Full range of multi-purpose gas carriers: (pressurized 3,500 m³ to VLGC 85,000 m³)
- Market leader in 'midsize' segment (20,000 m³ to 40,000 m³)
 - > Transport 40% of the world's seaborne Ammonia
- In total, Exmar operates commercially a fleet of 27 LPG carriers (owned or time chartered):

> VLGC	- 4 vessels
> LPG/NH, Midsize	- 17 vessels
> Semi-Refrigerated	- 1 vessel
> Pressurized ⁽¹⁾	- 5 vessels



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OFFSHORE

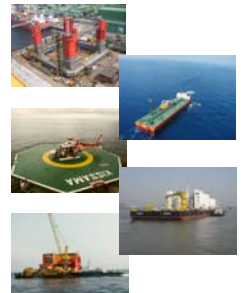
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Exmar Offshore

Provides engineering & design services, asset leasing, operating and management

- Own Assets and Project Management
 - > KISSAMA – Accommodation Barge; 350POB
 - > NUNCE – Accommodation Barge; 350 / 450POB (Del. Q1 2009)
 - > OPTI-EX™ – Production Semi-submersible; 60,000bpd, 50mmscfd (Del. Q2 2009)
- Management and Operations
 - > FARWAH – FPSO
 - > DALIA – FPSO
 - > GIRASSOL – FPSO
 - > SEREPKA – FSO
 - > KISSAMA – Accommodation barge
 - > NUNCE – Accommodation barge
- Engineering and Design Services
 - > EOC, Houston
 - > DVO, Paris
 - > Exmar Technical, Antwerp



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OPTI-EX™ Production Facility

OPTI-EX™ is a flexible production semi-submersible designed to operate worldwide in deepwater environments.

- Availability: **2Q 2009** commissioned and ready for First oil.
- Missions:
 - 1) Primary Field Production
 - 2) Early Production



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Exmar Services

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Exmar Services: Highlights

Exmar also Offers State-of-the-Art Services in the Shipping and Offshore Industry

- Exmar Shipmanagement
 - Specialized in quality ship management & related services to asset owners
 - Crewing (recruitment and selection, training)
 - Operational and Marine Management
 - Health, safety, security, environment and quality
- Belgibo
 - Insurance Broker based in Antwerp
 - Among the Top 10 Insurance Broker in the Benelux
- Travel Plus
 - Professional Travel Agency

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EXMAR TECHNICAL DEPARTMENT

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Exmar Technical department responsibility for newbuildings



Define Ship Requirements
 Yard Selection
 Building Specifications
 Design development (e.g. LNG-regasification vessel)
 Plan Approval
 Building Supervision

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Exmar Technical department responsibility for project development



Investigate project (client) requirements
 Establish work scope
 Contact subcontractors
 Define the concept
 Prepare project overview and budget for decision makers
 Supervise detailed design by subcontractors
 Supervise actual project execution

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Plan Approval

- Extent of drawings - for approval / for reference
- Deadline for reply (existing designs!)
- Communication with Classification Society
- Auditing of equipment vendor's documentation

Building Supervision

- Role/Authority of the Buyer's representative
- Number of people allowed
- Extent of inspections
- Access to all working areas, including subcontractors
- Facilities provided for Buyer's team

Follow up the construction (incl. main equipment)

- Compliance with approved drawings
- Check workshop drawing vs approved drawing
- Compliance with building standards
- Compliance with the specifications
- Compliance with "Good Shipbuilding Practice"
- Ease of maintenance & Access
- Follow up testing and trials
- (Pre-)qualification of Subcontractors
- Compliance with HSE policy
- Construction follow-up and reporting



Scheduled inspections

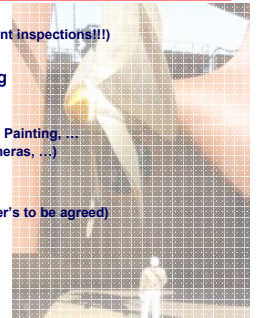
- Extent to be agreed (Steel fit-up, paint inspections!!!)

Unscheduled inspections/Patrolling

- Critical areas
- Shipyard's weak points
- Bottle necks - Erection in dry-dock, Painting, ...
- Quick reporting system (Digital Cameras, ...)

Tests & trials

- Shop tests (extent attended by Buyer's to be agreed)
- On board testing
- Mooring trials
- Sea trials
- Gas trials (before or after delivery)



Auditing of a subcontractor's responsibility



Thank You