

# **Spares Management Experience**



### **Golar Spares Management**

- Integration of IT systems, warehouse modules and procurement strategy
- Global fleet support
- Project Logistics scope for conversion of FSRUs and LNG vessels
- Marine support during FLNG/FSRU vessel and terminal installation
- Logistics consultancy services

# **FSRU/FLNG Experience**





### **Golar Hilli and Golar Nusantara**

- Project logistics for the vessel conversions of Golar Hilli FLNG and Golar Nusantara FSRU
- Includes all equipment, from small air freight to large gas modules above 1000 MT
- Involvement in installation and commissioning campaigns

### **Project Experience**



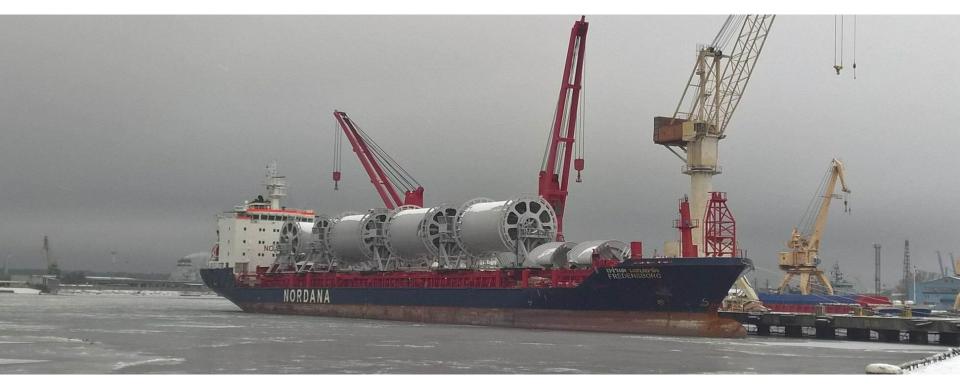


#### **McDermott Ichthys Project**

- Load-out of umbilical reels and subsea equipment in Moss 2<sup>nd</sup> half 2016, involving ship agency and chartering of barges and HLV
- Provision of various rental equipment and procurement services to enable project completion. Use of spacer barges, ballasting equipment



# **Project Logistics Experience**



#### **Transport solution for Scana offloading reels**

- Full integrated transport solution from key vendors in Europe to Latin America and Far East
- Specially designed solutions for their requirements and charters of local coasters as well as deep sea HLVs





#### Logistics turnkey provider to several FPSO/FPU projects

- Numerous large contracts for the construction and installation mob/demob of FPSOs
- Current logistics support for the conversion of FPSO BW Catcher with special focus on the heavy lift modules and topsides.
- Moved the world's largest STP Buoy from Asia to Gulf of Mexico
- BW Offshore, SBM Offshore, Aker, Rubicon, Golar, Omni, NOV





#### **Cascade & Chinook Project**

- High profile project for worlds deepest FPSO project. Contract value USD 7m
- All heavy lifts for the FPSO constructions with multiple complex HLV charters.
- Project movements covered by National Geographic's Megastructures
- Moved the world's largest STP Buoy from Asia to Gulf of Mexico





#### **Reliance FPSO Construction & Installation Project**

- All material and heavy lift deliveries to the FPSO construction
- Assembly and transport solution of 2 x 50m cranes with large cost savings to project
- Full mobilization out of Singapore and Johor of multiple HLVs, installation vessels, diving vessels, AHTS and semi-submersibles for the installation campaign. Total integrated solution including marine agency, fabrication, equipment rental, procurement and various support services





### Load-out for Lam Son FPSO

- External Turret Production Module. 33m high, 18m wide and 900 tons excluding grillage
- Marine Engineering
- Grillage and seafastening design and fabrication





### **Peregrino FPSO Project**

- Load-out and transport of various large components for the FPSO's turret and mooring system in Java and Batam. 36m high, 18m wide and 700 tons.
- Marine Engineering





#### **Catcher Project**

- Total logistics, including both small parts and large heavy lifts, for the construction, transit and installation of Catcher FPSO project. Contract value USD 5-7m
- Altus in-plants in BW Offshore. Warehouse and storage solutions
- Smart solutions for some of the larger project cargo by using unconventional methods that made significant savings

# **Ship Spares Experience**





### Supporting Swire's fleet of approx. 90 vessels globally

- Warehouse management in Singapore and Northern Europe
- Logistics studies to find efficiencies and cost savings for implementation of new logistics strategies
- Project logistics support to Swire Seabed's diving vessels in North and East Europe
- Supporting vessel lay-up and ship agency in multiple locations

### **Project Cargo Experience**





#### **Crane construction & Transportation Project**

- Presentation of a cost efficient solution, where we moved crane assembly project for 2 x 50m cranes from Europe vendors to a construction yard near FPSO shipyard.
- Provision of assembly yard, forklifts, cranes, and machinery for construction
- Project Management and manpower supply for the assembly, including mechanics, electricians, welders, painters, etc.



# **Project Logistics Experience**



#### **Base-to-base transportation for North Atlantic Drilling and Seadrill**

- Provision of supervision and load-out expertise for moving bulky and heavy cargoes between supply bases in Northern Europe locations
- Multiple short sea charters along Norwegian and UK coast, with flexible solutions and use of high speed coasters

# **Ship Spares Experience**





#### Supporting Swire's fleet of approx. 90 vessels globally

- Warehouse management in Moss, Singapore and Rotterdam
- Logistics studies to find efficiencies and cost savings for implementation of new logistics strategies
- Project logistics support to Swire Seabed's diving vessels in North and East Europe
- Supporting vessel lay-up and ship agency in multiple locations

# **Ship Spares Experience**





### Supporting AKOFS fleet and project logistics

- Warehouse management in Moss, Norway
- Frequent movement of larger equipment to project locations
- Managing vessel spares