HYDROGRAPHIC SURVEY VESSEL 6613
“TRAN DAI NGHIA”

**GENERAL**
- Yard number: 556053
- Delivery date: December 2010
- Basic functions: Multipurpose vessel for hydrographic and oceanographic survey, training, buoy laying mine counter measure
- Classification: Lloyd’s Register
  - 100 A1
  - LMC UMS
- Flag: Vietnamese
- Owner: Vietnamese Navy

**DIMENSIONS**
- Length overall: 66.35 m
- Length B.P.P.: 60.25 m
- Beam moulded: 13.20 m
- Depth moulded: 6.50 m
- Draught summer: 3.10 m
- Deadweight (summer): 565 t

**TANK CAPACITIES**
- Ballast water: 338 m³
- Fuel oil: 255 m³
- Fresh water: 162 m³

**PERFORMANCES (TRIALS)**
- Speed: 12.6 kn

**PROPULSION SYSTEM**
- Main engines: Diesel-Electric, 400 V, 50 Hz
- Propulsion Power: 2x 600 kW at 1200 rpm
- Propellers: 2x 1600 mm, FPP, Azimuth
- Bow thruster: 1x 140 kW, 840 mm, FPP

**AUXILIARY EQUIPMENT**
- Main generator sets: 4x CAT 3412C TA, each 500 kW at 1500 rpm
- Emerg./Harbour gen. set: 1x CAT 3406E TA, 215 kW at 1500 rpm

**DECK LAY-OUT**
- Boat handling crane: 1x electric-hydraulic, 5 t at 10 m (sea state 2)
- Deck crane: 1x electric-hydraulic, 3.2 t at 10 m (harbour)
- A-frames: 1x for towed side sonar winch and 2x general purpose winches
- 1x for shallow water CTD winch
- 1x for deep water CTD winch
- Boats: 2x survey boats 8.0 m
  - 1x RIB 4.0 m

**ACCOMMODATION**
- Crew: 19 persons
- Additional: 27 persons

**NAUTICAL AND COMMUNICATION EQUIPMENT**
- Radar system: 1x X-band + S-band
- GMDSS: Area A3

**SURVEY EQUIPMENT**
- Extensive hydrographic/oceanographic equipment such as:
  - Single Beam Echo Sounder
  - Towed Side Scan Sonar
  - Ultra Short Base Line
  - CTD System