

### Norwegian Icegoing Research Vessel

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#### Background

2009



#### Organization



## **Technical details**

- Length over all (LOA): 100,0m
  Breadth: 21,0m
  Draft approx. 8,0m
  Gross tonnage approx. 9000GT
- Machinery Diesel/electric (A/C) 10MW thruster effect
- Two azimuth thrusters (Z-drives) aft
- Two tunnel thrusters forward
- Accommodation for 55 persons in 38 cabins (15 crew and 40 scientists & technicians)
- Helicopter capacity for two small helicopters
- Emergency towing and fire fighting of other vessels
- Diving facilities & mobile pressure chamber
- Loading capacity: 22 x 20 'containers
- DNV-Class: PC-3 Icebreaker
- Maximum cruising range approx. 15.000nm = Tromsø-Antarctica and back
- Endurance 65 days



## Icegoing capabilities

- PC-3 ICEBREAKER =
- Year-round operation in second-year ice which may include multi-year ice inclusions
- Continuous ship speed when breaking 1,0m ice thickness: Approx. 5 knots
- Continuous ship speed when breaking 0,4m ice thickness: Approx. 11 knots
- Hull structure, appendages and cranes to operate down to at least -35°C
- With moonpool/hangar and helicopter hangar:
- The Vessel may operate & sample year round everywhere in Antarctic seas
- The Vessel may operate & sample year round in the Arctic marginal ice zone
- The Vessel must navigate in leads when old, thick ice is present. With sufficient time allocated, the Vessel may operate well into the Arctic Ocean, even in winter.



## Scientific functions

Arranged and equipped with state of the art scientific instrumentation for:

- Oceanography, Marine Biology, Fisheries research
- Geology, Geophysics, Chemistry, Physics
- Demersal and Pelagic trawling (Open water and in ice)
- Bottom piston coring and grabbing
- ROV and AUV operations
- Seismic operations
- Launch and recovery of buoys, landers, observatories and moorings
- Launch and recovery of different kinds of towed vehicles
- Student training







#### Yard contract

- 6 shipyards prequalified
- Bids to be delivered on 6 June 2013
- Yard selected on 5 September 2013
- Bids expected from 5 yards:
  - Bergen Yards, Norway
  - Damen, Romania
  - Fincantieri, Italy
  - Freire, Spain
  - Shanghai Shipyard, China

# Questions?