

# Research on Safety of Ice Navigation and Environmental Protection in the Gulf of Finland

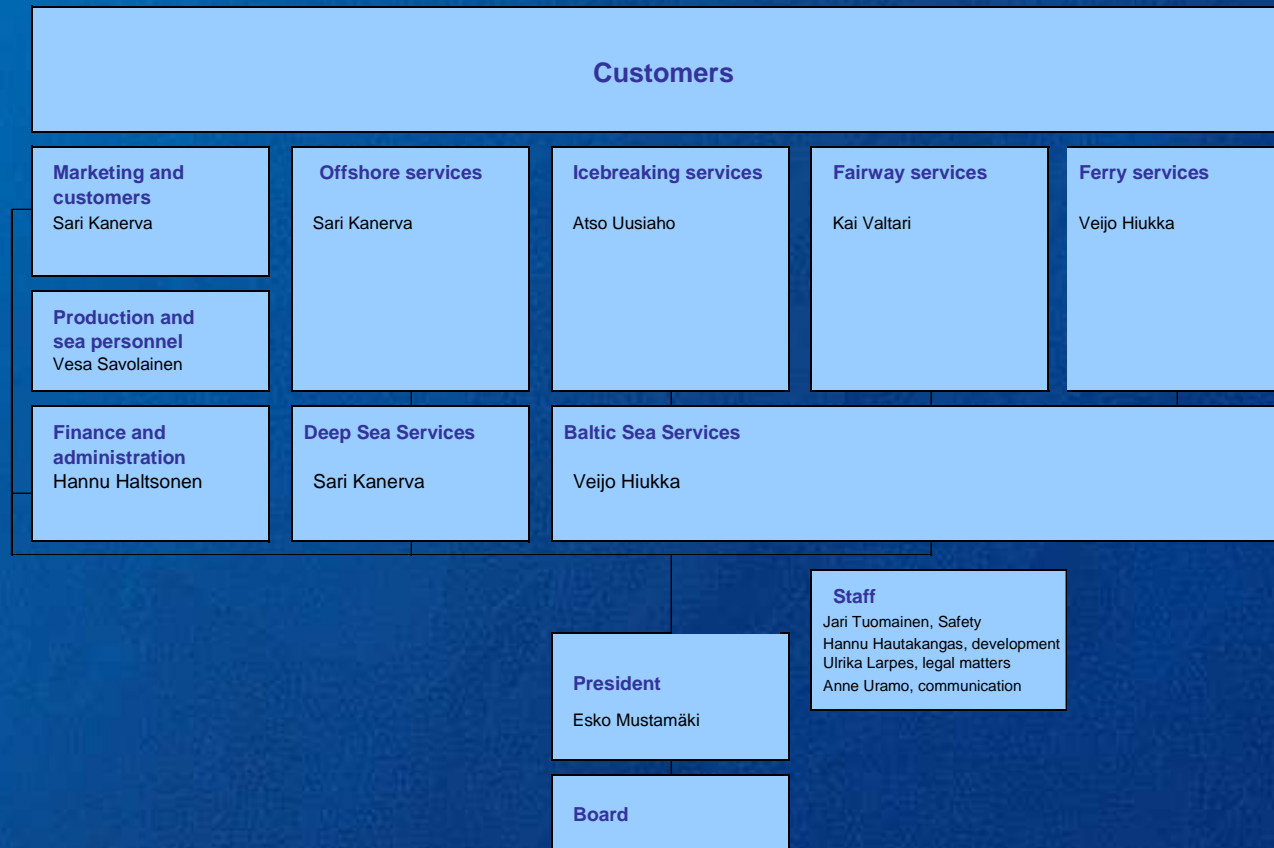
International Seminar  
20 – 21 November 2007  
Kotka, Finland

# Our mission

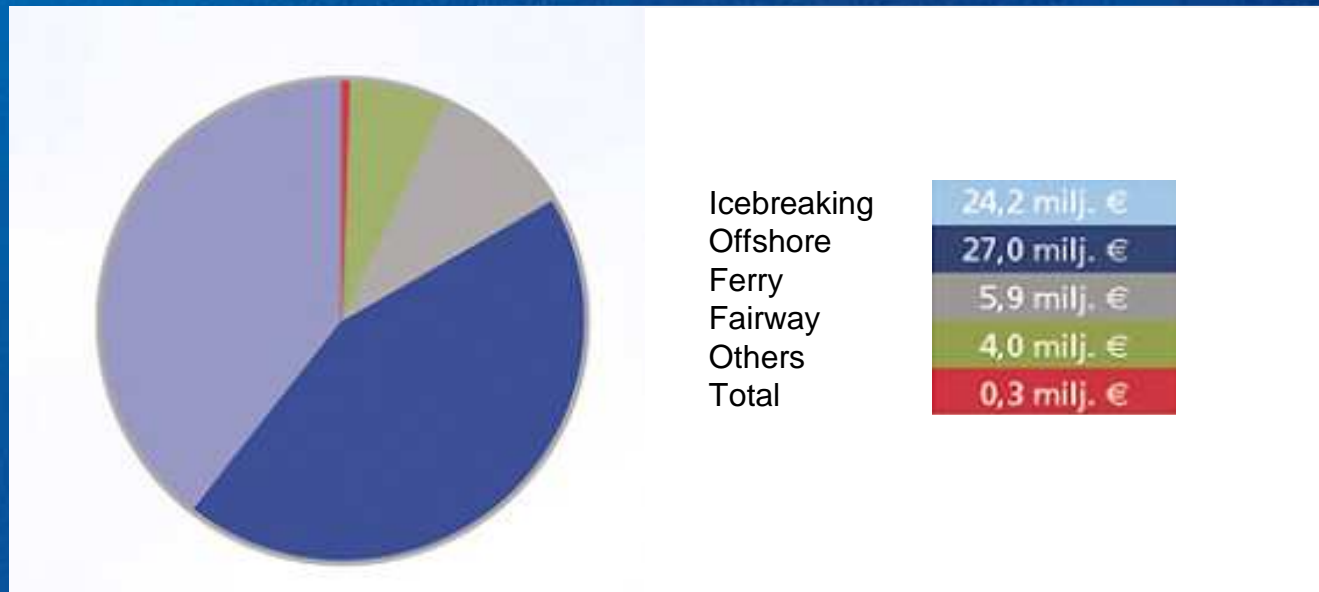
## *Firmly at sea*

We provide a versatile range of icebreaking and fairway services for general shipping needs, specialised services for offshore operations, ferry services, and ship management services. Our operational field focuses on the Baltic Sea and arctic regions.

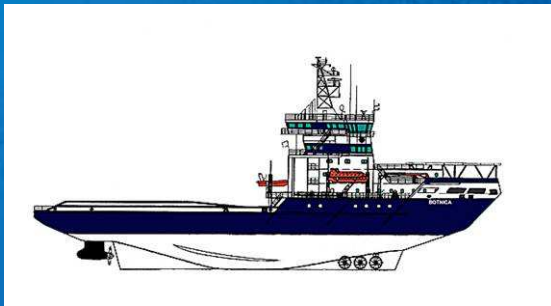
# Organisation



# Turnover per business area in 2006



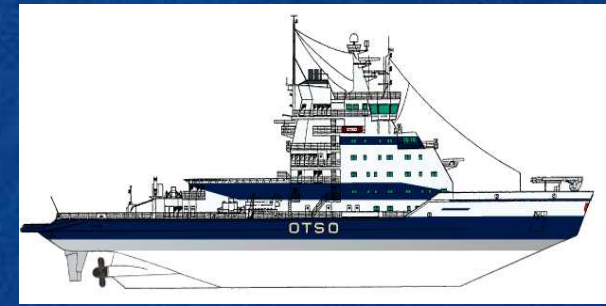
# Finnish icebreakers



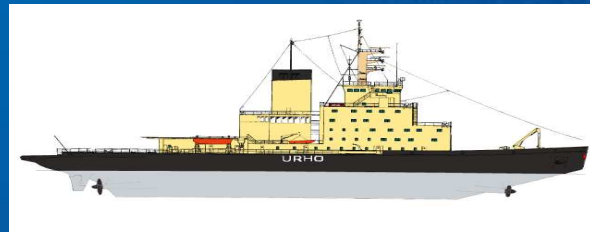
**Botnica 1998**  
**10 MW**



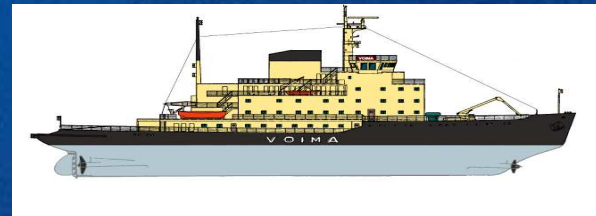
**Fennica 1993**  
**Nordica 1994**  
**15 MW**



**Otso 1986**  
**Kontio 1987**  
**15 MW**



**Urho 1975**  
**Sisu 1976**  
**16,2 MW**



**Voima 1954 (1979)**  
**10 MW**

ICEBREAKERS AND MULTI-PURPOSE VESSELS

LENGTH m · BEAM m · DRAUGHT m · OUTPUT KW



**KONTIO**  
98.6 · 24.2 · 8.0 · 15,000



**OTSO**  
98.6 · 24.2 · 8.0 · 15,000



**SISU**  
106.6 · 23.8 · 8.3 · 16,200



**URHO**  
106.6 · 23.8 · 8.3 · 16,200



**VOIMA**  
83.5 · 19.4 · 7.0 · 10,200



**BOTNICA**  
97.0 · 24.3 · 8.5 · 10,000



**FENNICA**  
116.0 · 26.0 · 8.4 · 15,000



**NORDICA**  
116.0 · 26.0 · 8.4 · 15,000

FERRIES



**AURA**  
53.8 · 12.0 · 4.2 · 1,900



**AURORA**  
53.8 · 12.0 · 4.2 · 1,900



**ANTONIA**  
48.5 · 9.1 · 3.5 · 602



**FALKO**  
33.3 · 6.6 · 2.4 · 633



**JURMO II**  
33.3 · 6.6 · 2.4 · 633



**ROSA LA II**  
33.3 · 6.6 · 2.4 · 633



**VIKEN**  
31.6 · 8.0 · 2.9 · 530



**URSUS**  
26.5 · 10.0 · 2.2 · 402



**KAITA**  
24.5 · 7.2 · 2.2 · 580



**KIVIMO**  
24.5 · 7.2 · 2.2 · 580



**FINNO**  
19.8 · 5.8 · 2.2 · 350



**FISKO**  
19.8 · 5.8 · 2.2 · 350

FAIRWAY VESSELS



**SEILI**  
50.5 · 12.2 · 3.8 · 2,200



**LETTO**  
42.7 · 12.2 · 3.8 · 2,500



**LINJA**  
34.9 · 9.0 · 2.8 · 1,600



**SEKTORI**  
33.0 · 7.9 · 2.5 · 638



**KUMMELI**  
29.2 · 7.9 · 2.5 · 638



**OILI 1**  
24.5 · 6.6 · 2.1 · 399



**OILI 2**  
24.5 · 6.6 · 2.1 · 268



**OILI 3**  
24.5 · 6.6 · 2.1 · 268



**OILI 4**  
19.9 · 6.5 · 2.0 · 252

# Icebreaking services

- Finstaship's assets are its expertise in winter navigation and an excellent fleet of vessels.
- Icebreaking services include the assistance and towing of vessels in ice, route planning and related navigational guidance.
- The northern region of the Baltic Sea is the main market area for this sector of Finstaship's services.
- Our fleet includes five traditional icebreakers and three multipurpose icebreakers.

# Icebreaking services

- Finstaship endeavours to establish long-term icebreaking service contracts, which are a considerably more cost-efficient option for both parties when compared with traditional time-based charter services.

As a contractor, Finstaship is responsible for ensuring smooth winter traffic in agreed sea areas and ports while simultaneously increasing the utilisation rate of the vessels. If the winter is mild, Finstaship strives to find other tasks for the icebreakers that are not in use.

# Icebreaking services

- Finstaship's aim is to develop, within the decade, into the most flexible and efficient icebreaking service provider and winter navigational expert in the Baltic region.
- Finstaship believes that icebreaking in the Arctic region represents a new, important market. There is also a demand for ice navigation services, since year-round commercial transports in the Gulf of Finland have increased significantly during recent years.

# Operations in 2006

- Turnover in EUR million 24.2 (26.2 in 2005)
- Operating days 710 (517 in 2005)

# Ice Advisors Ltd

- In January 2006, Ice Advisors Ltd was established to provide ice navigation services. The company is jointly owned by the Finnish State Pilotage Enterprise Finnpilot with a share of 60 per cent and Finstaship with 40 per cent. In winter 2006, some of the pilots and icebreaker deck officers served as ice navigation experts for tankers navigating the Gulf of Finland. The task of ice navigation experts is to assist and advise the crew on customer vessels to find the safest and most efficient sea routes.

# Offshore services

- Its offshore activities are based around the use of three multipurpose vessels, working outside the icebreaking season.
- Finstaship's robust multipurpose vessels are equipped with advanced technology, making them an excellent tool for underwater construction on oil fields all over the world. The vessels are also deployed for research expeditions. Most of our customers are either oil and gas companies, or offshore companies. Finstaship's goal is to expand its customer portfolio.
- Finstaship's strengths in the offshore market include its expertise in arctic conditions and its ice-strengthened multipurpose vessels.

# Offshore services

- Within the decade, Finstaship's goal is to develop into the leading offshore service provider in arctic regions within its own special areas of expertise.
- The price increase for oil has further accelerated activities on the oil fields. There has been an increase in new investments, and the exploitation of fields previously considered unprofitable has been resumed.
- The high price of oil and its accelerating impact on the market environment are expected to continue until at least the year 2009.

# Offshore services in 2006

- Turnover in EUR million 27.0 (18.8 in 2005)
- Operating days 939 (656 in 2005)

# Fairway services

- Finstaship has nine fairway vessels with personnel specialised in the building and maintenance of infrastructures for maritime traffic. The vessels are also fitted with special equipment designed for oil spill response activities. Some of the vessels are also equipped for icebreaking in ports and channels.
- Finstaship's aim is to broaden the fairway services to extend over the entire Baltic Sea region and to update the vessels to be applicable for a wider range of uses.

# Fairway services

- The objectives for the next few years include maintaining market leadership in fairway services, renewing the fleet, developing new services and shifting the focus of the activities from time-based charter services towards more flexible service entities.

# Fairway services

- Turnover in EUR million 4.1 (4.4 in 2005)
- Operating days 712 (1,180 in 2005)

# Ferry services

- Finstaship is a familiar and reliable service provider for all those traversing the Archipelago Sea. The 13 ferries owned by Finstaship's Archipelago Shipping transport more than 230,000 passengers and 100,000 vehicles each year. Along their routes, these ferries dock at more than 100 quays and small harbours. The service is provided on a nearly year-round basis.

# Ferry services

- Short-term contracts are common in ferry traffic, which makes it difficult to carry out long-term planning for activities and investments. Finstaship endeavours to establish longer service contracts for a more efficient future.

# Ferry services

- Passengers transported 235,580 (230,891 in 2005)
- Vehicles transported 104,250 (97,609 in 2005)

Thank you!