Re-organization of Hydrographic Survey Operations in Finland

A Government Service to State Owned Enterprise

Kari Pohjola

Hydro 2010, Rostock-Warnemuende, Germany, 02 - 05 November 2010

Structure

- Path from Public Administration to a Private Company
- Meritaito Today
  - Organisation
  - Services
  - Multibeam Vessels and other Survey tools
  - Examples of Results
- Inland Survey Project Example
Background of FMA

The Finnish Maritime Administration has been the national authority responsible for maritime safety, fairway maintenance, hydrography, winter traffic assistance, archipelago ferry services, marine traffic management and authority duties in pilotage.

The history of maritime authority in Finland dates back to 1696.

The Administration itself was established as a national institute in 1917, within two weeks of the declaration of independence.

Development in Finnish public traffic sector 1990 -

- National Post and Telecommunications
- National Meteorological Institute
- National Aviation Administration
- National Maritime Administration
- National Institute of Marine Research
- National Vehicle Administration
- National Railroads
- National Road Administration
- State RepairShop
- 1990
- Communications Regulatory Authority (2001)
- Post and Telecommunications
- Finnish Post Corporation
- Sonera Ltd
- Itella Ltd (2001)
- Finnish Post Corporation
- Civil Aviation Administration Finavia (1991)
- Civil Aviation Authority (2006)
- Finnair Oy
- Shipping Enterprise Finstaship (2004)
- Maritime Administration
- Meritaito Ltd
- Finnish Transport Safety Agency
- Arctic Shipping Ltd
- Finnish Road Enterprise (2001)
- Desta Ltd (2008)
- Finnish Road Administration (2001)
- Arctic Shipping Ltd
- 2007
Finnish Maritime Administration split into three elements from 1.1.2010:

- **Finnish transport Agency**
  - Implementation of national traffic policy
  - To take care of traffic infrastructure by evaluating new practices and methods for that purpose
  - Developing frame to lead and purchase f.ex. hydrographic surveys of Finnish seas and inland waters
  - International co-operation (f.ex. IHO) and EU matters

- **Finnish Transport Safety Agency**
  - Transport safety matters
  - Ship inspections, manning, certifications
  - International co-operation and EU regulation

- **Meritaito Ltd**
  - Providing services and resources for fairway maintenance, planning, channel operations and hydrographic surveys
  - To ensure the availability of such activities in Finland
  - To be an independent self sustaining company

---

**Meritaito Customer Focussed Organisation**

![Customer Focussed Organisation Diagram]

**Public Sector**
- Gulf of Bothnia Fairway Services
- Archipelago Fairway Services
- Gulf of Finland Fairway Services
- Inland Waterways Services B.U.
- Coastal Waterways Services B.U.
- Hydrographic Surveys and Fairway Planning B.U.
- Vessel Maintenance

**Meritaito Customers**
- Business Support Services and Corporate Functions
- Operational Units
- Result Units

**Private Sector**
- Business Support Services and Corporate Functions
- Operational Units
- Result Units

**Business Support Services and Corporate Functions**
- Communications Manager: Eija Koli
- Logistics Manager: Mikael Anderson
- Project Director: Seppo Virtanen

**CEO**
- Jari Partanen

**Chief Financial Officer**
- Jukka Suonvieri

**Controller**
- Harri Vuorialho

**Human Resources Manager**
- Tuula McKee

**IT Manager**
- Tero Tuominen

**Jyrki-Pekka Ollaranta**

**Navigational Aids**
- Manufacturing Unit: Jari Partanen

**Oil Spill Response**
- Business Unit: Jaako Halonen
New Organisation and Business Units 10/2010

Maritime Expert Professional Services

- Hydrographic surveys, hydrographic data processing and chart services
- Sea based structures and inspection checks
- Exploration and detection of underwater objects and matter
- Hydrographic survey equipment leasing with professional staff
- Fairway planning and design
- Civil engineering and dredging studies and supporting surveys
- Research and acceptance testing
- Project management services
- Supervision of construction projects

Waterway Operations and Maintenance Services

- Fairway management
- Fairway operations and maintenance
- Oil spill response and readiness services
- Fairway traffic services
- Marine property and equipment services

Marine Construction Support Services

- Civil engineering
- Diving assignments
- Transport services
- Marine construction support services
- Navigational aids and buoy manufacturing

Activities
Multibeam Survey Vessels
SeaBat 8101/7111/7101/7125

Keila-1,2,3 and 4

KEILA

Other Survey Tools
- Side Scan Sonar
- Boomer and Chirp
- Magnetometer and metal detectors
- ROV
- USBL
- Single Beam and Bar Sweep
Results

- Total Lake area in Finland is about 32,500 km²
- Average depth in Finnish lakes is extremely shallow (Less than 10 m), rocky bottoms and other highlights are usual
- Challenge for a hydrographic surveyor lies in courage, professionalism, safety and costs
- Total length of inland official waterways in Finland is 9540 km
- In lake Keitele that length is about 580 km
- The depth of waterways in lake Keitele ranges between 1,8 and 3,0 m
- Typical depths are between 2 and 10 m in many surveyed areas.

Case Study: Fairway Surveys in Lake Keitele for energy sectors transport needs in future
The project to survey lake Keitele fairways was planned to take place over one survey season; from end of ice cover of lake to new ice cover, approx. a six month period.

Survey vessels had to be transported by land to the target area.

Main player was survey vessel Kaiku, a catamaran with low draft and good maneuverability.

The survey boat Kieku played the role of “Sancho Pancha” to secure the most shallow and hazardous points in the survey area.

Survey vessel Kaiku surveyed 450 km of the fairways in lake Keitele during project.

The time span for survey work was 5 months.

About 78% of the fairways on the area were surveyed.

Because of hazardous, narrow and shallow aspects of the fairway areas, the total surveyed area was 150 km².

“Sancho Pancha” spent some hundreds of hours in the area to find those hot spots; and found many (without losing any propellers).

Meritaito relied on the excellent skills and competence of its professional surveyors who made this project efficiently, safely and profitably.
Re-organization of Hydrographic Survey Operations in Finland

A Government Service to State Owned Enterprise.

Structure

- Path from Public Administration to a Private Company
- Meritaito Today
  - Organisation
  - Services
  - Multibeam Vessels and other Survey tools
  - Examples of Results
- Inland Survey Project Example
Thank You For Your Interest!

And if you want more information please come and see the Finns at booth 40

Meritaito Ltd