



Home page (in Norwegian) www.fargisinfo.com/hits

User driven innovation project supported by the Norwegian Research Council

Project owner: Kongsberg Seatex AS

tony.haugen@kongsberg.com

Project leader: SINTEF Fisheries and Aquaculture AS

knut.torsethaugen@sintef.no

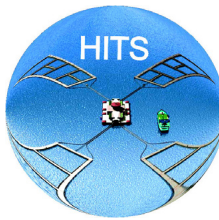
Total budget: 14 mill NOK

Support: Norwegian Research Council: 5 mill NOK

Duration: 2007-2009

Partners

- **Kongsberg Seatex AS**
 - Supplier of AIS and sensors for dynamic positioning
- **SINTEF Fisheries and Aquaculture**
 - Forecast models for local sailing conditions
- **Rambøll Norway AS**
 - Collect and analyze risk factors for use in risk modelling
- **Semekor AS**
 - General knowhow related to risk assessment in the coastal zone
- **NTNU Samfunnsforskning AS, Studio Apertura**
 - Overall risk assessment
- **Directorate of Fisheries region Trøndelag**
 - Management and enforcement of aquaculture activity
- **Coastal administration Mid-Norway**
 - Management and enforcement of fairways and waterborne transport



HITS

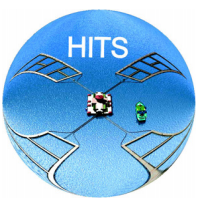
Havbruk og intelligente transportsystemer

Aquaculture and intelligent transport systems

Norwegian Research Council/MAROFF Project 182586



60 m feeding vessel EWOS EXPRESS. Photo: EWOS



Goal

Develop decision support tools for safe and efficient transport operations at aquaculture plant

Activities

- specify tools and routines for safe approach and operations
- develop information services for local sailing conditions
- demonstrate use of dynamic positioning systems
- adapt AIS for electronic tagging of plants and vessels
- describe responsibilities and routines for safety systems

Results

- enhanced safety for humans, environment and values
- reduced risk for escape of fish
- efficient logistics and fleet management

User contact is important to:

- collect user requirements
- define risk factors
- discuss and test solutions

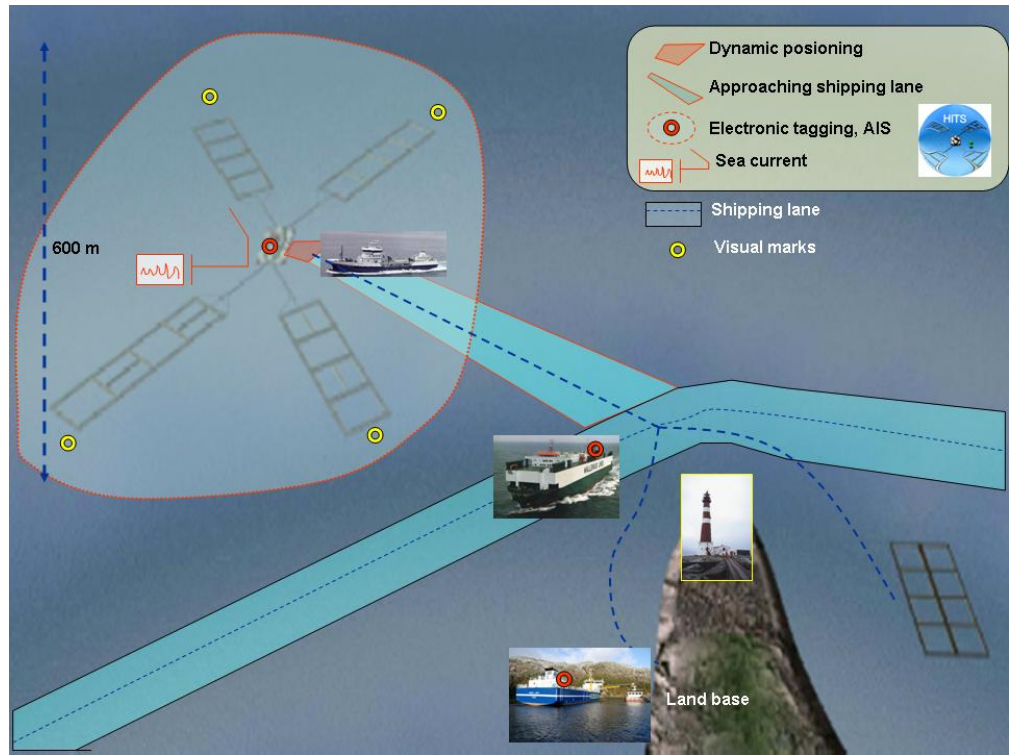
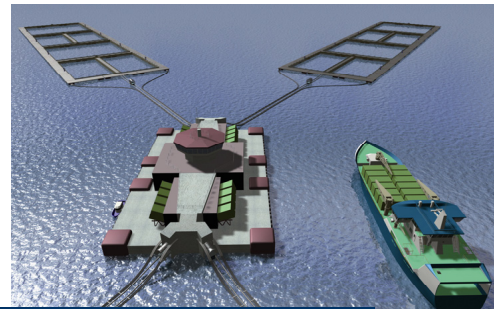


Illustration of elements in HITS

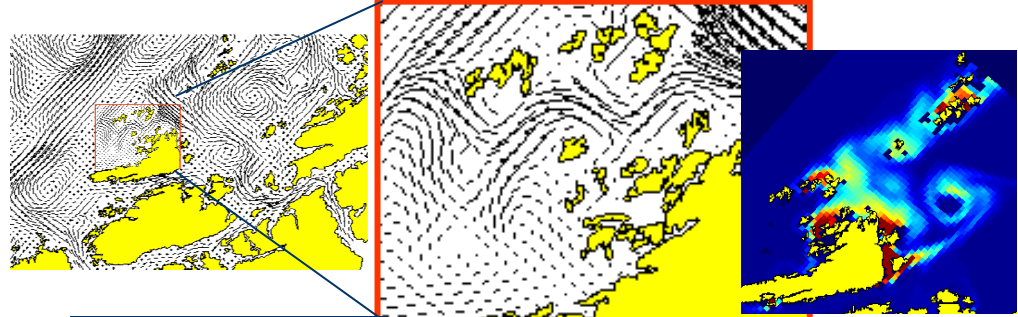
- Sailing lane
- Operational area, dynamic positioning
- Tagging of plants and vessels with AIS
- Monitoring and forecast of sailing conditions
- ICT tools on-board vessel and on the plant



Offshore technology reused in aquaculture- the Future?

Photo: Kongsberg Seatex

Illustration: Mats Heide Concept: Marine Harvest



Modeling of sea current

Current model: SINTEF Fisheries and Aquaculture