User driven innovation project supported by the Norwegian Research Council

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Duration: 2007-2009

HITS
Havbruk og intelligente transportsystemer

Aquaculture and intelligent transport systems

Norwegian Research Council/MAROFF Project 182586

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

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