Arctic User Needs

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The arctic challenge

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- No international protocols established for polar navigation, paying attention to the unique circumstances of ice navigation in relation to ship loss or damage and consequent pollution
- No ice navigator standards established for certification of personnel
- No international/national control of the state of the ship during transit through the arctic regions
- State of readiness in arctic regions require fleets of worthy vessels, including dedicated polar icebreakers to assist and rescue commercial vessels. Only a few vessels are available for this worldwide.
- Chart quality is low, and the waters are unknown
- Coastal communication and surveillance infrastructure is insufficient

- Can we leave the responsibility to the captains alone?
- Can we accept that we have no authority control with the shipping in these areas?
- How can positive control of the arctic maritime activity be achieved?

AISSat-1 – Monitoring of AIS signals from space

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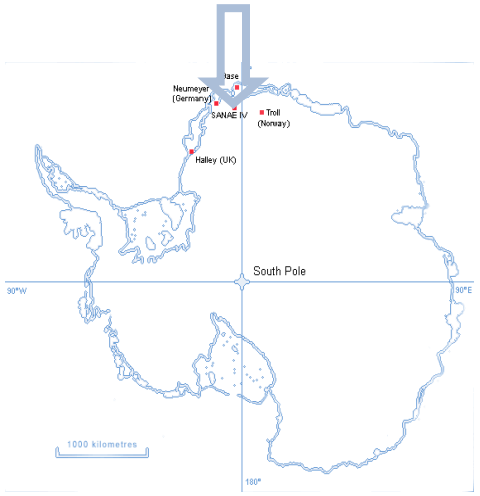
Galileo ”Pole to Pole”

The Norwegian Minister of Environment, B. Brende (right) visits SANAE base in January 2003. The picture shows the GNSS antenna and the Galileo test-bed station (embedded).

In December 2002 Kongsberg Seatex AS in co-operation with Norwegian Space Centre deployed a Galileo test-bed Sensor Station in Antarctica at ”Vesleskarvet”. This is one of the stations in the ”Pole to Pole” initiative for Galileo. A second station is installed at SvalSat/Spitsbergen at 78° N.



Galileo station in Antarctic opened by Prime Minister Stoltenberg January 19th 2008

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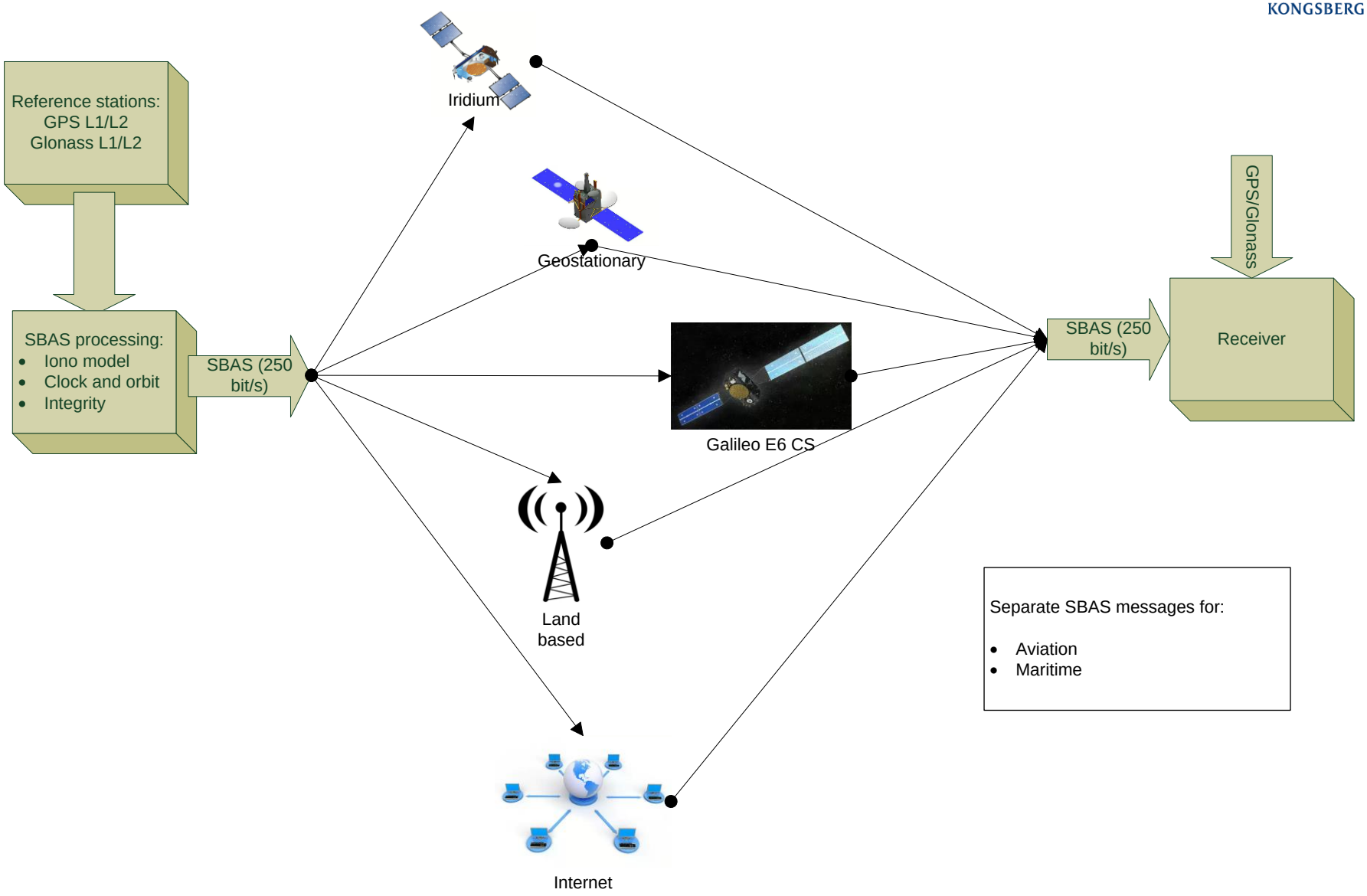
Foto: KSAT

Arctic Testbed



Arctic Testbed - Overview of the consortium

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logica

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Kartverket

ThalesAlenia Space
A Thales / Finmeccanica Company

TERMA

DTU

UNIVERSITY OF CALGARY

gmv
INNOVATING SOLUTIONS

Septentrio
satellite navigation

Kongsberg Seatex is prime contractor for the project and will be responsible for coordinating the partners

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Kongsberg Maritime