



VDE-SAT OBA – progress report

Facilitation of ship to shore reporting pilot project – 7th meeting

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Advantages of VDES



1. VDES enables two-way communication
2. VDES provides encryption for communications
3. VDES has been designed to operate via satellite (VDE-SAT)
4. AIS becomes saturated in areas with a high concentration of ships
5. AIS only has a horizontal reach of 40 nautical miles
6. VDES allows for the integration of other communication systems
7. VDES facilitates the rollout of autonomous navigation systems

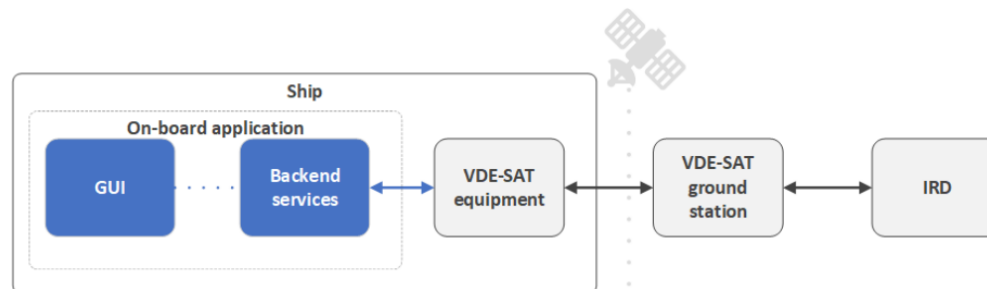
<https://info.alen.space/advantages-of-vdes-vs-ais-in-maritime-satellite-communications>

Background

- Purpose: to test VDE-SAT technology for ship-shore communication
- VDE-SAT Application and Services Platform (VASP): demonstration project run with European Space Agency (ESA), Space Norway (SPN), Norwegian Coastal Administration (NCA), Kongsberg Seatex AS (KSX) and EMSA.



Current status



- Contract signed in May 2021 with Kongsberg Seatex AS (KSX)
- Development of OBA completed by September;
 - Data exchange by using full communication chain is currently being tested.
- Foreseen testing area: Norwegian waters, Svalbard (BAREP reporting system)
- Participating ships: 7 Norwegian vessels involved in the VASP project
 - Equipment installed on two vessels: MS Polarsysse and Advent Supplier
 - Third vessel (Ocean Space Lab) is ready for installation, but the equipment will be tested towards satellite using rooftop antenna at KSX premises before installation, as part of SAT of OBA development
 - One set of VASP service demonstration equipment has been allocated for installation at EMSA premises in Lisbon.

Project Roadmap



May 2021	Contract signature, project kick-off
May 2021 – August 2021	Development of OBA
September – October 2021	Factory acceptance test (FAT): end-to-end testing between KSX development environment and IRD
October 2021	Site acceptance test (FAT): application is tested onboard first participating vessels
November 2021 – January 2022	Operational testing, maintenance

Actions required



Member States are invited to:

- note information provided;
- provide feedback.