versatile als/vdes network solutions Future proof flexibility



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74

AIS/VDES networks – infrastructure for the future

AIS on steroids.

AlS became a standard requirement for heavier ships in the early 2000s and has since served the maritime traffic on our oceans very well. Saab TransponderTech played a major role in pioneering the AlS standard, so when the successful technology now is ready for the next step, we are busy pioneering this standard as well.

VDES, or VHF Data Exchange System, is an international standard based on AIS. It is a radio communication system that operates between ships, shore stations and satellites, and supports both traditional terrestrial routing and global routing via satellite.

VDES offers an effective and efficient use of the radio spectrum and addresses the increasing requirements for data through the system. New advanced techniques providing higher data rates and enhanced cyber security are core elements of VDES.

AIS/VDES network expertise at your service.

Saab is today leading in both AIS and VDES technology and offers the know-how, software and products needed to build maritime infrastructures for rivers, offshore, coastlines, surface ships and aircrafts, and connect them in a complete network solution for communication and control that is both modular and flexible. It can also be expanded to include other types of sensors, such as radars and cameras.

Saab's AIS/VDES network solutions offer modern cyber security as well as possibilities for encrypted and protected data communication. The modern software architecture can be installed on your own premises or be delivered as a cloud-based service (SaaS). It can also integrate with systems from other manufacturers, thus complementing them with new features such as VDES or the latest e-Navigation technologies.

Decades of experience from AIS and our broad expertise in VDES makes us the perfect integration partner for AIS and VDES network technology.



R60 AIS/VDES Base Station

AIS/ASM/VDE Base Station with Software Defined Radio.

The R60 VDES Base Station from Saab TransponderTech is a VDES compliant base station, including AIS and ASM functionality and prepared for the new VDE channels. Working as junction/gateway in the communication between the stationary network and the mobile transponders, it is a key component in an AIS/VDES network.

Thanks to its market leading Software Defined Radio (SDR) design, it is built to be future proof and support coming changes to international standards and requirements.

R6 Supreme Transponder

Class A AIS/VDES Transponder with Software Defined Radio.

Global networks are a likely future expansion of VDES network technology, and Saab is in the forefront of this development. It is the fourth type approved Class A AIS system generation from Saab, and does not only feature leading AIS performance, but also a range of additional digital communication channels in the form of VDES.

The updated Software Defined Radio developed by Saab for the R6 generation product offers flexibility and performance unlike any other system.

Global VDES networks

Global networks are a likely future expansion of the VDES technology, and Saab is in the forefront of this development.

In the long term, base stations, transponders and terrestrial networks will connect to VDES satellites and satellite networks, and together with terrestrial VDES networks they will form a global VDES network. Near the coasts, base stations are used as access points while out on the open seas where base stations do not reach, VDES satellites are used as access point instead. Saab TransponderTech software solutions for AIS and VDES sensor networks enable higher security and more efficient operations. With Saab as you partner you will be sure to remain at the forefront of the latest AIS and VDES technology.

