

Systems and Solutions for Professional Electronic Navigation and Overview & Monitoring of Vessels World-Wide

ADVETO
ADVANCED TECHNOLOGY AB

– world class systems for precision navigation
and vessel monitoring with electronic charts

World-wide use of the systems and solutions from Adveto – world pioneer in Electronic Navigation and AIS presentation

Adveto Advanced Technology based in Stockholm, Sweden, is a world pioneer in Electronic Navigation and AIS presentation focusing on three main business areas:

- *Complete electronic systems for precision navigation of professional vessels including ECDIS and ENC, official Electronic Navigational Charts.*
- *Complete infrastructure for national AIS networks including base stations, world-wide internet transmission solutions and compact VTS systems for land based users to track and monitor ships world-wide.*
- *Passenger information systems with real time display of ship position on an electronic chart background.*



The Baltic Sea harbour in Stockholm City

Adveto was first in the world producing AIS software for commercial use already in 1993 and one of the first customers was the Swedish Maritime Administration. We have 20 years experience within the area of navigation systems and solutions for professional vessels. The Adveto company history has its roots in general aviation navigation in Sweden already in the early 1980's.

World wide use of Adveto systems

Our customer list includes a long range of shipowners and national maritime administrations. The majority of the users are still found in Scandinavia but with a rapidly growing number of users around the world – all countries with significant coast lines.

Adveto systems are used in and around all continents by work boats, tow boats, ferries and ocean-crossing cruise-liners, pilot boats, skerry boats and training ships.

User-friendly and safe world class systems

The Adveto user-friendly and safe world class systems are advanced but still easy-to-run PC systems. They are all developed in Sweden based on, among other things, the special conditions for complex navigation in the narrow and shallow waters of the widespread Scandinavian archipelagos. These conditions demand safe and reliable navigation systems as those supplied by Adveto, systems that users all across the world benefit from.

Complete and safe systems with after-sales support

The Adveto complete systems include hardware, software, NAV computers, DGPS and control units. We take the responsibility for installation and training directly or via selected representatives. To maximise our customers' access to the Adveto systems we also give a professional and comprehensive after-sales support and service. Adveto clients are close partners in our efforts to constantly improve our solutions.



Customer examples

A majority of the shipping companies operating passenger and car ferry traffic in the Baltic Sea

The Swedish National Maritime Administration for most of their pilot-boats, ice-breakers and workshops

The National Maritime Administrations in Norway and Denmark

The Coastguards in Sweden and Argentina

Multiple harbours in Scandinavia, Poland, Spain, Bangladesh and other countries

A significant number of special freight companies

Cruising operators

The French Marine

Pilots in Sweden and around the world



ECDIS & ECS for navigation, Compact VTS for world-wide monitoring and Nationwide AIS infrastructure

ECDIS and ECS systems for precision navigation of professional vessels

The three versions of our **type approved ECDIS-4000** are full scale systems offering superior precision navigation capability together with ECDIS and ENC's, official Electronic Navigational Charts. These new systems are based on our well proven and across the world widely renowned **ADVETO AECDIS-2000** ECS system which has been in use and appreciated for years all across the world.

Our unique "predictor" offers superior navigation capabilities by displaying a "ghost ship" showing the predicted vessel position during the next coming minutes.

Our control unit for quick, simple and easy manoeuvrability makes the ADVETO ECDIS and ECS systems some of the most user friendly systems available, according to experienced users.

A new feature has been added to the ECDIS-4000 allowing easy presentation of the new "free chart format" S-63 acquired directly from the source (PRIMAR ONLINE™) with an opportunity to receive electronic charts online with less administration and reduced costs.

Examples of other useful features: Navigation models for Ocean, Archipelago and Harbour manoeuvres (Docking); Multiroute function – one route handles several alternatives; GOTO-button for quicker move to any location; Advanced tidal water function; Automatic zooming function.



ADVETO CVTS – a Compact VTS system to track and monitor AIS vessels world wide – with the same detailed ENC quality as onboard

ADVETO CVTS helps marine professionals and the marine industry in general to monitor vessel movements all across the world. Port, Harbour and Coastal Authorities, Ship Owners, Offshore installations and others can easily track the position of a certain ship world-wide independent of any AIS network – a true global coverage!

ADVETO CVTS is a supplement to national VTS systems offering live graphical display of the vessels on the computer screen with full ECDIS presentation with fast response time.

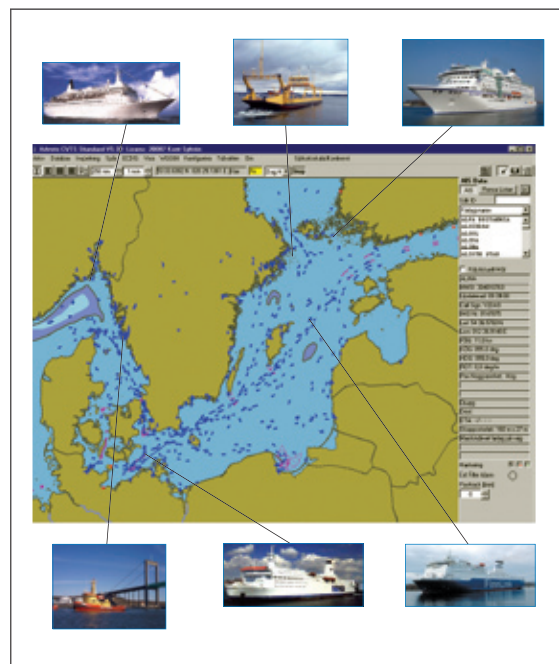
All incoming data to ADVETO CVTS can be recorded and later used to replay and analyse historical ship movements.

ADVETO CVTS offers a new perspective in land based monitoring with advanced filtering of the increasing number of ship symbols shown on the screen.

Complete infrastructure for national AIS networks

In addition to our systems for navigation, tracking and monitoring of vessels we also offer complete infrastructure for national AIS networks including base stations and world-wide internet transmission solutions.

We have the skills and capabilities not only to set up stand alone AIS base stations but also to establish installations of a complete AIS infrastructure along a coastline.

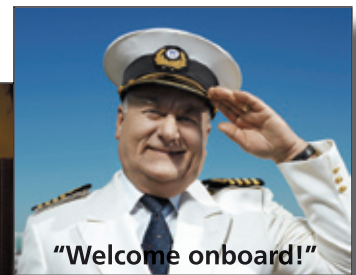


PAXINFO for passenger information onboard

The PAXINFO continuously answers questions like "Where are we?", "How long time to our destination?", "What activities are available onboard?"

Display screens are located so that all passengers can follow the presentation including real time display of ship position on an electronic chart background.

PAXINFO uses its own data base, has full Multimedia function and can be programmed with visual and acoustic effects.



The Adveto story in short

Adveto was established in 1986 to develop navigation systems for small aircraft and later also for marine applications. The first Adveto navigation product was DATANAV, originally made for pilots' flying route scheduling. This was installed at an early stage in a small Jodel DR1050 Ambassadeur aircraft owned and piloted by Kent Sylvén, founder and president of Adveto. This was probably the first single-engine aircraft in the world to be equipped with a navigation system including GPS, maps, route navigation and a navigation data base.



The Swedish National Maritime Administration was (together with Finnish Porkkala) first in the world to take up DGPS broadcasts in the Baltic Sea in the early 1990's. This gave Adveto an opportunity to try this new technique to further develop its navigation products.

It was a major challenge to make potential users of DATANAV and DGPS to understand the benefits of electronic navigation. However, close co-operation with progressive ship captains resulted in a market breakthrough in 1991 and during 1991-1997 over 100 DATANAV installations were made onboard ships mainly in Scandinavia but also in Asia.

In 1997 Advetos new system with ECDIS and AIS presentations were launched as ADVETO AECDIS replacing DATANAV. This year Adveto wins a tender for navigation equipment for the Swedish National Maritime Administration's pilot-boats in competition with most other suppliers within EU. This prestigious order opened up the market for Adveto and soon another prestigious order was won with the Swedish Waxholms-bolaget line operating the widespread Stockholm archipelago with some 25 ships.

Since then, more than 700 ADVETO AECDIS systems have been installed onboard a wide range of vessels in Scandinavia and all around the world.



**Kristina & Kent Sylvén,
founders of Adveto**

In 2004, as a "breed" from AECDIS, the ADVETO CVTS was launched for land based users and in December 2005 we received the DNV full approval of our ADVETO ECDIS-4000 system.

Hence, after 20 years in our type of industry, we are still in the front end of the technical development and customer applications in the area of Electronic Navigation and AIS presentation for professionals.

In the meantime, another aircraft has been added to the Adveto fleet – a Cessna TU-206 amphibian float plane. As a "flying navigation platform"



it has been equipped with an advanced electronic navigation system with ENC, flight maps, GPS and AIS transponder. This makes it possible to communicate with other AIS units and monitor the own flight as well as the vessel movements below - and to be monitored from the ground.

And the small Jodel aircraft is still owned and piloted by Kent Sylvén!

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