

**Track and monitor the thousands of AIS vessels
on the Seven Seas – easily done with ADVETO CVTS
from Scandinavia and its electronic charts**

ADVETO
ADVANCED TECHNOLOGY AB

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

ADVETO CVTS – a Compact VTS system world wide – with the same detailed

With ADVETO CVTS land based users can track any AIS vessels and monitor their movements world wide using the same electronic charts as a rapidly growing number of vessels now are using.

The ADVETO CVTS is an advanced but still easy-to-run PC system developed by the Swedish company Adveto – a world pioneer in developing systems based on AIS information – offering the same professional data used onboard professional vessels.



From the beginning of 2005 all vessels over 300 gross tons must be equipped with the Swedish invented AIS transponder system. Therefore, the movements of not only all ships over 300 gross tons but also the steadily increasing number of smaller ships equipped with AIS can be monitored with ADVETO CVTS. And this applies world-wide! The only things required are a set of relevant Electronic Charts, AIS data via Internet, TCP/IP or directly via an antenna, and an ADVETO CVTS system.

A new perspective in land based monitoring

Compared with existing web based solutions, ADVETO CVTS offers a range of additional features introducing a new perspective in land based monitoring of vessels:

- Vector based electronic charts giving maximum zooming opportunity and therefore high detail level without losing sharpness as many web based raster charts do
- Tailor made charts selection based on the user's need
- Full ECDIS presentation
- Fast response time
- Easy tracking of the position of a certain ship
- Advanced filtering of the increasing number of ship symbols shown on the screen

For Port, Harbour and Coastal Authorities, Ship Owners, Offshore installations and others

The system helps marine professionals and the marine industry in general to gain benefit from AIS and use the useful detailed vessel information transmitted and received. Obvious users are Port, Harbour and Coastal Authorities, Ship Owners and Marine Managers, Shipping Companies, Marine Professionals, operators of offshore installations with vessel monitoring requirements and all others with a need and interest to monitor vessel movements all across the world.

Monitor a variety of vessels equipped with AIS: m/s Birka Paradise operating luxurious cruises in the Baltic Sea; m/s Norrskär of the Waxholmsbolaget Line in Stockholm, a genuine steam ship built in 1910 now operating in the Stockholm archipelago; HSC Gotland operating the route Nynäshamn-Visby at the isle of Gotland in the Baltic Sea; m/s Amorella operating the route Stockholm, Sweden-Helsinki, Finland.

These are examples of vessels equipped with AIS navigation systems from Adveto.

A supplement to national VTS systems

The 100% Microsoft Office compatible ADVETO CVTS system should be considered as a lower cost supplement to the national VTS systems in use. It is based on the well proven and across the world widely renowned ADVETO AECDIS system but designed for land based users. ADVETO CVTS is designed in full accordance with IALA A-124 recommendation.

Valuable vessel information on the screen

ADVETO CVTS provides a live graphical display of the vessels on the computer screen on an electronic chart background of a detail level as chosen by the user. Both AIS and ARPA targets can be presented in the chart automatically. A short presentation of the target is easily achieved simply by placing the cursor on the target. And a "single touch" on the symbol activates a true course and speed vector or predictor. It is also possible to sort the AIS information on ships name, call sign, IMO number, distance or speed.



M/S Baltica (Photo: Sjöfartsverket)

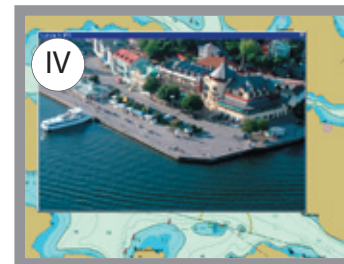
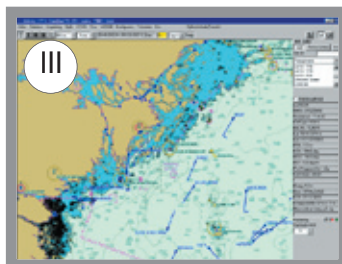
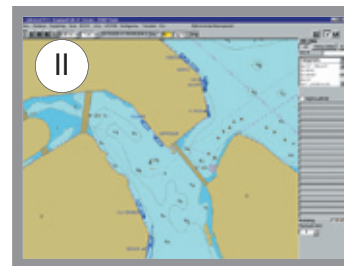
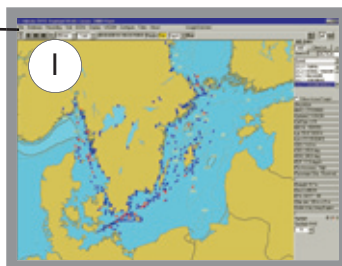


From overview and monitor AIS vessels and electronic chart quality as onboard



Multiple views

ADVETO CVTS offers up to four different views and the user can quickly and conveniently switch between the different views just by the press of a button. The views might show e.g. an overview of the national coastline plus details of three major national ports, an archipelago or inland waterways. The different views can also be shown simultaneously on separate screens. Each view can be shown either with the chart frozen or with the chart picture following a ship's motion.



World wide vessel tracking and monitoring with ADVETO AISVIEW and SEEKSHIP

The unique ADVETO CVTS optional feature AISVIEW allows the user to monitor vessels in several areas of the world at the same time. AISVIEW integrates input data from all national AIS networks and AIS sources available like Shipplotter and AIS Live. These data may also be integrated with data from the user's own AIS receivers.

With the ADVETO SEEKSHIP device installed onboard a vessel, this can be easily tracked across the world independent of any AIS Networks – a true global coverage!

Multiple types of electronic charts in CVTS

The growing number of vessels now using official ENC's confirms the importance of using correct data for safe navigation particularly in critical and complex waters. With ADVETO CVTS – developed for the narrow Scandinavian waters – land based users now can use the same official ENC's that are used in professional vessels. Official ENC's in S-57, S-63 and Direct-ENC formats from PRIMAR, IC-ENC and other suppliers can be used and so can all non-official electronic charts like ChartWorld and BSB.



Passenger counting

ADVETO CVTS offers a feature with reporting of passenger countings from ships equipped with ADVETO AECDIS-2000. Provided that staff onboard inputs number of passengers this data is immediately available in the control center's CVTS system. This feature is used onboard all ships of the Stockholm based Waxholmsbolaget company operating the sea-going public transport in the complex waters of the Stockholm archipelago and harbor all year round with some 20 archipelago boats.

Recording

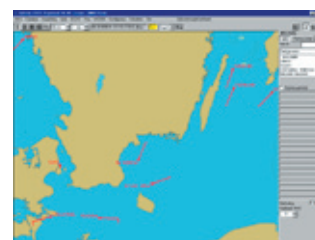
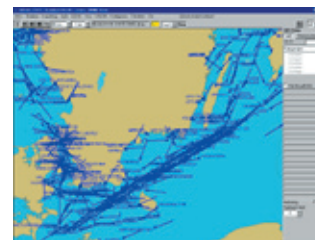
All incoming data to ADVETO CVTS (time, position, course, speed, depth, ARPA and AIS targets, etc.) can be recorded and later used to replay and analyse historical ship movements. A fast presentation of a 24-hour recording is available and data for 60-300 days or more can easily be recorded and saved depending on computer capacity. Trails from individual targets can be easily separated from each other simply by applying different colours.

Additional screen information from separate databases

As a supplement to existing chart information, pictures and texts can be freely placed in the chart and saved in a database. By linking e.g. a digital photo to a database point, the picture can be presented in the chart when the database point is clicked (view IV above). Several databases can be run simultaneously.

AIS filter to select type of ships

The rapidly increasing number of AIS-equipped ships results in an equally increasing number of ship symbols shown on the screen. To facilitate the handling of all this information, ADVETO CVTS is equipped with an AIS "filter" making it possible for the user to select the type(s) of ships to be viewed (passenger, car-go, tank etc.) or to view ships with e.g. dangerous cargo.



Views without (above) and with (below) AIS filter used.

Adveto CVTS functions	Base model	Standard model	Extended model
Same user-interface as Word, Excel, Access, Outlook	●	●	●
100% Microsoft Office compatibility: Access, Excel	●	●	●
Database – Microsoft Office compatible		●	●
Counting passengers via AIS			●
Chart presentation			
Number of "views" with different chart presentation	1	2	4
Multi monitor (several monitors with different charts)		●	●
Can present worldwide S-57, S-63 and other chart formats	●	●	●
GOTO-key for fast location	●	●	●
Digital photo in the chart		●	●
AIS-filter – can present different categories of AIS-targets			●
AIS-targets			
AIS-target presentation	●	●	●
AIS-text, send text messages simply by "clicking" on target		●	●
AIS-target in via serial COM-port	●	●	●
AIS-target in via Internet and LAN	●	●	●
Radar targets			
Presentation of ARPA-target from radar		●	●
Presentation of EBL VRM and cursor from radar		●	●
Unique ADVETO Options			
AISVIEW integrating national AIS Networks and AIS sources	●	●	●
SEEKSHIP for easy vessel tracking	●	●	●

The Swedish company Adveto in Stockholm-Spånga offers the world market complete digital systems for precision navigation of professional vessels with ECDIS and also official Electronic Nautical Charts. Our user-friendly and safe world class systems are 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.

World wide usage of Adveto system

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

The majority of our users are still found in Scandinavia but with a rapidly growing number of users around the world. In addition to the National Maritime Administrations in Sweden, Norway and Denmark, the corresponding bodies in Poland, Spain and Argentina are also Adveto users and so are customers in the harbour of Hong Kong and in Mexico – all countries with significant coast lines.

World pioneers with commercial AIS solutions

Adveto started in 1987 and understood the benefits of AIS at an early stage. Already in 1993 we were the first company

to produce AIS software for commercial use. One of our first customers was the Swedish Maritime Administration. Since then we have frequently added a number of new functions that can be connected to Adveto's systems for precision navigation with official ENCs – functions integrated into ADVETO CVTS.

Complete and safe systems with after-sales support

Our complete systems include hardware, software, NAV computers, DGPS and control units. We take the responsibility for installation and training directly or via our representatives. To maximise our customers' availability of our 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.

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