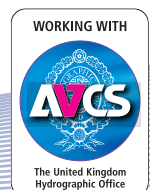




TRANSAS ADMIRALTY DATA SERVICE

• Official SENC and ENC with Digital Notices to Mariners • Vector Charts • Admiralty Digital Publications



TRANSAS ADMIRALTY DATA SERVICE

TRANSAS ADMIRALTY DATA SERVICE – MORE THAN JUST ELECTRONIC CHARTS

Transas Admiralty Data Service (TADS) delivers official chart data and information directly to your ECDIS, helping you prepare for paperless navigation and the proposed ECDIS mandate in 2012.

Whether you are a Transas ECDIS user or operate another brand of ECDIS, TADS delivers fully official and global chart coverage formatted in SENC or standard ENC format to suit your needs.

Developed directly for Ship Owners and Managers, Captains, Navigators, Crew, Marine Superintendents and shore-based staff, TADS uses only official chart data along with a range of carefully considered additional data services.

Service, support and consultancy services are all available to help you optimize your navigational needs onboard.



CHOOSE TADS TO ENJOY THE FOLLOWING SERVICES:

Transas SENC service	Official ENC data converted and ready for use in your Transas ECDIS, saving you time and increasing efficiency (Transas ECDIS Users Only)
AVCS (ENC's for Non-Transas ECDIS users)	Official ENC data in standard format available to those customers who do not operate a Transas ECDIS but gain the benefits of the TADS service
Admiralty Digital Publications	Admiralty List of Lights, Admiralty Radio Signals Vol.6 and TotalTide information direct to your ECDIS (and also available for general use onboard)
SPOS® Weather Service	Courtesy of Meteo Consult, SPOS® is the ideal onboard weather data tool increasing both safety, efficiency and accuracy onboard
Additional Data Services	During 2009, Transas customers can look forward to additional TADS software and functionality, making planning administration easier
Consultancy Services	Transas helps you to prepare for the move towards paperless navigation. Office processes are just as important as those onboard; Transas provides all the training and support you need to administrate your vessels

TADS BRINGS YOU THE FOLLOWING BENEFITS:

- TADS helps you prepare for paperless navigation and the proposed ECDIS mandate in 2012
- The most comprehensive official, worldwide ENC data available in Transas SENC data format with weekly updates
- Simplified ordering and update procedures – when using SENC data will save both time and cost
- Access to and supply of Admiralty Digital Publications and additional data services for easy navigation

THE FUTURE – PAPERLESS NAVIGATION WITH TADS

Pre-filled with TADS, your new Transas ECDIS is configured with official global SENC data, enabling the mariner to make the transition towards paperless navigation.

What is paperless navigation?

In order to enjoy paperless status, ENCs should be up to date and comply with the International Maritime Organisation (IMO) Regulations and loaded into a type-approved dual-ECDIS onboard. Having a dual ECDIS onboard means that the main ECDIS is connected to an identical but fully functioning backup system, providing safety, efficiency and peace of mind.

TADS allows any vessel (equipped with dual-ECDIS) to operate paperless in areas where ENCs are available, making the most of the ECDIS as a professional navigational tool. AVCS data from the United Kingdom Hydrographic Office is used together with the aforementioned ENCs to provide the most comprehensive, official worldwide coverage available to the professional mariner.

The differences between ENC and SENC			
Action	ENC	SENC	Comments
Electronic Navigational Chart compiled and coded according to the standards of the IHO Standards (S57 Version 3.1)	X	X	
Based on official ENC data only available for use in type approved ECDIS	X	X	
Regularly updated with official update information distributed digitally	X	X	
Can order/handle chart administration online via Transas Chart Assistant simplifying ordering procedures		X	Using Transas Chart Assistant program
Requires time for the ECDIS to convert the ENC data into a format that can run in the system itself	X		Installation and conversion of ENC data can be time consuming. Tests show that SENC installation is approximately 8 times as fast as standard ENC installation.
Comes pre-formatted for instant upload and use within the ECDIS		X	As supplied on TADS CDs

SENC & ENCs - In General:

Electronic Navigational Charts (ENC) are the official data format for digital navigational information compiled in accordance with SOLAS Regulations for operation in any ECDIS system. As such, they need to be converted into a format that runs with the configuration of a particular ECDIS.

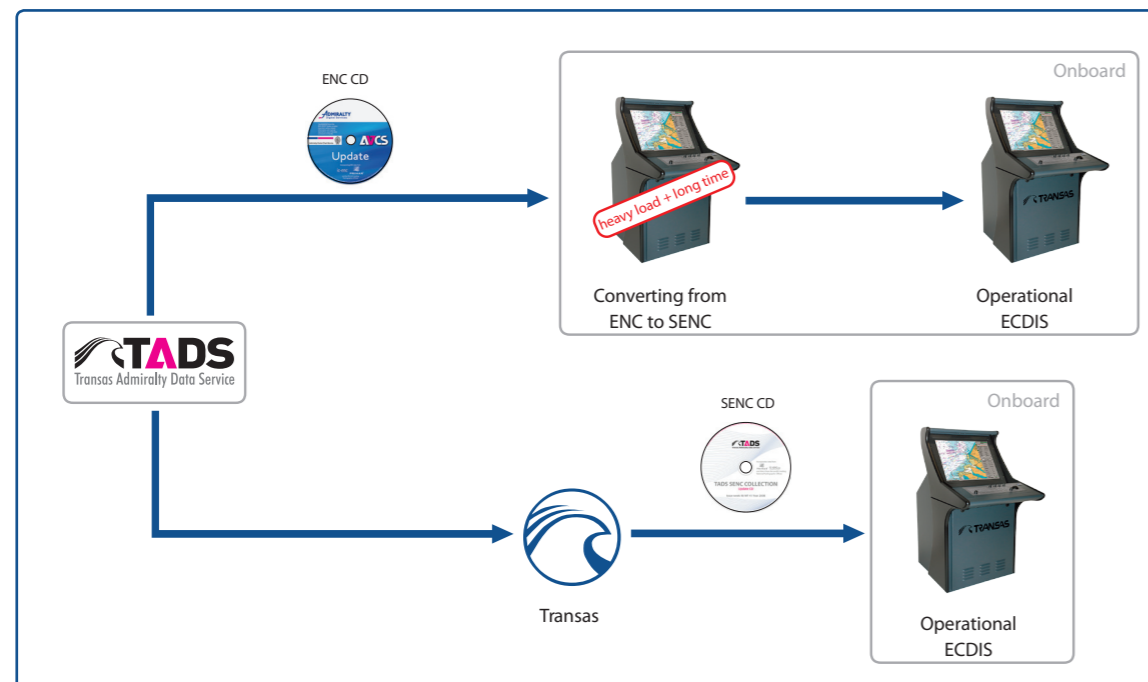
System Electronic Navigation Charts (SENC) are similar to ENCs, but are converted to the internal format of a specific system before they reach the customer. As a result, there is no conversion in the system and users are able to purchase, manage and update their charts online or through a weekly update service.

TRANSAS ADMIRALTY DATA SERVICE

TADS SENC CHART COLLECTION

SENC (System Electronic Navigation Chart) is ENC data that has been compiled into the internal format of a specific Electronic Chart Display and Information System (ECDIS). Transas is the only ECDIS manufacturer providing an SENC service. Transas delivers official ENC data from the UKHO, in SENC format as per IHO guidelines. The Transas SENC Distribution Service was fully tested and approved by Det Norske Veritas (DNV).

- The subscription term runs for 12, 9, 6 or 3 months from the date of the first SENC purchase
- The SENC Base CDs are distributed quarterly on CD or via the Transas website. Updates are released on a weekly basis and distributed regularly via email or CD and can be downloaded from the Transas website.
- The Chart administration onboard is done through Transas Chart Assistant Utility



ENC vs SENC conversion

FAST AND EFFICIENT CHART MAINTENANCE

Chart Assistant (SENC users only)

Chart Assistant (CA) is the specially developed chart administration tool for all chart formats used in Transas navigation systems, which provides the following:

- Ordering and delivery of Chart licences, new charts and chart updates
- Installation of charts and chart updates
- Status report of the ship collection

Chart Assistant can use the email system to automatically collect chart licences, charts and chart updates from the mailbox using SMAPI (Simple Messaging Application Programming Interface). The updates are then applied to the ship's chart collection.

Weekly Update CD's

Updates can also be delivered via CD on a weekly basis to Transas Customers. This CD contains updates to all the charts in the service and once uploaded onto the ECDIS system, ensures that every TADS customer has a complete and up to date set of data onboard, with the option to easily access additional data if required. CD updates can also be used in conjunction with online updates, where internet access is limited or where a physical backup is required.



Digital Catalogue (AVCS customers only)

Admiralty Digital Catalogue is included free of charge to all our AVCS customers.

Temporary and Preliminary Notices to Mariners - (T&P)NMs

TADS will be launching Temporary & Preliminary Notices to Mariners as an additional information layer in 2009. This information will appear as a notice on the relevant chart(s) and can then be selected and read by the user. This ensures that users of TADS have the most up to date T&P information available regardless of where they are in the world. T&P NMs will be delivered on a weekly basis via CD or online updates, depending on requirements.

We have gained many benefits from ECDIS approval onboard. The navigational officers have experienced significant reductions in workload, with better route planning and chart corrections. Using TADS means we get T/P corrections automatically enabling us to save even more time.

Vessel *TORM GERTRUD*



TRANSAS ADMIRALTY DATA SERVICE

ADDITIONAL SERVICES – INFORMATION, ASSESSMENT, ADMINISTRATION

Admiralty Digital Publications – (ADP)

TADS incorporates Admiralty Digital Publications in the form of the award-winning Admiralty Total Tide, Admiralty Digital List of Lights and Admiralty Digital Radio Signals Volume 6. These are compiled together on a single CD and can be licensed, installed, used and updated via a single common interface that is quick and easy to use.

SPOS® Weather by MeteoConsult

The ultimate in weather information and forecasting, SPOS integrates information from the world's major meteorological offices along with observations, forecasts and satellite imagery to give the best weather information available. This data can be input and used to optimise route calculations, performance and voyage reporting.

Data Assessment Layer (DAL)

Introduced as an additional layer, this will compare information available on SENC charts with that available from other sources to give the mariner an even more up to date information source that can be overlaid on the chart.

Additional Data Services

New software and functionality will be available to TADS customers as the service develops. Currently under development, these will include planning and administrative applications designed to make your life easier.

Consultancy Services

In partnership with the service organisation, Transas offers a range of consultancy services to TADS customers including office administration, training and process management, giving you all the support and guidance needed to administrate your vessels.

At Lauritzen we have been running completely paperless on several vessels. TADS will make it possible to keep costs down and at the same time ensure that our vessels are equipped with all the required and updated electronic data.

Lauritzen Fleet Management



QUALITY AND COMPLIANCE

Compliant

The Transas Admiralty Data Service only contains SENCs that meet SOLAS Carriage Requirements for use within Electronic Chart Display and Information Systems (ECDIS).**

Quality

Transas is proud of its reputation as a supplier of high quality, reliable navigation products to the marine industry. Transas continues this by offering official ENC content (based on the UKHO's AVCS data and before being converted to SENC) in the TADS service. All cells have passed validation checks to ensure that they will load and display correctly on ECDIS equipment.

In addition, all ENC data is fully assessed by the UKHO where the content of the ENC data is compared to the equivalent Admiralty paper chart. Any navigational significant differences identified are then investigated and resolved with the producing nation. Where Transas believes additional information should be made available to the mariner, it will be displayed via a Data Assessment Layer exclusive to the TADS service. These extra layers will be available shortly after launch. No other electronic chart service offers this level of quality assurance.

TADS: FLEXIBLE SOLUTIONS

Licensing

TADS will be available initially with a 12 month licence period. During 2009, 3, 6 and 9 month options will be made available where allowed by HO's.

WORLDWIDE SERVICE AND SUPPORT

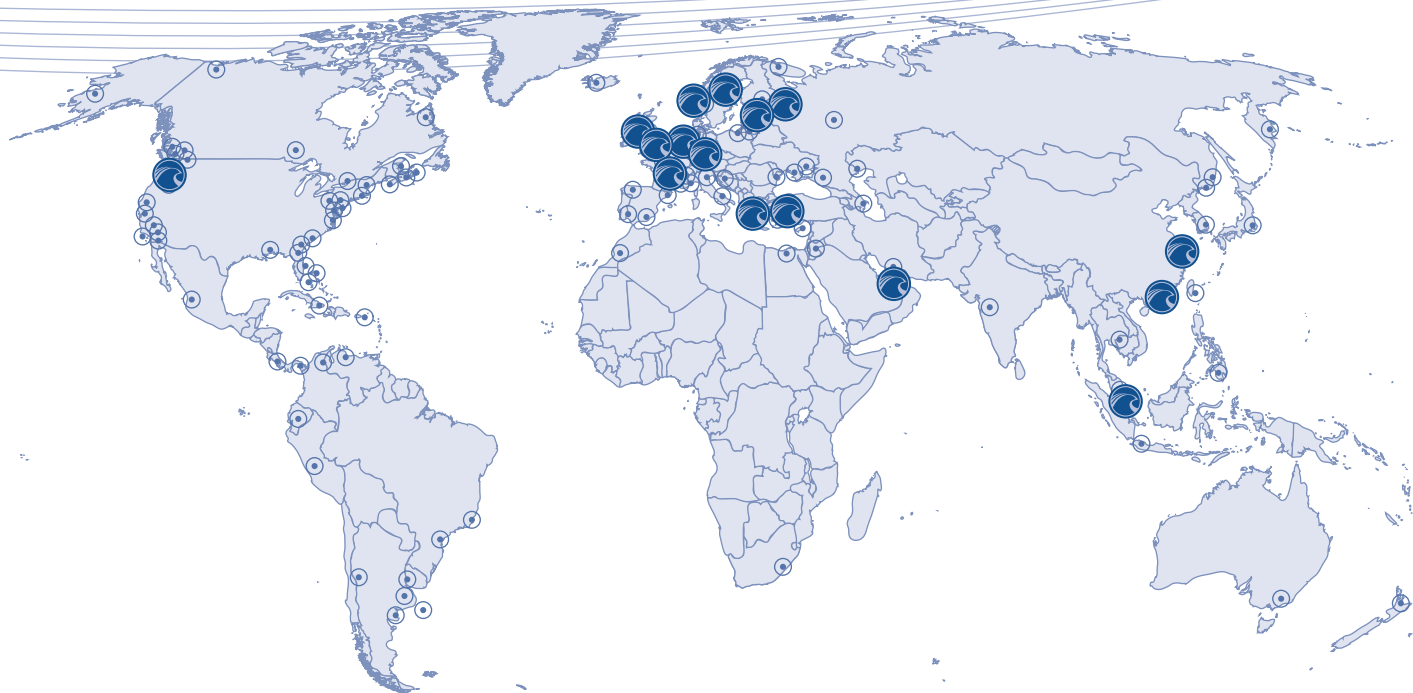
Transas is dedicated to providing high-quality service to the shipping industry. Our service network is strategically spread worldwide to deliver fast and efficient service to our customers. Transas is a leading manufacturer of marine navigation equipment and operates according to ISO 9001:2000 principles.

Always within your reach

Transas Worldwide Service Network is able to respond to any service enquiries 24 hours a day, 7 days a week and make sure that service is delivered in time. Transas provides service with its own trained specialists in the 30 biggest ports, and supplies service in all other major ports via our widespread Service Network. All work is performed by Transas-certified engineers who are continuously trained to upgrade and refresh their knowledge of the latest technologies. Spare parts stock allows us to quickly supply replacement parts.

** Transas delivers official ENC data in SENC format as per the IHO amendment to paragraph 3.3 of S-52, and the new Technical Resolution A3.11 adopted at the IHO's 16th International Hydrographic Conference. Transas SENC Distribution Service was fully tested and approved by Det Norske Veritas (DNV) and the collection currently includes Electronic Navigational Charts (ENCs) from national Hydrographic offices and new ENC coverage produced by UKHO in co-operation with Foreign Governments to provide comprehensive, official, worldwide coverage.

TRANSAS WORLDWIDE DISTRIBUTORS AND SERVICE NETWORK



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