

# SPICA

## SOFTWARE SOLUTIONS

E-NAVIGATION MADE SIMPLE.



### OVERVIEW

SPICA is a group of digital products designed to enhance the administration of data on board and to ensure that you are always up to date. The aim of SPICA is to make workflows on board simpler, reduce mistakes and decrease human error.

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Special Offer

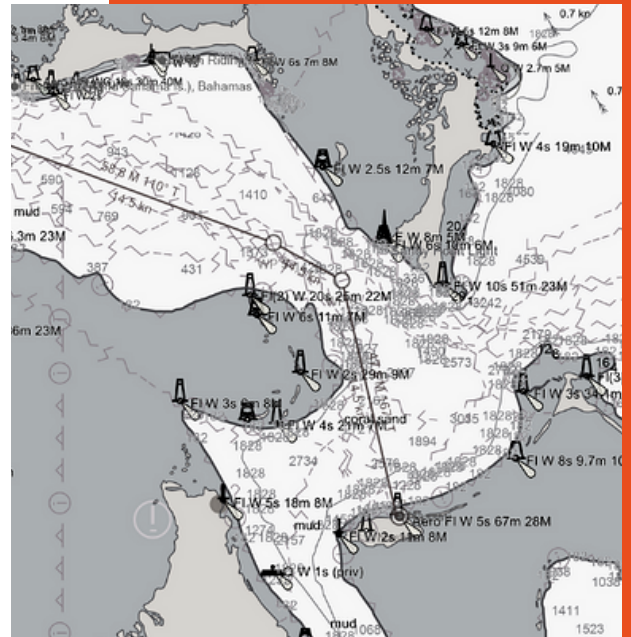
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# SPICA: E-NAVIGATION

SPICA is a versatile back of bridge tool for vessels, shipping companies, engineers and consultants as many of our services can be consolidated onto one platform. The software gives individual vessels unique control of each voyage and enables optimal fleet operation through improved planning, monitoring, analysis and communication capabilities.



## KEY FEATURES

- High performance chart display with clear, fast, uncluttered images. Modern, touch friendly user interface.
- Charting tools to overlay the chart with points, lines, areas, annotations and routes and exchange routes with ECDIS. Simple and robust overlay management.
- Automatically generated routes - Integrated routing engine uses a database of thousands of ports worldwide.
- Chart management to purchase, download and display ENC charts. Generate standards compliant with S-57 exchange sets to update an ECDIS.
- Tides and Radio Signals Overlay the chart with data from ADMIRALTY Digital Products. Purchase, download and display updated information.
- Route monitoring GPS and AIS inputs. Helming display, ETA, etc.



### **AVCS – ADMIRALTY Vector Chart Service**

SPICA offers a unique service for AVCS charts. Existing charts can be installed and viewed, or charts can be acquired using our Pay-As-You-Need service. You can update the ENC charts free of charge each week and update the ECDIS by making a standard exchange set.

### **ADP – ADMIRALTY Digital Publications**

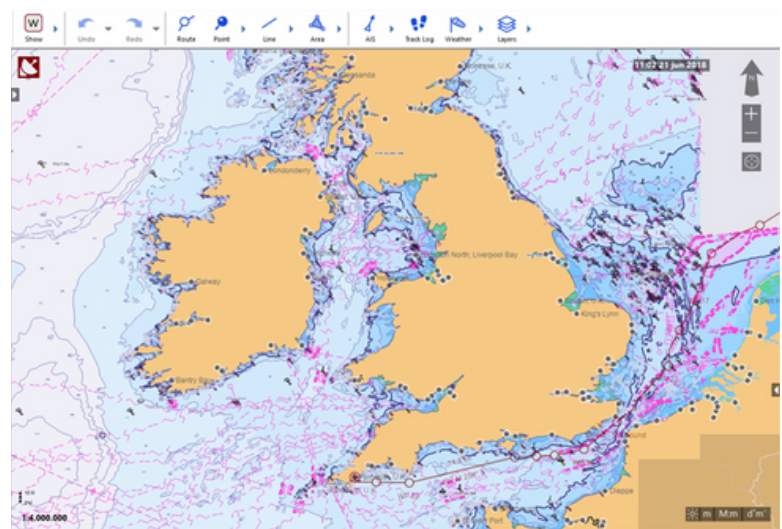
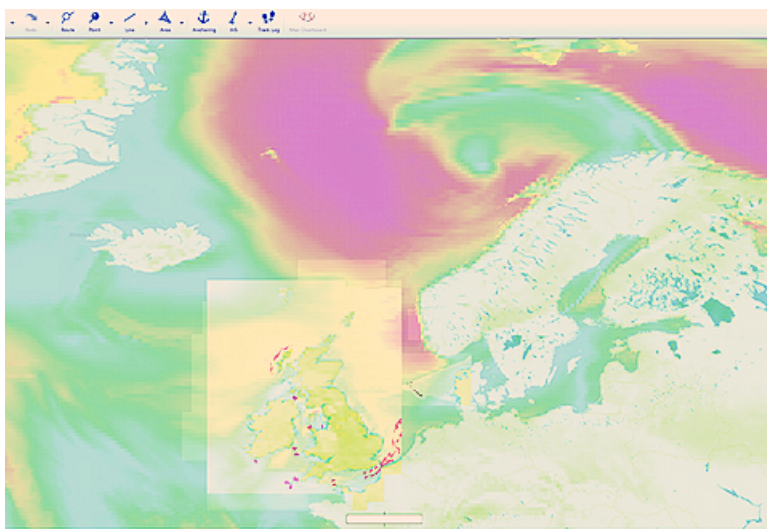
SPICA displays the important information from ADP to support voyage planning and monitoring activities. Tidal predictions from ADMIRALTY TotalTide and ADMIRALTY Digital Radio Signals information is combined with AVCS charts and your routes to give an integrated view of the data in a single application.

### **AIO – ADMIRALTY Information Overlay**

SPICA displays AIO to provide the operator with the most up to date information possible. It simplifies planning by giving mariners the right information when they need it. It displays ADMIRALTY Temporary and Preliminary Notices to Mariners (T&P NMs) and ENC Preliminary Notices to Mariners (EP NMs) on top of ENCs.

### **AENP – ADMIRALTY e-Nautical Publications**

Having AENP integrated into Viewer, operators will be able to download and apply the latest UKHO updates to publications electronically. This important feature helps to support safety and compliance, as well as reducing administration on board the vessel.



#### **Weather service**

See up-to-date weather information in SPICA. Access seven days of weather forecasts to check if there will be any issues for the voyage. In addition to the standard weather service, we offer typhoon and ice data to assist in voyage planning for these scenarios. Weather data, provided by Vento Maritime, is available to download on demand. You can find out more information on the Weather service [here](#).

#### **Environmental module**

ECA and Marpol zones are highlighted, so routes can be planned around the zones. Knowing where zones are in your schedule can make a difference in compliance, time and cost. Routes can be planned to avoid changing fuel or to take the additional time and costs involved into consideration.

#### **Passage Planning**

Viewer routes provide a full overview of route waypoints, legs, speed and predicted times and is based on our AtoBviaC service. The passage planning tool allows you to easily share routes between the vessel, shipping companies, charters or Vento Maritime, to ensure safer navigation. A printable passage plan (route details, ENC update state, ADP certificate) is also available.

#### **NAVAREA warnings**

Embed NAVAREA warnings into voyage plans to see warnings on your routes and avoid any potential dangers, to save time and keep the vessel and its crew safe.

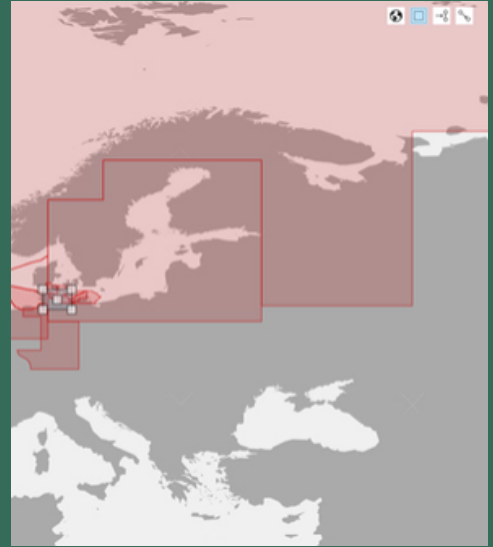
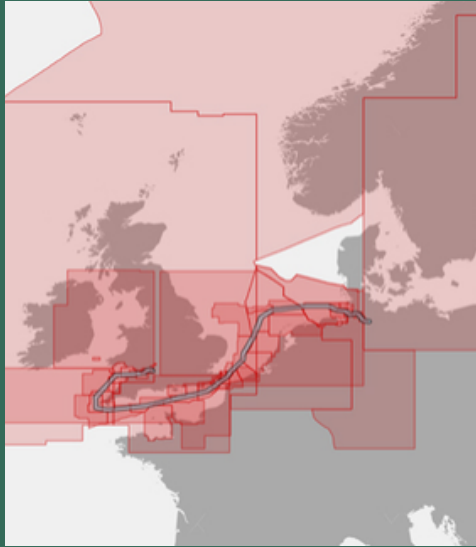
#### **Fleet Tracker**

If your fleet is using PAYS, Viewer can offer a fleet monitoring service. Each vessel in your fleet can be displayed on the chart view with current and historical track. Fleet monitoring can be used in combination with services such as AVCS, ADP and weather to obtain relevant ENC charts and improve situational awareness for each vessel. A measurement tool allows you to assess how close vessels are to port, sister vessels or to bad weather, such as typhoons or reported ice. This allows you to supply optimised routes and provide effective support to vessel operations.





# SPICA: PAYS (PAY-AS-YOU-SAIL)



## WHAT IS (PAYS)?

The main principle of PAYS is for a vessel to have access to charts to plan routes and pay for the charts that are used for navigation. Any charts that are viewed and not used are not charged for. The vessel is supplied with an extensive set of cell permits, and any cell can be used free of charge for passage planning. The cells are paid for when the vessel sails onto the coverage area of the cell. On the vessel, all cells are immediately available for use with the ECDIS. There is a clear safety case for preferring this approach to schemes where a permit needs to be delivered to the vessel first. The administrative burden to the vessel is reduced to a minimum as all charts are available all the time with no action required.





# HOW DOES PAYS WORK?



## KEY FEATURES

- Automatic ordering of charts
- Full chart portfolio always on board
- Works with all ECDIS types
- Free viewing of ENC's
- No installation needed
- Plug-and-use antenna
- No internet connection needed
- Compliant in the event of emergency route changes

## THE SERVICE

The PAYS service is solely concerned with PAYS cell permit management. It is not part of a greater ECDIS, data delivery, passage planning or other related system. As such, the service is independent of proprietary chart display or navigation technology.

## HOW DOES PAYS WORK?

PAYS uses shore-based vessel tracking and each vessel is supplied with a satellite GPS antenna.

The antenna simply needs a view of the sky and connecting to a 9-32V DC power supply.

No other software or internet connection is required.

At pre-programmed intervals, the antenna transmits position reports via satellite (Inmarsat).

As position data becomes available, it is collected from the antenna and stored in a database.

The database is automatically analysed and reported back to the ENC server or the shipping company.

Any existing ECDIS on the vessel can continue to be used as normal; and it will now have access to the full PAYS portfolio of charts.

PAYS can be used on ECS – Non-approved ECDIS as long as it is using ENC charts.

## PAYS UPDATES

Along with PAYS we offer SPICA Update for PAYS, which makes the updating of AVCS easy and minimizes the data transfer to a minimum.

For a global ENC folio there will be:

- 49 MB of update data per week
- 573 updates per week
- 20% of the updates are re-issued base cells
- 3 KB of update data per cell per week

Some sea areas are updated more frequently than this, for example in the North Sea the average is 4 KB of update data per cell per week. This means that if you have a folio of 100 cells, you will need 300 KB of data to update your charts weekly – only 1.5 MB for 500 cells.



# SPICA: E-READER

SPICA is a versatile back of bridge tool for vessels, shipping companies, engineers and consultants as many of our services can be consolidated onto one platform. The software gives individual vessels unique control of each voyage and enables optimal fleet operation through improved planning, monitoring, analysis and communication capabilities.



## KEY FEATURES

- Full digital technical library
- Quick and easy to use and update
- Removes shipping costs of paper library
- Compliance made easy
- New books added regularly
- Filtered searching
- IMO and flag state approved
- Easily access certificates for inspections
- No unlocking
- Reduces administration on board
- Online and offline updating

### Reduced administration on board

SPICA e-Reader keeps the administrative work on board vessels to a minimum as the latest set of publications will always be available on board and constantly kept up to date.

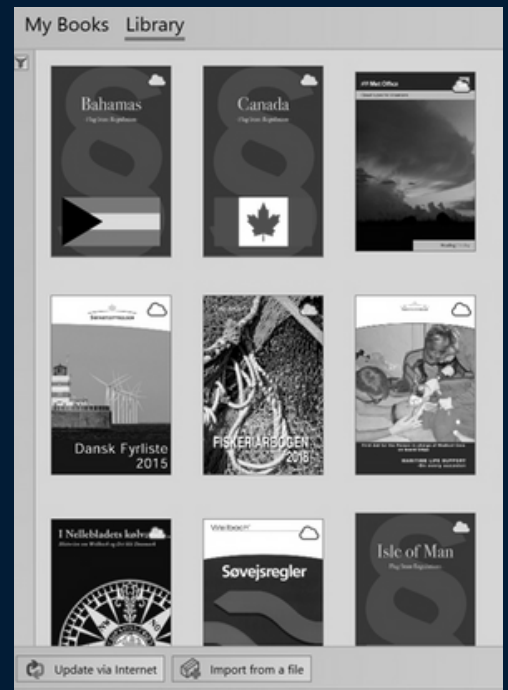
SPICA e-Reader provides total visibility of what books are on board the vessel. This gives you complete confidence the vessel is compliant by having the latest mandatory publications on board at all times.

### Simple and easy to use

Its streamlined design is simple and easy to use with one-click updating and filtered search results among many other easy to use features. All data will already be on the vessel so new eBooks are accessed easily.

Updates and amendments to publications are highlighted and distributed automatically, ensuring the latest copy is always available.

There is no need for an internet connection to use SPICA e-Reader – you can get permits for books either online or offline.



# MORE INFORMATION

**American Nautical Services  
is your Ultimate Resource for:**

- SPICA Digital Navigation Solutions
- Electronic Navigation Charts
- Classic Nautical Paper Charts
- HAZMAT Compliance Software
- Maritime Books
- Nautical Instruments
- Safety Placards
- Flags, and More!



Call us Toll-Free at  
+1(877)999-3321  
or e-mail us at  
sales@amnautical.com  
to get an exclusive offer for a

**90 DAY TRIAL OF  
SPICA E-NAVIGATION!**



## **ABOUT US**

Proudly serving the maritime community since 1977, American Nautical Services (ANS) is one of the largest nautical chart agents in the U.S. and is an International Admiralty Chart Agent on behalf of the United Kingdom Hydrographic Office.

ANS is an ISO 9001 certified company and is committed to providing goods and services that meet the ISO 9001 standards. Your sailing voyage begins here!

**WWW.AMNAUTICAL.COM**