



## SIMULATOR OVERVIEW

**NAUTIS Maritime Simulators** - DNV approved integrated simulator solutions in compliance with the latest IMO requirements.



## NAUTIS Maritime Simulator

NAUTIS Simulators are DNV-GL approved integrated simulator solutions satisfying the latest IMO requirements. Our advanced simulators are designed to facilitate the education and examination of your students or employees.

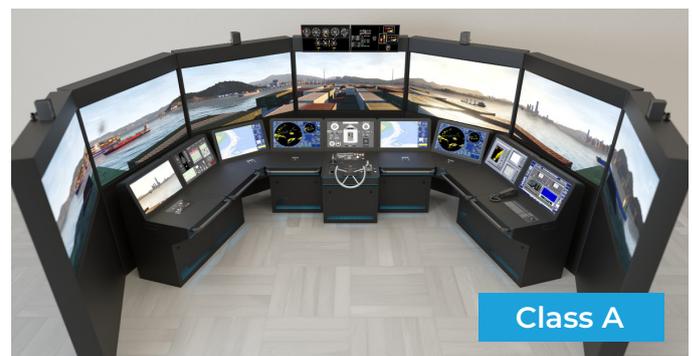
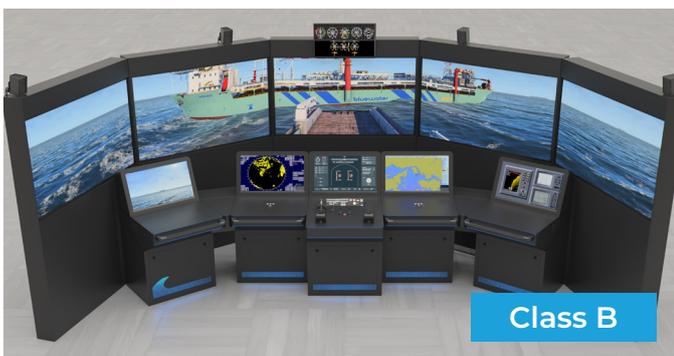
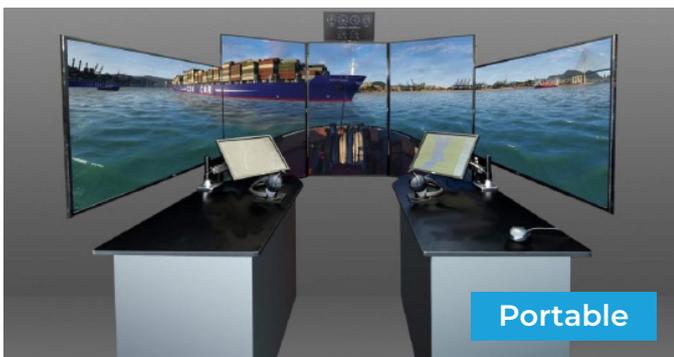
We offer a range of configurations from portable setups on a single laptop up to Full Mission Bridge Simulators with interfaces to real navigation equipment and engine room components or simulators.

## Certified training options

NAUTIS Simulators allow training in full compliance with international standards and regulations:

- The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (or STCW)
- IMO Model Courses
- IMCA Guidance on the use of simulators (IMCA C 014 Rev. 4 – March 2015)
- Approved and certified by DNV GL - with class notation for Integrated Simulator System, Tug, HSC - to be compliant with the Class A standard for certification of Maritime simulator systems DNVGL-ST-0033 Edition April 2018 and compliant with the requirements of the STCW Convention, Regulation I/12
- Nautical Institute Accreditation for DP Training Centres running VSTEP NAUTIS Dynamic Positioning Simulators
- DNV-GL Class A Certification for Dynamic Positioning Simulators
- CESNI compliant with European Standard for Qualification in Inland Navigation edition 2018 Part IV, vessel-handling and radar simulators

The following configurations are available for training:

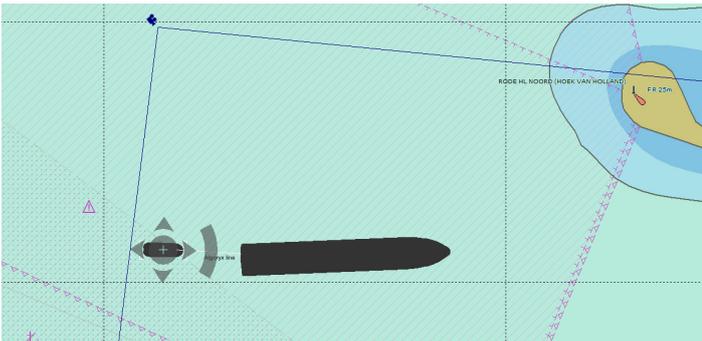


## Core Benefits

- **Ease of use** – Simple and intuitive interface allows users to quickly operate the software.
- **Realism** – Validated hydrodynamics simulate realistic physical ship behaviour.
- **Quality** – Photo-realistic render of objects and environments enhance user immersion.
- **Compatible** – Standard and open interface to connect to external equipment.

## Exceeding industry standards

Our consoles are designed according to dimensions and ergonomic specifications as set by class society standards for ship building. Control plates are designed to mimic actual ship layouts. These plates can include multiple types of propulsion and steering controls to create training solutions for various vessel types. We cooperate with well-known control suppliers, whose controls are also used onboard real vessels. All together, this results in an utmost experience of realism and makes you feel as though you are onboard an actual vessel, thereby increasing training immersion.

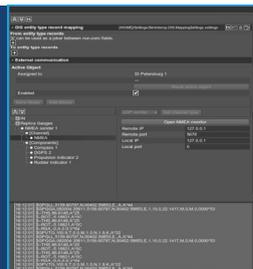


### User-friendly instructor tools

NAUTIS Instructor Stations are both comprehensive and user-friendly, with a complete graphical interface in both 2D and 3D. Easily drag and drop ships into environments, connect towing or mooring lines, drop anchors, change vessel dynamics, view vector forces and more from different views.

### Open interface for customisation

NAUTIS supports a flexible and open interface, allowing the addition of customised software-developed navigation panels or nautical instruments and hardware. This is more cost-effective and versatile than buying real equipment of particular ships and creating hardware interfaces.



NMEA Standard  
or ControlStation API/custom protocol



### High-quality support options

VSTEP customer support is supervised from our headquarters and coordinated with our strategic partners around the globe, always near you. We provide different service agreements according to your needs, ensuring you always receive the help you need, when you need it, quickly and efficiently.

### Less hardware, lower costs

NAUTIS Simulators are optimised to deliver high-quality certified simulator power without the need for many expensive PC's. A complete NAUTIS FMB Simulator requires only a few PC's to run on, saving hardware costs and making installation and support much easier.





## NAUTIS instructor station



### Total control at your fingertips

An Instructor Station (IS) is a mandatory element of STCW compliant simulators. The NAUTIS IS allows an instructor to follow a trainee's decisions and actions in detail during each simulator training session and includes after action review and assessment. It also interfaces seamlessly with all NAUTIS Simulator configurations.

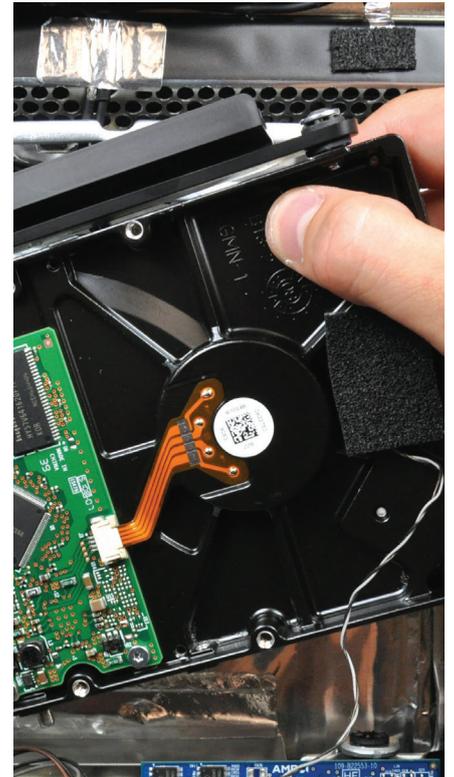
The setup of the NAUTIS IS consists of displays on which the outside view and navigation screens of the trainee are duplicated in real-time. This intuitive tool facilitates a high degree of control, which benefits the education and examination of your students or employees. By operating the Instructor Station, instructors can also conduct a range of tasks to carry out their training goals:

- Prepare an exercise: select a training environment and add one or more vessels in it using the easy drag-and-drop interface. Furthermore, you can set the weather conditions and time of day.
- Save scenarios for later use.
- The NAUTIS IS has both a 3D bird's eye view of the environment and a 2D chart view.
- Assign trainees that are logged into the exercise to one of the vessels.
- Start, pause, record or stop the exercise.

During an exercise, the instructor can perform the following actions in real-time:

- Change the weather, visibility and time of day.
- Show a trail of all the ship movements.
- Shift any of the vessels to a different position.
- Assist in mooring operations by creating mooring lines.
- Assist in anchoring operations by operating winches and communicating status of chain/anchor.
- Operate tugs and their lines for towage assistance.
- Add new target vessels, and set their speed and direction, or add them to a complex track.
- Change the track of the target vessels and helicopters.

## Simulator instructor and maintenance training



### Training you for optimal simulator use

Excellent training and support are an important part of operating a simulator. As part of a simulator delivery, VSTEP provides basic and advanced training courses for each customer.

Simulator technical support and maintenance training:

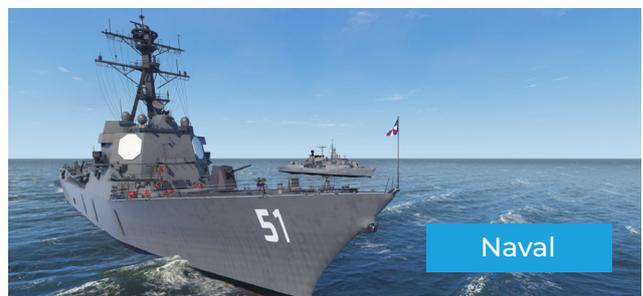
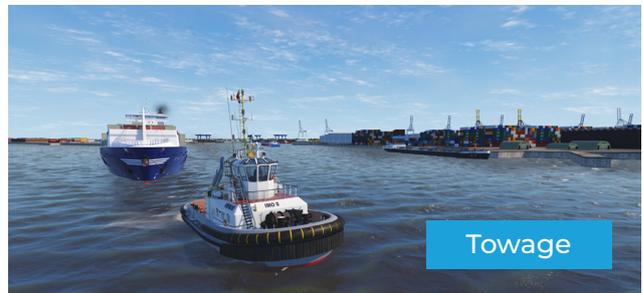
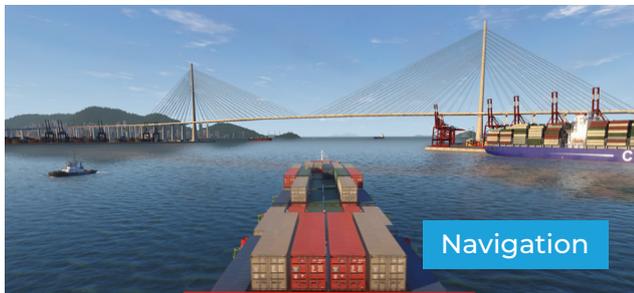
- Simulator Start-up / Shut down, facility specific circumstances.
- Overview of hardware and software connections.
- Calibration and assignment of controls.
- Interfaces check & finetuning for Radar, ECDIS and GMDSS simulator.
- How to detect / remedy hardware issues.
- Organize scenario storage and session recordings.
- Back-up / restoring of configuration files.
- Remote log-in facilities and simulator optimisation.

Simulator and instructor station training:

- Creation of scenarios.
- Exercise Recording and playback / debriefing.
- Initiate / restart an exercise.
- Controlling target vessels during an exercise.
- Introduce ship equipment or sensor faults and failures.
- Change the operating environment conditions during an exercise.
- Communication with the trainees on relevant comms channels.
- Simulator application in training, assessment and examination.
- Visual tracking of an exercise in both 3D view and on chart.
- Setting up a scoring or grading system to assess student performance.



## Content and functionality packages



	Portable	Desktop	Class B	Class A
Navigation	■	■	■	■
Towage	■	■	■	■
Inland	■	■	■	■
Naval		■	■	■

Our **GMDSS** simulator is available in a single setup, which can be extended to a classroom environment or integrated in any other simulator configuration.

**For more information, contact our team:**

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## Additional integrated solutions

### Response Simulator

Response Simulator is a virtual safety training software designed specifically for emergency responders to help them re-create emergency situations and practice response strategies. It prepares users to make the right decisions in the heat of the moment without the time, risk and costs of traditional practical training.

The platform includes a maritime content & functionality package that accommodates an increasing number of environments, vessels and objects which will allow you to re-create emergency situations on-board. Integrated solutions with NAUTIS enable the possibility to simultaneously conduct safety and vessel handling training.

### Features

- Ability to train in a virtual ship environment.
- Interior and exterior of a vessels are accessible.
- Train with a focus on incidents, including engine room fires, on-board explosions, evacuation procedures and **more**.

### For whom?

- Civilian ship crews
- Watchstanders
- Naval commanders
- Damage control team members
- Navy & coast guard shipboard personnel





## About

NAUTIS is a product of virtual training and simulation developer VSTEP Simulation, an ISO9001:2015 certified company based in Rotterdam, the Netherlands. We aim to train people for a safer world through the use of advanced products that serve existing markets as well as new markets not yet familiar with the benefits of simulation. Our six leading product development principles are all geared towards optimally satisfying our users. We strive for transparency, quality, reality, efficiency, flexibility and versatility. By listening to our users, we create products that are built to optimally cater to their unique needs.

## Our clients include:

