

VTS simulator training

General

The Vessel Traffic Services Simulator is a facility for adequate, realistic and controlled operational training of VTS operators. Six VTS operators (trainees) can be trained simultaneously. Each one has his own display, which is placed in a separate cubicle.



By combining all six cubicles of the VTS operators, a traffic control centre or even a network of control centres can be simulated. The training scenario has been computerised in such a way that the instructor can interfere manually with the exercise at any time. Ships can be in an automatic or manual control mode. In the latter case the instructors control the ships and play a major role in the communication between VTS operator and all ships that are present in the trainee's (block) area.

Training set-up

A full training crew can have as many as 27 members consisting of 20 VTS operators (trainees), 6 instructors and 1 head instructor in a course where VTS simulation is combined with theory lessons.

The simulator has a flexible and modular set-up. The inclusion of raw radar and synthetic radar allows for the training of operators of simple

shore-based stand-alone units and operators of complex and sophisticated systems.

Training content

All VTS courses are provided by NNVO qualified VTS instructors and experienced teachers. Basic, regional and refreshment courses are regularly offered to Dutch VTS operators.

The **Basic course** for Dutch VTS operators is eight weeks and is in accordance with IALA V103. Courses include nautical knowledge, legal and regulatory training, sea speak in three languages and intensive simulator training. This training is executed on a so-called fictive playing area - an area that contains all types of fairways and traffic encountered in the Netherlands. On request a dedicated basic VTS course can be prepared which is in accordance with the requirements of the clients and the experience of the trainees.

Regional training is a one-week basic training, focusing on a specific VTS area. The purpose of this training is to familiarise the VTS operator with local conditions, rules and regulations. The **refreshment course** runs for three days and consists of theoretical work and simulator exercises.

For clients who face other or more specific demands on VTS operators different courses focusing on specific competencies can be comprised on demand.

Research

The simulator can also be used for research. For example problems related to work load, communication procedures, remote piloting and traffic planning can be studied.

The VTS Simulator System

Traffic model

Specially developed traffic model, with sophisticated mathematical ship models allowing all kinds of realistic manoeuvres.

Ships

Maximum 49 ships actually shown, maximum 100 in scenario. Fast, medium and slow, seagoing and inland vessels of various sizes.

Playing area

Maximum 256 x 256 nm. Maximum 6 block areas of which 4 are actually shown, either adjacent or separately.

It is possible to show the same area on all displays.

Radar

Raw radar and synthetic radar.

Information Systems

Basic Management Information System.

Debriefing

Extensive playback functions, for all parts of the exercise, including recording of all communication.

Communication

4-Channel VHF simulation including disturbances.

Telephone/Intercom

Off-line operation

Extensive utilities and a sophisticated graphic system facilitates the generation of simple or complex exercises.

For more information please contact MARIN's Nautical Centre MSCN,

T +31 317 479 911

E MSCN@marin.nl

