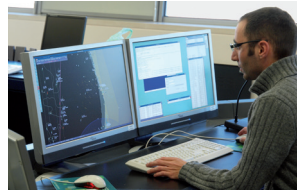


inVTMIS

Vessel Traffic Management & Information System

Ultimate extension for perfect coordination

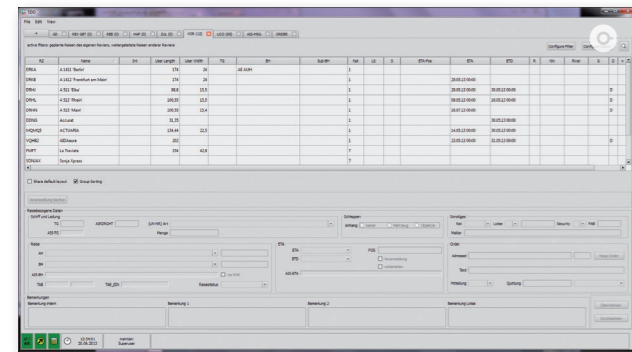




inVTMIS

Application

Vessel Traffic Management & Information System



CUSTOMIZED VESSEL DATA WINDOW

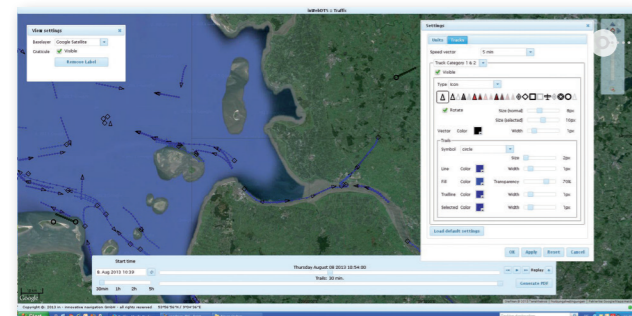
inVTMIS serves the needs of any stakeholder in shipping processes for custommade information. It supports VTS-operators, cargo and port operations, as well as administration and customs from a single data base. Several hundreds of attributes for a single vessel can be defined. Actual environmental data like hydrological and meteorological information can be easily integrated. Presentation of data is a tailor made solution depending on the needs of the particular traffic center or coordination office. Operators working at inland and coastal offices as well as shipping agencies are provided with a system that can be fully integrated into an existing VTS system or it may be used as standalone unit.

inDTS PROVIDES ALL INFORMATION AT ONE GLANCE

The innovative display module is designed to meet the highest requirements within VTS centers and Coastal Surveillance Systems. Due to its combination of high performance traffic viewport with a modern graphical user interface, *inDTS* presents any sort of integrated Management & Information System data at a glance.

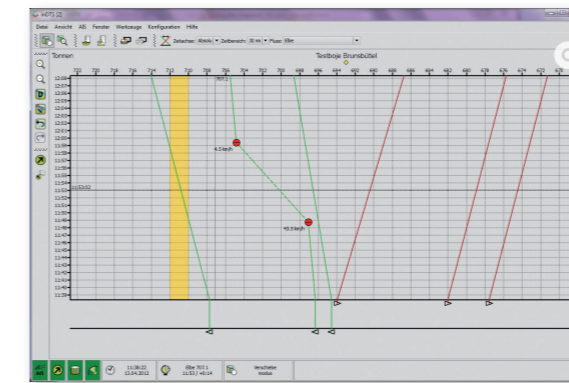
REALTIME INFORMATION WITH inWebDTS

Via web browser, information is given on the traffic display *inWebDTS* combining track information with any type of electronic charts. The software allows determining data specific access rights for each user providing a highly valuable service application for shipping companies, Ministries and other authorities.



CUSTOM-MADE TRAFFIC DISPLAY

Appearance of the traffic display is highly configurable depending on the focus of the user. Other services available from world wide web can be integrated (e.g. Google Earth™, OpenStreetMap, meteorological or hydrographical data). Furthermore, it is possible to assign different combinations of user rights to the personalized system-access, e.g. for an operator, technician or system administrator. Rule-based control opens a variety of interactions between the system and the operator. A user can be notified by email, acoustically or directly on the screen as soon as one of the predefined rules is violated, e.g. a vessel enters a prohibited area or crosses a line.

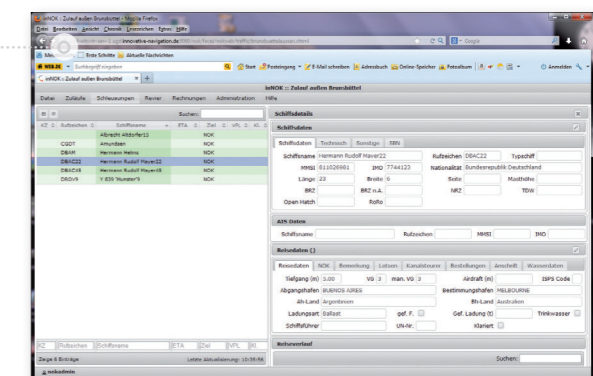


PREDICTION OF ENCOUNTERS

For a safe and smooth passage of large vessel through narrow fairways the encounter of vessels have to be predicted in time. A graphical visualization of this prediction as path-time diagram allows the operator to support the ships for secure passage. The operator in the center is able to predict exactly the point of encounter of two vessels and to organize accordingly the traffic.

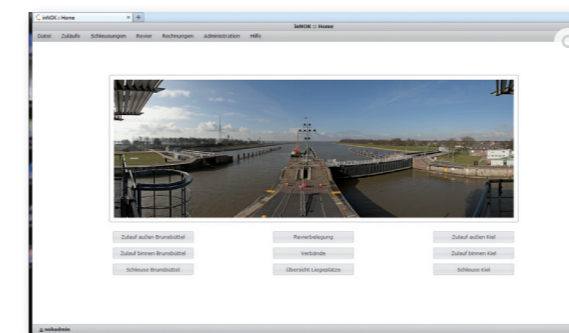
PILOTAGE SCHEDULING

Scheduling pilotages in ports requires the optimization of different factors. Vessel positions, ETAs and ETDs of ships, vessel traffic in the port area, actual availability of pilots and their transfer to the boat have to be considered. A system setup with *inVTMIS* with its profound data base on ship journeys and the overall traffic situation makes the difference between estimating and easy planning.



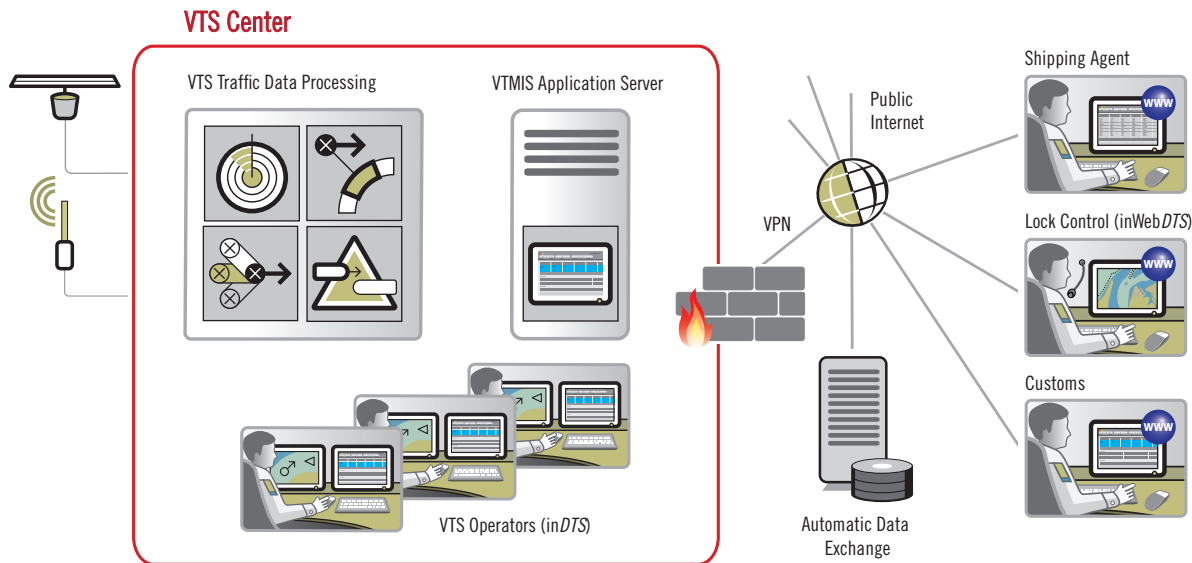
LOCK MANAGEMENT

To save time in locking of ships an operator has to be aware of the current and predicted traffic situation. It requires data like ETA, RTA or ETD on a wider scale than just the area around the lock. The adequate module of *inVTMIS* provides all ship details at a glance and invoices can be processed electronically. This setup of a specific lock scheduling interface allows a cost and time saving management of locks along the passage of vessels.



Application areas and tasks

- ✓ Lock management
- ✓ Pilotage scheduling
- ✓ Cargo and allied services
- ✓ Voyage planning
- ✓ Port operation
- ✓ Accounting and billing
- ✓ Incident management
- ✓ Staff roster
- ✓ Route and traffic prediction
- ✓ Document and report management
- ✓ Hydrological and meteorological information



intENTION

In order to manage a busy port, a modern Vessel Traffic Service (VTS) has to provide consolidated traffic data from local and remote sensors, perform reliable traffic analysis in the area of interest and complete the picture with a management and information system. Import and export interfaces of such a system shall allow to extract efficiently the appropriate information.

inVTMIS is a state-of-the-art application web server with a variety of additional modules for dedicated information sub domains such as static, dynamic and voyage related ship data, port and cargo operation data, as well as environmental information and general reports. A traffic planning module can assist in detail berth planning and lock allocation. The integration of TrafficAnalysisSystem TAS allows recording and responding to traffic events of different severity. The user interface available for **inVTMIS** is the powerful traffic display module **inDTS**. Furthermore, **inWebDTS**, a browser based traffic display, can also be used additionally or exclusively.

inVTMIS allows operators to access exactly the information they need and also to enter data relevant for their work in one data base. Since all components of in-innovative navigation GmbH work in a modular way, a VTS center providing all functions for traffic surveillance can easily be complemented later on with **inVTMIS** and, therefore, extended with any of these functionalities available.

FEATURES

- Modern commercial application server infrastructure
- Standard commercial SQL data bases
- Simple integration of a large variety of additional information modules
- Excellent configurability and scalability
- Extremely flexible database design to adapt tables with additional information even during operation
- Export of table content as HTML or PDF possible
- Display via **inDTS** or via **inWebDTS**
- Supplying clients inside or outside the port area protected by firewall
- Customized user right & role management
- Platform independent (LINUX, Windows™)
- Any service may be retrofitted anytime in an existing VTS system



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