in DTS

Display for Traffic Surveillance

SECURE **in** SIGHT
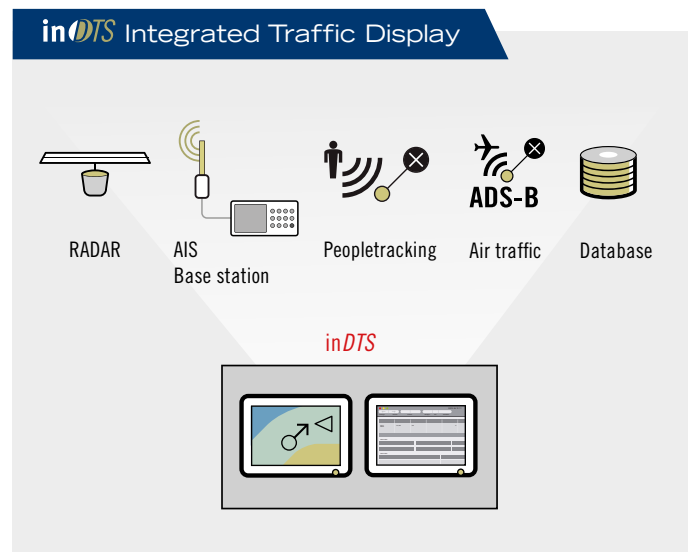
in innovative navigation

Modular Design – Adaptive Display Solution

in*DTS* comprises a wide variety of graphical or textual presentations of traffic information on waterways. It can be set up as pure AIS data display on an electronic chart up to comprehensive VTS/CSS display solutions with real time radar display that also integrates information from generic databases.

Thereby, the setup of in*DTS* is always optimized to meet the operator's need for information. Sensor data like Radar, AIS, GPS, Satellite AIS, CCTV, Satellite images and ADS-B can be combined with information from databases and all information is presented together without loss of time or quality. Automatic warnings and alerts are shown in a customized manner, ensuring an operator to keep everything securely in sight.


in*DTS* Integrated Traffic Display

| RADAR | AIS Base station | Peopletracking | ADS-B Air traffic | Database |

in*DTS*

Application

- ☑ Traffic Surveillance Services
- ☑ Lock Management
- ☑ Border Control

- ☑ HSE Management
- ☑ Incident Management
- ☑ Pilotage Scheduling
- ☑ Route and Traffic Prediction

- ☑ Voyage Planning
- ☑ Document and Report Management
- ☑ Port Operations
- ☑ Accounting and Billing

All relevant information at a glance
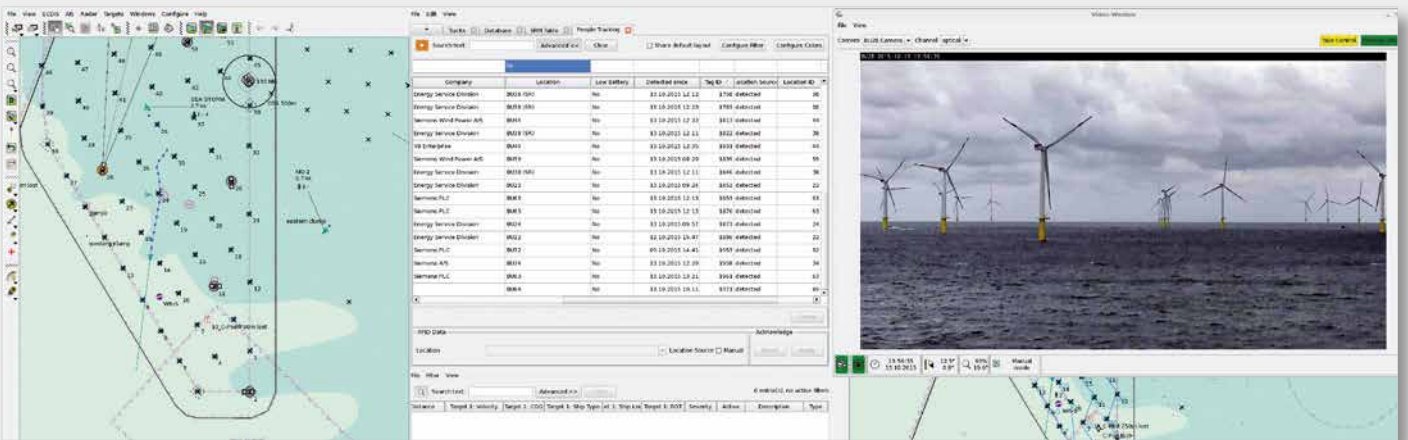
Offshore solutions – people tracking with in*DTS*

Successful in operation

The highly configurable display software with the OpenGL drawing engine is used worldwide in traffic monitoring systems: at locks, at ports, on inland and coastal waterways, as well as in offshore installations.

The latest concepts for information presentation are the bases for a user friendly and straight-forward display solution, either in a self-contained VTS system or in a web application.
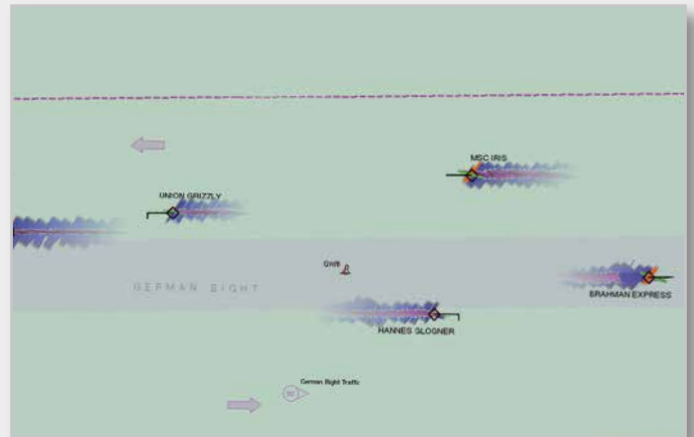
Authentication and access control by the rights management enables networked information processing for efficient and safe traffic management and surveillance.

Wide variety of display options available
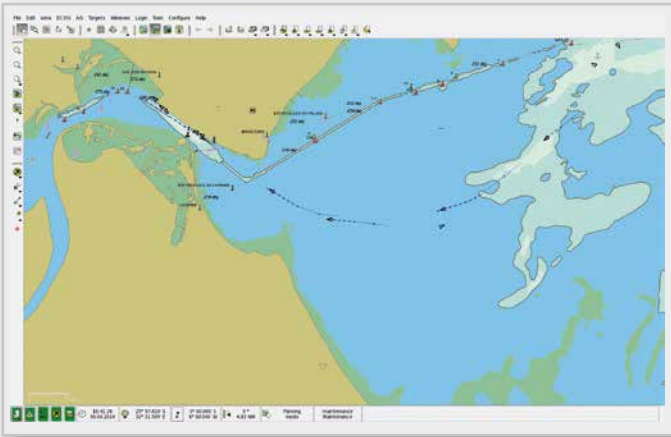
Pure AIS display

Detailed traffic display with multi radar

Customized Graphical User Interface

in*DTS* combines a high performance traffic viewport with a modern graphical user interface, that is used intuitively by an operator. Together with its unique plug-in interface that allows bidirectional communication, in*DTS* is an ideal platform for networked traffic surveillance services.

The display software has predefined STANAG as well as AIS standard symbols implemented for indicating targets on the chart display. However, new symbols can be easily created.

in*DTS* presents Management & Information System data, radar overlay and track data at a glance, either as overview or in the desired level of detail. In addition, the display software offers the possibility to create customized forms reflecting already existing forms with regard to functionality and look and feel.

The GUI of each workstation can be individually adapted. Thereby, flexible arrangements of windows contain text or video presentation according to the setup chosen. Functionalities like radar calibration or camera control can be made directly available on the display. A reliable rights and role based access regulates availability of functions at a specific workstation.

The software is in compliance with UTF-8, supporting also Cyrillic, Chinese and Arabic characters.
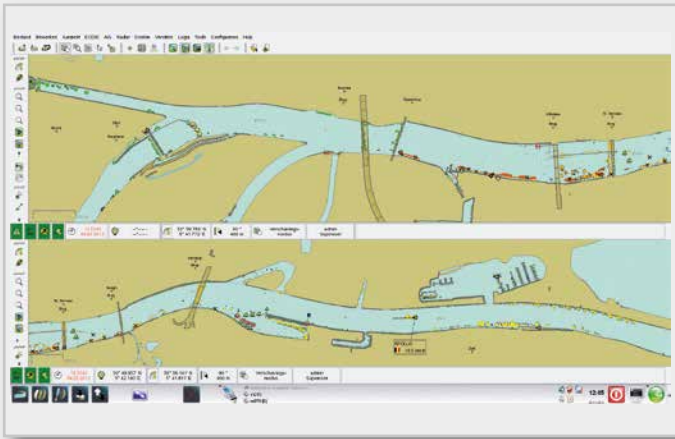
The GUI offers clear configuration dialogs to adapt the display to project specific requirements. The customer may define and adapt target symbols, labels, table windows and alarm lists during runtime. Operators can draw specific warning areas directly on the electronic chart and define the according traffic rules to be applied there. If the traffic analysis system TAS detects conflict situations and traffic rule infringements, in*DTS* visualizes them immediately and unequivocally.

To achieve best compatibility with other components of a surveillance system, in*DTS* relies on existing standards providing input interfaces for EUROCONTROL ASTRIX, ITU, IEC and IVEF standard data format.
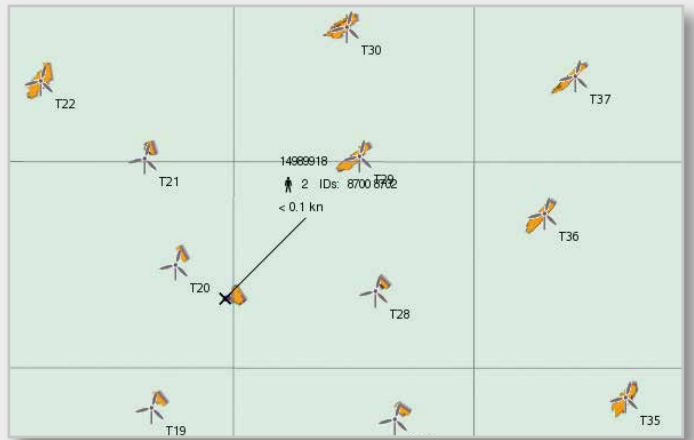
Thus, each in*DTS* display within a complex networked traffic surveillance system can be configured to be perfectly suited to the respective application purpose.
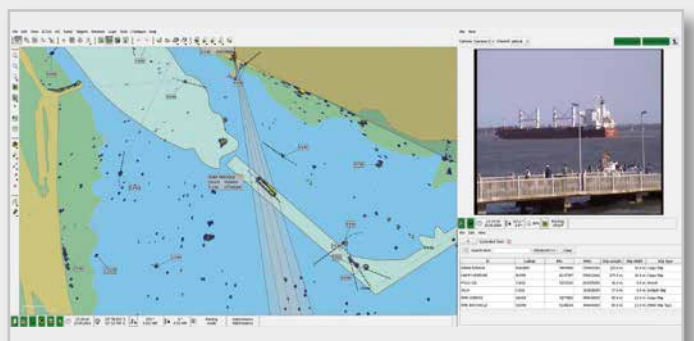
Split screen display

Work safety in an offshore wind farm by people tracking

Traffic event list - list windows may contain information
about vessel, tracks, topology objects, and others

Integration of CCTV providing view and control (PTZ, Slew-to-cue)
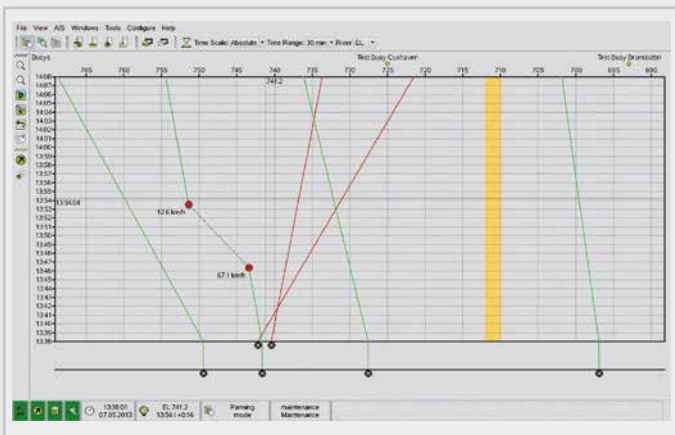
Prediction and planning of vessel encounters on waterways

Customized forms for entering and editing vessel and voyage data

Highlights in*DTS*:

- Configurable Graphical User Interface and OpenGL drawing engine

- Real-time zooming and panning operations without any delays

- Display of standardized (Inland-) ECDIS charts, with customizable level of detail

- Overlay of radar, AIS and multi sensor targets, including history trails

- Graphical definition and adaption of alarm zones together with automatic generation of alert signals for predefined events

- Display of air targets and option for PeopleTracking functionality

- Various measuring functions (e.g. EBL, VRM)

- Parallel overlay of video from 8 radar sources (RADARserver or RADARproxy)

- Input of targets following the EURO-CONTROL ASTERIX Standard for tracks and radar video

- Video display and CCTV camera control

- Graphical and textual presentation of AIS data and configurable table windows

- Manual and automatic tracking function

- Waterway prediction and positions diagram for perfect scheduling

- Authentication and access control by the rights management (LDAP)

- Custom business logic and forms can be implemented according to the requirements of the traffic center

- Input for Radio Direction Finder (RDF) data in NMEA syntax

- Retroactive radar trails: immediate response on enlargement of display time

- Supporting Inter-VTS Exchange Format Service (IVEF data)

- Input of AIS target information from serial line or network (ITU and IEC Standard format)

- MS Windows™ or LINUX operating systems

Further information about recent developments on:
www.innovative-navigation.de

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