New traffic surveillance system at Basle's Swiss Rhine ports

inVTS*box ng* developed by in-innovative navigation GmbH is suited especially for use at inland waterways. Typical applications are locks or bascule bridges. A state-of-the-art inVTSbox *ng* system is now in operation for the traffic center at Basle's Rhine harbors, including also an internet connection with the display software inWEB*DTS*.
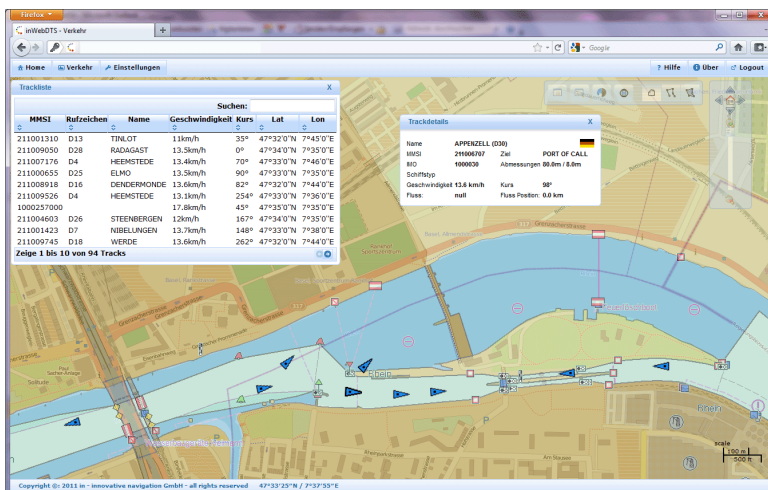

The Swiss Rhine ports along the river Rhine cover the cantons Basel-Stadt and Basel-Landschaft. These inland ports are the most important hub for Swiss import/export, because 10 to 12 percent of all goods enter the country via these ports. The traffic volume associated makes reliable traffic surveillance indispensable.

Therefore, an AIS (Automatic Identification System) based surveillance of the river Rhine was realized, covering the area from river kilometer 149,5 to 170,0 (German border). This section is used typically by large cargo vessels. Additionally, at the entrance to the port *Kleinhünigen*, one radar scanner is integrated as sensor.

In the traffic control center in the harbor of Basle, all data a processed by an in*VTSbox* ng workstation. This workstation is equipped with a powerful openGL graphic engine driving 4 monitors for display. All AIS and radar data received are recorded. In case of accidents, they may be replayed to show what exactly happened.

Parallel to the display of the operator in the traffic control center, the AIS information is also available on a web server, providing remote access using a standard web browser. The software inWeb*DTS* driving the web server offers an excellent solution for browser based visualization of the traffic situation, and it is especially suitable for the exclusive access of identified and authorized users, which need information about the current or recent shipping traffic on this waterway. The display application supplies a valuable service for fire brigades, ministries, police or port authorities.

Besides the indication of the traffic situation, inWEB*DTS* provides the external user access to static and voyage related data received by AIS. The software works with a variety of chart data, available from the internet (Google Physical, Google Roadmap, Google Satellite, OpenStreetMap, OpenStreetMap (Tiles@Home)).

The ultramodern traffic surveillance system of in-innovative navigation GmbH now is successfully in operation for some time in Switzerland, helping to recognize and prevent potentially dangerous situations for humans and environment in time, as well as to handle shipping traffic most efficiently.

about in-innovative navigation GmbH:
Following a modular conception, in-innovative navigation GmbH provides customized software solutions, which can be applied in all areas of navigation, telematics and traffic surveillance. in-innovative navigation GmbH is market-leading with software integrating all information from radar, GPS, AIS on an electronic ECDIS chart display. inDTS and RADARpilot720° are the powerful display applications from in-innovative navigation GmbH for traffic monitoring in use either in VTS centers and coastal surveillance systems or in integrated navigation systems.

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