

The use of PPU for safe docking of LNG vessels

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The HITT group of companies through its daughter company adNavigation A/S of Norway has been heavily involved in the developments of portable pilots systems over the last 8 years. In close cooperation with the pilot organization of Rotterdam adNavigation has been able to develop a first generation portable pilot unit. They have been operational for 6 year with great success.

adNavigation developed a second generation unit and the first 25 units are operational in the busy port areas of Rotterdam and Antwerp. The units are assisting the pilots with not only accurate position (centimeter level) though a network of RTK base stations but also by receiving additional information onboard the vessel. The information is transmitted to the pilots and displayed on the Qastor Navigation software produced by HITT daughter company QPS. This information can be for example the VTS radar overlay from the traffic center, not only showing the AIS but also the targets for smaller vessels in the area who do not have an AIS transponder installed. At the same time additional information can be transmitted as well such as tidal, wind and current information. This means that the Pilot has all relevant information at his fingertips to navigate and dock the vessel.

The key to safe navigation is the availability of a high definition Electronic Nautical Charts (ENC), QPS software can produce such charts and together with the integration of tidal information it will display a so called dynamic ENC.

To complete the data flow all the information can be stored on a server and transferred to for example an ESRI GIS application (Geographical Information System, Maritime Solution) the data can be stored, studied, analysed etc. This completes the cycle of service to enable the relevant operators to make the operation as safe as possible and create an efficient port operation.