The Scheldt Radar Network

Introduction

In the Scheldt area Flanders and The Netherlands co-operate in the nautical field in order to ensure a safe and efficient navigation to and from ports along the Scheldt.

Safe shipping traffic promotes external safety, namely that of the surrounding area: residents, environment and infrastructure. An efficient traffic flow contributes to the least uninterrupted passage to ports along the River Scheldt.

Common Nautical Management stands for use of the fairway by shipping traffic and for traffic management by means of instruments such as Vessel Traffic Services.

On November 29th 1978, the Radar Treaty was drawn up between the Netherlands and Belgium to build the Scheldt Radar Network. Under direction of a common project bureau the construction started in 1984. The network has been operational since 1991.

Purpose

The Scheldt Radar Network is meant to include hardware, software (technology) and infrastructure to enable Vessel Traffic Services (VTS) to carry out their duties.

VTS "Scheldemonden" is supported by the hardware and software of the Scheldt Radar Network. Their main duties via Vessel Traffic Services "Scheldemonden" are:

> Supporting the shipping traffic. This duty includes various sub-tasks such as assistance in navigation, supplying information regarding meteorological and hydrological circumstances, implementing the access policy, maintaining and guarding of passage plans, checking compliance with legislation and regulations, for example in the area of traffic behaviour and the transport of hazardous goods
>
> Informing the locks with regard to traffic volumes which is of great importance for an efficient dispatch of traffic.
>
> Support when dealing with calamities

The main ICT systems are:

> RW (Radar tracking system): this system provides a picture of shipping traffic on the Western Scheldt. In every traffic centre radar data is being received and processed to build up a tactical traffic image.
>
> IVS (Information system): this system supports shipping by recording future, current and historic ships voyages of seagoing vessels and inland barges in the Scheldt VTS Area.
>
> CBS (Central Broker System): via this system all parties involved (VTS-SM, port authorities, pilot organisations (NL/FL), RIS authorities (NL/FL) can interchange vessel voyages (seagoing + inland barges).
>
> Hymedis: a distribution system, which has been making hydro-meteo data available online to the end users by wireless communication. Users may access the data continuously via internet and mobile phone. Where GPRS coverage is available information can be requested.

VTS-Scheldt.net: the website was set up jointly by VTS authorities to promote the Common Nautical Management on the Scheldt River. Further aim is to quickly and efficiently inform target groups of the Scheldt Radar Network, e.g. via a AIS web application.

WESP: A timely planning of inbound and outbound traffic and using the positions and speeds of the vessels involved, make it possible to calculate the overtaking and meeting places at an early stage. WESP enables this. WESP is an electronic system for the planning of large vessels on the Scheldt river.

AIS: This system consists of 5 servers and 11 base stations. The AIS network is also integrated into the RW system: the aim of this integration is to present AIS data on the radar screens (tactical traffic image).

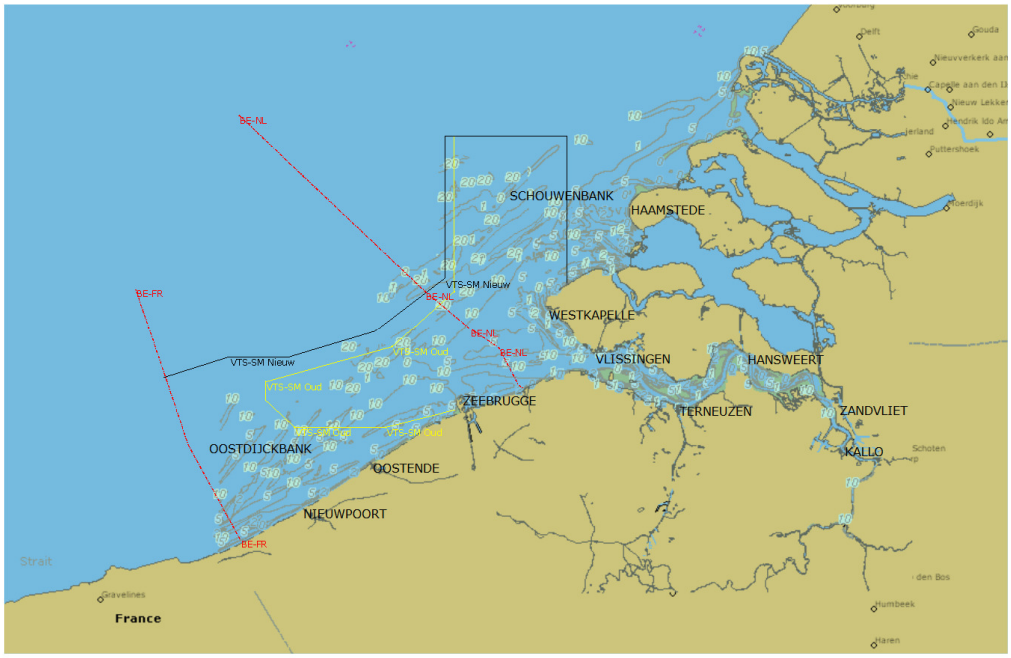
BI (Business Intelligence) system: BI is the process of acquiring and processing of information relating to strategy forming of organisations. A well-equipped BI function improves the availability of useful strategic information in order to make decisions for the management. IVS and AIS are used as source databases.

Operation

Authorized in the border areas of two countries and five ports, the Scheldt Radar Network is a unique instrument for Vessel Traffic Services. This is achieved because the equipment and the operational procedures, as well as the financial and technical management are completely integrated between Flanders and the Netherlands.

On average 140.000 ship movements (/ year) are captured, of which 50 % are inland barges.

The present Scheldt Radar Network consists of 5 manned traffic centres and 21 unmanned radar sensors. The manned traffic centres are located in Zeebrugge (FL), Vlissingen (NL), Terneuzen (NL), Hansweert (NL) and Zandvliet (FL):



Management and Exploitation Team

The operational, functional and technical management of the systems of the Scheldt Radar Network is carried out by the common Flemish-Dutch Management and Exploitation Team (BET).

The technical management of all radar, VHF and ICT systems of the Scheldt Radar Network entails:

Execution of maintenance and system and network management in order to maintain a high system availability of 99,9 %

To supply an optimal functionality and quality control of the Scheldt Radar Network which connects to the needs of the users, taking into account national and international agreed legislation and guidelines

Planning, co-ordinating and realisation of migration projects regarding the sub-systems in order to keep Scheldt Radar Network technology up-to-date

Adjusting and expanding the Scheldt Radar Network as a result of new policy initiatives and/or changed functional an operational demands

The Permanent Committee of Supervision on Scheldt Navigation

The Permanent Committee of Supervision on Scheldt Navigation (PC) is the highest body in the organisation of the Common Nautical Management. They are responsible for the smooth and safe completion of shipping traffic in the Scheldt region. The PC was established in execution of Art. 9 § 2 of the Treaty dated 19 April 1839 ruling the separation between Netherlands and Belgium. This article lays down that Pilotage and Buoyage for Scheldt navigation are subject to common supervision, executed by common commissioners. Execution of common supervision is regulated by the Scheldt Regulations of 11 January 1995. In the interim, the Scheldt Radar Network has also become subject to common supervision.

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