MARITIME TRAFFIC MANAGEMENT

YOUR TRUSTED PARTNER IN MARITIME SOLUTIONS
Maritime Traffic Management

Maritime transport is a primary link in the global logistics chain. 95% of all world trade is transported by ship, with limited alternatives. Not only are the world's seas and waterways a transport highway, they are also a natural resource for food, raw materials and energy. Gaining efficiency without compromising safety and the environment is vital to the world economy. Saab provides the quality solutions to do that, delivering the tools that authorities, ports, service providers, off-shore companies, shipping companies and coast guards need.

A PARTNER YOU CAN TRUST
Saab is a well-established company with 15,000 employees in over 130 locations around the world. Likewise, our customers are found on all continents. Our experience in the maritime domain spans over three decades, and our employees, many of whom have come from other parts of the maritime industry, understand what our customers need. We are used to working in different cultures, with customers at various levels of sophistication, providing solutions at virtually any scale.

MARKET DRIVEN INNOVATION
At Saab our motto is anticipating tomorrow, and to do that, we invest heavily in product development. A significant part of our sales is reinvested in research and development. We are a member of several standardisation organisations, such as IALA and CIRM. When Automatic Identification Systems (AIS) were first designed, Saab was at the forefront of their development. Thanks to our thinking edge, we have a unique ability to stay ahead of technological, operational and environmental developments.
Fairway to Freeway

For operations in a port to run like clockwork, a ship’s visit must be well planned and well executed, with all of the services and resources available when and where they have to be. Saab’s Fairway to Freeway delivers that value by providing seamlessly integrated solutions, enabling them to bring the full advantages of the available data.

Many parties are involved in port services, each with their own automation solutions. This makes it difficult to share information, leaving many opportunities for operational improvements unused. Saab’s solutions streamline operations and result in an immediate return on investment.

Scalable to match your needs

With Saab you can start small and then grow. We are your single point of contact and we take the end-to-end responsibility. Our experienced staff knows what questions to ask and how to translate the answers into configurations that seamlessly match the way you work.

Coastal Surveillance

Coastal surveillance covers a very broad range of responsibilities: law enforcement, safety and security. This calls for a flexible toolbox of solutions that can be configured to match any set of requirements. With extensive experience in topics such as surveillance, target tracking and C4I at national scales, Saab is well equipped to provide a suitable solution for your needs.

Organisations such as coast guards and navies are responsible for vast expanses of water and have the need to know what goes on, where their assets are and how to best deploy them. This requires real-time information, as well as intelligence from a variety of sources, that is presented in a clear way for effective decision making.

Saab provides an integrated platform to support coastal monitoring activities around the world in their daily operations. This includes sea and lower airspace surveillance, monitoring of vessel behaviour, management of incidents, and communications. The system can use mobile surveillance units and the sensors on board of own assets to maximize surveillance coverage.

Information exchange with neighbouring systems greatly extends the reach of the system, allowing suspect contacts to be picked up earlier.

In addition, the system provides tools to find trends in historic data, providing much needed information to adjust strategies and policies.
The maritime transport world can be seen as four separate zones, each centred around a port:

1. The port itself where most of the economic activity takes place, served by Port Management, Terminal Operations and Vessel Traffic Services systems.
2. The area 12 nautical miles out of the coast on one side of the port and inland waterways on the other side, where Vessel Traffic Services systems play an important role.
3. Areas covered by Coastal Surveillance Systems.
4. International waters.

Facilities in these zones support each other. Saab VTS systems and platform protection systems often contribute to coastal surveillance systems, just as port management and VTS systems are very much interconnected.

A port management system often embraces multiple ports. Direct data exchange with management systems at other ports helps to streamline vessel visits by providing the right information at the right time.
Saab’s flexible architecture allows separate systems to share the same infrastructure. National AIS networks deliver ship information to port authorities, coast guards and waterway authorities at the same time.

Radar stations can be shared among several users, with individual processing systems to fulfil different tracking needs if required.
VESSEL TRAFFIC SERVICES (VTS)

The V3000 VTS system provides VTS Operators with a complete real-time traffic overview for inland shipping, ports, coastal waters and protection of platforms at sea. It supports users to ensure safe, secure and efficient vessel traffic, and to manage environmental risks. The result is maximum continuity in operations under all weather and visibility conditions.

V3000 provides many features to make the life of officers easier, such as an ergonomic user interface, integrated ship to shore communications and seamless integration with port management systems. A true-to-life training simulator quickly gets users up to speed.

V3000 is fully IALA compliant and is in use in over 70 locations around the globe, including 5 of the world top 11 container ports.

AUTOMATIC IDENTIFICATION SYSTEMS (AIS)

Originally AIS was intended for giving ships better awareness of other vessels nearby. It was such a success that it now has much wider applications.

The position, speed and identity a ship broadcasts through its AIS transponder greatly improves the traffic image in the VTS centres on shore. It provides information for automatic labelling of ships with name and destination, enhances ship tracking and often covers areas outside of radar range.

Saab is a pioneer in AIS, one of the first to supply shipborne, airborne and shore-based solutions. For India, China and the Netherlands, we have provided AIS shore networks with national coverage, extending to hundreds of base stations.

We also provide secure AIS, allowing navy and law enforcement to see without being seen, and to privately communicate with authorised parties.

Saab is now working on the next generation AIS standard called VDES that will greatly enhance the capacity and range of AIS.
Ports can be very complex environments, with many different ship movements, resources, services and tariffs that need to be aligned for maximum efficiency. Saab’s KleinPort Port Management Information System (PMIS) brings significant returns on investment from day one.

A PMIS can automate many business and logistics processes in a port, and at the same time give users key information, alerts and analyses when they need them.

KleinPort is a modular, configurable software solution that combines the latest technology with industry best practices from ports around the world.

It provides an end-to-end solution from vessel and resource scheduling through activity tracking to billing, reliably ensuring the capture of key data and the consistent, timely generation of accurate invoicing.

In the same way KleinPilot provides a comprehensive solution for managing maritime pilotage.

MARINE GEOMATICS

Safe navigation accurate charts and precise positioning of ships. Over the span of more than three decades, Saab’s development of the science of depth measurement and geolocation, has resulted in a true Swiss army knife of marine geomatics tooling.

Our hydrographical software in combination with our navigation solutions provide you with the tools to safely continue operations in zero visibility with centimetre accuracy.

Quickly acquire, process, visualise and share measurements of the underwater landscape. Above water features can be acquired at the same time for a full 3D terrain map of your area of interest.
Saab’s long heritage in the maritime world is reflected in our references. We support 5 of the top 11 highest volume container ports in the world, have over 70 traffic centres in operation, and at any given moment our systems keep track of over 50,000 vessels. Customers rely on our port management systems to accurately generate billions of dollars in invoices every year. Over 7,000 users use our marine geomatics tools for their daily operations. With over 4,000 AIS bases stations deployed, we cover all of the coasts of India and the majority of the coast in China. Saab is the number one supplier of integrated maritime solutions in the world.

**Saab: The ease of one-stop shopping**
Outside our Maritime Traffic Management department, we have many other Saab solutions available, from communications to incident management, from underwater vehicles to patrol aircraft. And it does not stop there. Not only does Saab provide solutions, we are also a systems integrator, providing fixed date / fixed price systems. Our solutions almost never work in isolation. With Saab you have the certainty that if it can work together, it will.

For more information, visit us at [saab.com/maritime](http://saab.com/maritime), or e-mail us at [mtminfo@saabgroup.com](mailto:mtminfo@saabgroup.com)