

## An Innovative Public Sector in 2017 – New Solutions to Complex Challenges

### EPISA2017153 Sea Traffic Management – Connecting the business value of the maritime industry

*Submitted by the Swedish Maritime Administration*

Sea Traffic Management (STM) is a concept with open services based on standardised maritime information sharing. STM is co-funded by the EU since 2010 in three consecutive projects involving 14 EU partner countries and Norway. In the current STM Validation project, the involved EU-countries are Austria, Cyprus, Denmark, Finland, Germany, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden and the United Kingdom. STM has taken input and inspiration from the Air Traffic Management work conducted under the SESAR umbrella.

The maritime industry has traditionally been a conservative industry with many independent actors. Sharing information used to imply a competitive disadvantage. However, other transport industries have realised that if all actors start sharing data, all will be winners. STM services assist all actors across the maritime industry:

1. **Voyage Management** services will provide support for individual ships in both the planning process and during a voyage, including route planning, route exchange, and route optimisation services including avoiding environmentally sensitive areas.
2. **Flow Management** services will support both onshore organisations and ships in optimising overall traffic flow through areas of dense traffic and areas with particular navigational challenges.
3. **Port Collaborative Decision-Making** services will increase the efficiency of port calls for all stakeholders through improved information sharing, situational awareness, optimised processes, and collaborative decision-making during port calls.
4. **System Wide Information Management** will facilitate data sharing using a common information environment and structure. This ensures the interoperability of STM and other services.

STM services help ships take the most fuel-efficient routes. Studies have indicated a potential 12% fuel savings in one area. Every percentage point is worth EUR 1 billion per year across Europe. Half the value derives from reduced costs for ship-owners and the other half from societal savings due to reduced emissions. Further fuel savings come from port call synchronisation avoiding unnecessary anchoring: One example indicates 4.1% the last 230 nautical miles with a potential to triple and arriving just-in-time.

Other ports later in the ship's schedule and all hinterland actors would benefit from getting accurate news on delays and actual arrival times. Instead of having every company involved in the maritime transport chain building their own predictive software and processes, STM could provide common services available to all actors involved.

Information sharing will also reduce the number of collisions and groundings by more than 60%, leading to obvious savings for ship-owners and insurance companies. Moreover, a decrease in the number of collisions and groundings also means a reduction of the public cost for decontamination.