

SUPPORT OVERVIEW

Background

About 90% of the EU's external trade and 40% of internal trade is transported by sea. This corresponds to 3.5 billion tonnes of freight loaded and unloaded in EU ports each yearⁱ. While individual port security breaches may cause much damage in themselves, the disruption that such security incidents cause to the supply chains can also become very costly. Thus, port security remains of paramount importance for Europe both due to direct threats to life and property as well as the potential for crippling economic damage arising from the effects on the supply chains.

Ports represent significant challenges when implementing new security measures. They cover large geographical areas, they have very complex operations, they service large numbers of passengers and they process large volumes of goods. Maintaining high efficiency in the transportation of goods and passengers is vital to the port. As well as efficient surveillance and access control, this requires efficient organisational and technological interfaces, linking ports to border control authorities, the police, other intervention forces, and transport and logistics operators.

Ports also represent the intersection between supply chain security measures (e.g., the USA CTPAT and CSI initiatives and the WCO SAFE Frameworkⁱⁱ) and ship and port facility security measures (e.g., through the International Ship and Port Facility Security (ISPS) Code). A specific challenge for ports is to combine these types of measures into an integrated security approach.

Research has also shown that the complexity and cost of port operations for intra-European freight is one of the major obstacles for shifting more freight from roads onto sea. The introduction of new security measures can easily make this situation worse and it is important to start to look at how one can improve security while, hopefully, reducing operational complexity and cost in European ports.

Our Objectives

SUPPORT aims to support port security stakeholders to establish the necessary and sufficient security level to satisfy evolving international regulations and standards while efficiently supporting the complexity of the real port environment.

SUPPORT will provide general methods, technology and training services to be used by any European Port to upgrade their security capability, meaning:

1. Secure and efficient Port operations in the context of sustainable transport;
2. Uninterrupted flows of cargo and passengers;
3. The suppression of:
 - terror and attacks on high value units
 - illegal immigration
 - trafficking of drugs, weapons and illicit substances
 - large scale or continuous theft and economic black mail.

Systems approach

We see the need for stakeholders¹ with tasks and responsibilities in ports and the supply chain² to switch from ad hoc problem solving actions to adopting a systems approach. This is necessary for efficient implementation of 'first port of call' measures or the 'Authorised Economic Operator' certification. These measures require transparency from ports about the effects of their behaviour on all stakeholders in the logistic chain as port security should be considered in the broader context of secure EU and international supply chains operated by responsible and collaborating business networks.

Upgrading Port Security

Although major players, mainly operating containers, have state of the art solutions there is still a need to:

1. Upgrade risks and vulnerabilities assessments;
2. Improve access control;
3. Set standards for fencing, intrusion alarm and CCTV systems;
4. Secure cargo through scanning and screening technology;
5. Improve monitoring and surveillance performance;
6. Integration of security management information in the overall supply chain information flows and decision support systems;
7. Set up of guidelines for screening of personnel, improving background checks and profiling functions;
8. Improve security training, awareness programs and management training.

SUPPORT will provide practical guides for all the above improvement areas and will deliver:

- A fully documented Risk Model, highlighting the relationship between Threats, Loss Events, Consequences and Risk Control Options;
- An Port Security Framework of port security processes, from which information exchanges between stakeholders will be derived and will be standardised ;
- An advanced Financial Model that will allow ports to conduct Cost-Benefit Analyses against individual Risk Control options and allow investigating potential security and economic gains
- An ICT platform that will provide the necessary information backbone for all your stakeholders and central to improvements in security, information exchange and better interrelationships between stakeholders
- Pilots demonstrating upgraded port security.

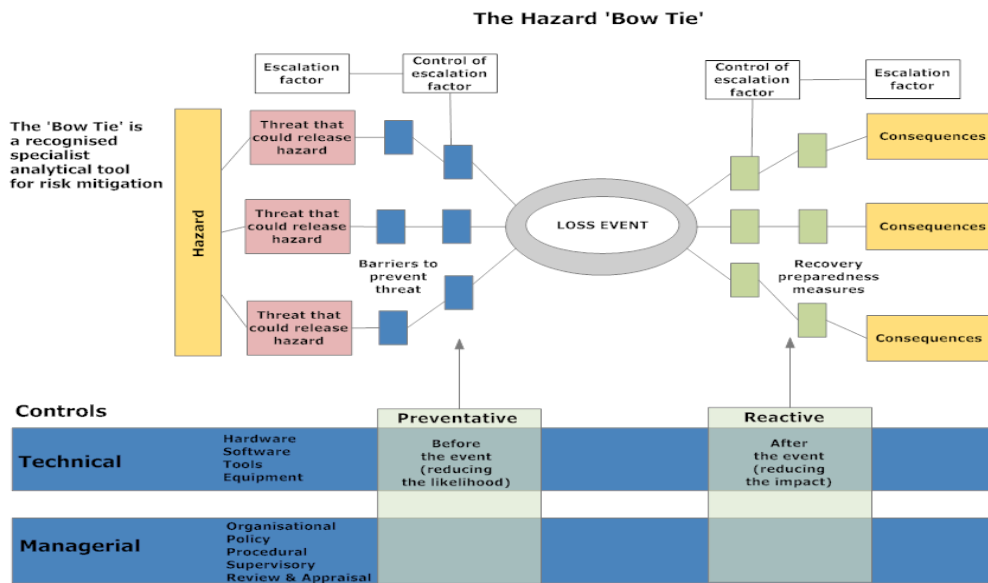
SUPPORT is creating a broad forum for port stakeholders and port security experts to come together and form new standards for port security.

¹ e.g. port authorities, port and transport operators and governmental organisations

² e.g. police, customs, regulatory and environmental authorities, health services

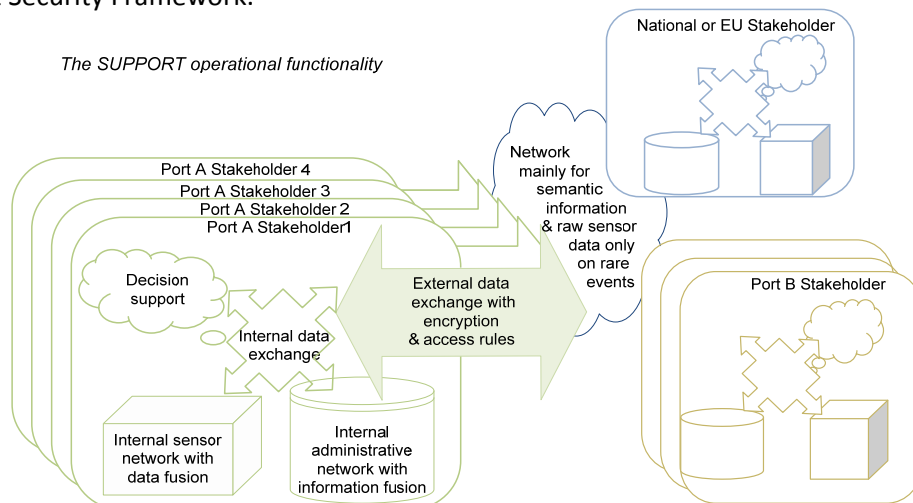
The SUPPORT Risk Model

- Identifies Loss Events, including:
 - Threats that cause Loss Events,
 - Consequences,
 - Preventive Controls
 - Reactive Controls
- Identifies Gaps where the Controls do not match the Threat Probabilities and Loss Event Consequences
- Interlinks common threats, follow-on Loss Events and common Controls
- Allows a quantification of Consequences
- Can help conduct Simulations on various scenarios, the effectiveness of control measures, consequence costs, etc.



The SUPPORT ICT Platform

It is essential that a security network is able to acquire data, handle it, exchange it and share it in the most efficient way amongst a great variety of stakeholders based at different geographic locations. The SUPPORT ICT platform will help the security stakeholders in different ports establish their own data exchange systems and communications with other ports or national and EU applications. The platform will essentially help different stakeholders establish interoperable applications consistent with the Port Security Framework.



Pilots demonstrating upgraded port security

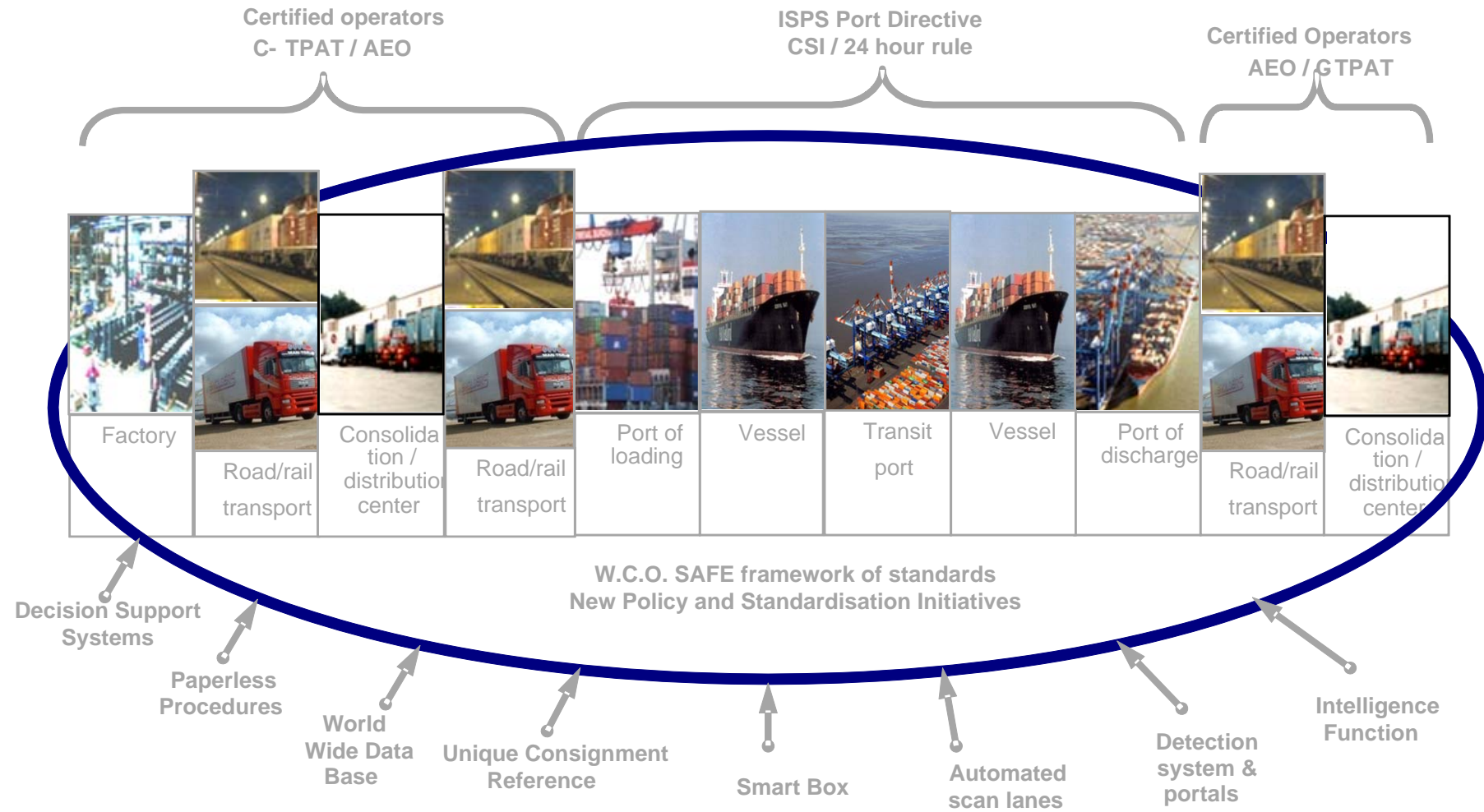
In order to demonstrate the usability and effectiveness of the project outputs, we will hold two pilots in the ports of Gothenburg and Piraeus which will demonstrate that the developed solutions can work effectively in a real port environment.

The pilots themselves will comprise a cluster of stakeholders each utilising its own version of the ICT platform. The pilots will demonstrate the ability for information exchange between platforms. Including the effectiveness of the ICT platform to communicate with disparate technologies and fuse information from stakeholders with data from various sensor sources. This will result in decision support for risk assessments. As the project will also produce a Risk Model and a set of standardised processes and procedures, the pilots will also prove that changes in processes and procedures can help increase port security for very little (if any) investment.

To achieve this, the project will define a set number of Key Performance Indicators (KPIs) that collectively will set the performance targets that port security experts will agree as necessary for the ICT solution and improved processes to be regarded as effective and successful. During the pilots, the project will collect various data in order to verify whether the KPIs are being met. This will include active and passive data collection of both qualitative and quantitative data. The ICT platform will collect systems-level data autonomously, whilst users of the ICT platform and operators in new operating processes will be interviewed to supplement quantitative data.

Port environment permitting, we will collect data both in a 'normal' use scenario where the port operates normally, and in an 'attack' scenario where one or more threats are being simulated attacking the port. This will ensure that the results of the SUPPORT project are validated by real users in a real environment.

Well protected ports have an advantage in Global Supply Chains



For more information on the SUPPORT project, downloadable material and news items, please visit the project website
www.support-project.eu

or contact

BMT Group
Goodrich house,
1 Waldegrave road,
Teddington Middlesex,
TW11 8LZ,
United Kingdom
Project Manager: Jenny Gyngell
email : supportproject@bmtproject.net



SUPPORT receives funding from the European Commission, Security Research under the Seventh Framework Programme for Research and Technological Development.

ⁱ Maritime transport policy, Improving the competitiveness, safety and security of European shipping, October 2006.

ⁱⁱ CTPAT Customs-Trade Partnership Against Terrorism, CSI – Container Security Initiative, World Customs Organisation SAFE Framework of Standards to secure and facilitate global trade