

## PROMERC Report Summary

Project reference: [607685](#)

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### Periodic Report Summary 1 - PROMERC (Protection Measures for Merchant Ships)

#### Project Context and Objectives:

Piracy has re-emerged as a global security threat. The Suez Canal and Gulf of Aden provide Europe's key trade route to the Middle East, India and the Far East. Unhindered passage for the 30,000 ships that use it annually is essential to the economic well-being and energy security of the continent. There are a number of options available to shipping companies to mitigate the risk of piracy and to deter pirates. Many advisable options are summarised in Best Management Practice. They include passive protection measures to discourage attacks, and defensive measures to counter the pirates in the event of an attack. There has been a rapid growth in the use of private contracted armed security personnel to provide ship-board protection and some flag states permit the use of lethal force in order to protect their ships. There is evidence that this militarization of the industry has been effective, however there remains deep unease regarding the broader industrial, political, ethical, economic, social, legal and environmental implications which are poorly understood.

Based on shipping industry concerns, it is clear that there are a bewildering number of options available to shipping companies to mitigate the risk of piracy and to deter pirates. However there is scant information regarding their operational effectiveness or the cost benefits of their use, particularly when employed in combination as part of a holistic approach addressing: the particular vulnerabilities of each vessel, non-lethal response measures and armed security guards, crew training and abilities, shipping business practices and pressures, pirate tactics and the impact of environmental factors (visibility, currents, waves and wind speed) on all. It is currently difficult for stakeholders to evaluate and compare the cost benefits, and operational effectiveness of different counter measures.

The PROMERC project will apply advanced geospatial analysis and intelligence techniques to provide the shipping industry with a layered approach to planning, routing and threat reduction that goes beyond current state of the art. PROMERC will organize and consolidate the many dimensions of risk reduction by delivering a knowledge base, manuals and tools to assess the available counter-measures, the current and future threat situations, to identify and quantify the risks and to aid decisions before and during voyages. The system will provide situation and ship specific counter-measures and best practice guidance prior to and during the voyage, as well as interactive route planning tools to develop the counter-measures and sail plan to an acceptable level of risk and cost.

To this end, the PROMERC consortium brings together end-users, commercial, political, academic, and military entities along with leading research companies and agencies. The consortium's broad commercial and military security experience will be supported by active stakeholder engagement throughout. This will ensure synergy with key players and ongoing activities, both military and non-military. We will draw on extensive background knowledge and data to ensure rapid development and completion of the project in 2 years. The deliverables will be reviewed by end-users and the prototype system will be used by end-users under realistic, operational conditions.

#### Project Results:

The Promerc project is running well and no major issues appeared in the first 12 months of the project. The activities on Current and Future non-military Counter measures (WP1) and PEESLE constraints (WP2) have been completed with good results in the first period. These results feeds into Evaluation options (WP3) for inclusion into a database and manual. An early prototype web portal to access the manual was fielded in early July 2014 and was updated to receive the completed databases, end 2014.

The approach to evaluating counter measures has been amended from a measure of 'operational effectiveness' to one of 'utility'. This adaptation followed the engagements with our stakeholders and is considered to be more reliable due to the scarcity of data for some counter measures.

Similarly, WP2 has adapted the measures of PEESLE weightings to create a flexible framework. This will enable changes to be made as legal and social factors change and will also provide end users with the ability to enter their own weights which reflect their company posture.

D1.1, 1.2, 1.3 and D2.1, D2.2 have been uploaded and submitted in the EC system. Although D2.2 was delayed in submission (the report on the PEESLE database) and was not on the critical path. The PEESLE database is required by WP3 and this has been delivered on time.

D3.1, D3.2 and D3.3 are submitted, and the Cost benefit studies have been finalized and the manual setup is completed, digital and hard copy.

Activities in WP4 have been started and first results are presented during the review meeting.

Overall, the activities in WP5 have been executed according plan, however the overall timing was slightly delayed

without out knock on effects, D5.1 has been submitted.

Current status on technical developments are plotted in figure below:

Cost Benefit & Voyage On Board  
CM selection Optimisation Decision Aid  
(Completed)

VDR Started

Weather/  
Currents Started Started

Intelligent Started Started  
reports

PEESLE Completed Completed Completed

Counter-  
Measures Completed Completed Completed

Potential Impact:

The main goal of PROMERC is to reduce the vulnerability of EU merchant fleets and maritime supply lines to criminal abduction and extortion. The challenge will be to create the optimal mix of security measures, based on an all risk approach. This will be delivered through the provision of following research outputs:

1. A Counter Piracy Measures Manual (D 3.3) to aid in the selection and use of appropriate active and passive counter piracy measures in a layered holistic defence. The manual will also be available as a user Counter Measures database and Planning Tool (configurable by End-Users) which will be produced as D 3.2. The end-users will be able to filter Counter Measure to achieve the desired level of protection, cost and compliance.
2. A prototype Onboard Counter Measures Decision Aid (D 4.1 – a software application) will provide sea farers with real time threat assessment, evaluation of possible courses of action and a recommended course of action.
3. A Prototype Pre-voyage planning and routing tool (D4.2 – a software application) to aid shore based authorities, which will balance routeing to mitigate risk against incurring additional fuel costs due to re-routeing and increased speed.
4. Recommendations on the further development of Counter Piracy Measures (D. 5.2 - including the Counter Piracy Measures Manual, Voyage Planning Tool, Counter Measure Tactical Decision Aid )

The PROMERC proposal addresses the main objectives – improved security for the European citizens by protecting the merchant fleet and enhancing competitiveness for industry. In more detail the proposed research addresses the adverse impact of piracy on:

- The liberty, health and life
- The competitiveness of the shipping industry
- The global trade
- The international community

Impact of on liberty, health and life – addressing the human costs of piracy

Piracy impacts multiple stakeholders, none more so than the seafarers attacked, held hostage, or killed. In 2011, at least 3,863 seafarers were assaulted by armed pirates seeking to hijack their vessel and kidnap them . In 2011 alone, 1,118 seafarers were held hostage by Somali pirates, of which 24 were killed . Seafarers face increased stress and risk associated with transiting through pirated waters, with extreme psychological pressures for those unfortunate victims held hostage on hijacked vessels. They are subjected to assaults with automatic gunfire and RPGs, beatings, and extended confinement as hostages. In some cases, hostages are even used as human shields to protect pirates from navy vessels or are forced to crew “motherships” that are used to lure and attack other merchant vessels

Impact on the competitiveness of the shipping industry – addressing the economic cost of piracy

European shipping industry is a global leader controlling 40% of the global merchant fleet and is active in all kinds of maritime services within Europe, between Europe and third countries and in so called cross trades between non EU continents . PROMERC proposes to strengthen the competitiveness of this significant European shipping trade by minimizing the most important direct cost piracy inflicts on the shipping industry:

- Minimising the number of hijackings, payments of ransoms and associate costs
- Minimising additional fuel and time costs
- Minimising insurance costs

List of Websites:

[www.promerc.eu](http://www.promerc.eu)

## Related information

## Contact

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## Subjects

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### Safety

Information source: SESAM

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