

Maritime domain



Europe's maritime interests are fundamentally linked to the well being, prosperity and security of its citizens. This is why the first EU Maritime Security Strategy and its Action Plan were adopted on 24 June and 16 December 2014 as a response to modern risks and threats to global maritime security. They were recently confirmed in the Council Conclusions on Global Maritime Security of 19 June 2017.

The Strategy and Action Plan are anchored in a cross-sectoral approach to global maritime security, bringing together all the relevant maritime sectors (maritime safety, marine environment protection, fisheries control, customs, border control, law enforcement, defence, research and development and others) and all relevant EU policies, strategies and instruments into a single strategic approach.

The preservation of Sea Lines of Communication is a vital component for Europe's security, safety and economic well-being. Maritime awareness is a strategic keystone of this. The maritime dimension has been included in the Agency's Capability Development Plan as one of its priority actions. Additionally, the EDA, among other actors, has been tasked by the European Council to contribute to the implementation of the EU Maritime Security Strategy and its Action Plan in important domains such as maritime surveillance, capability development, training & education as well as research & technology.

MARITIME SURVEILLANCE (MARSUR Networking)

Following a tasking by the EU Defence Ministers in late 2005, EDA launched the Maritime Surveillance project (MARSUR) in September 2006, to create a network using existing naval and maritime information exchange systems.

The project was launched to avoid duplication of efforts and to ensure the best use of available technologies, data and information; to enhance cooperation in a simple, efficient and low-cost solution for civil-military cooperation; and to support Maritime Safety and Maritime Security. Today MARSUR Networking can be seen as an excellent contribution to one of the most important aims of the EUMSS which is to "promote common enhanced maritime situational awareness and better sharing of information, operational concepts, modi operandi and experience, taking into account not only the need to know but also the need to share, thus anticipating threats, following a comprehensive approach."

After extensive work by the 15 initial participating Member States (Belgium, Cyprus, Germany, Spain, Finland, Greece, France, Ireland, Italy, Lithuania, The Netherlands, Poland, Portugal, Sweden and UK), the project reached a decisive point, as it entered a demonstration-phase for a basic MARSUR Networking connecting national systems from Italy, Finland, France, Spain, Sweden and United Kingdom in June 2011. In October 2012, three other Member states joined the MARSUR Networking.

A further programme was launched in October 2012 to improve the functionalities, the level of confidentiality of

the MARSUR CAPABILITY, and to accommodate potential new requirements proposed by the Member States. The MARSUR D2 Release from the MARSUR DEVELOPMENT Project provided the technical elements necessary to use the MARSUR CAPABILITY in a fully operational context and was completed in October 2014. Tools to implement a secure network for the exchange of classified information in support of CSDP operations were developed under this programme. The resulting capability is being used on daily basis within the MARSUR Networking.

MARSUR Networking is built by EU navies and is enhancing the exchange of data and information for the conduct of maritime CSDP-operations. In line with the EU Commission Integrated Maritime Policy (October 2007), the MARSUR Networking is envisaged to provide the Defence Contribution in the Common Information Sharing Environment (CISE), a project run by the EU Commission.

A new Project Arrangement entered into force on 06 December 2016 to ensure the maintenance and the enhancement of the MARSUR Networking and to provide a basis for the extension to those EU Member States that have a vested interest in the maritime domain but are not yet a member of the MARSUR Networking community.

The interface, the MARSUR Information Exchange System (MEXS 2.0), was developed by the military community with the aim of improving decision making for and during CSDP military operations. However, the approach used by the MARSUR-Networking is not limited to military systems and networks, allowing the MARSUR Networking cooperation with civilian systems.

Unmanned Maritime Systems (UMS)

The defence research and technology programme on European Unmanned Maritime Systems for Mine Counter Measures and other Naval Applications (UMS) aims at delivering the next generation of technical solutions that will ensure that European Member States possess the capabilities to operate at sea. With the necessity to develop complex technical solutions, an emphasis has been placed upon cooperation - cooperative efforts that are mutually beneficial for Member States in terms of delivering solutions as well as maximising the cost benefit ratio of the resource outlay.

The UMS programme consists of 15 coordinated projects which are administered under one programme arrangement. Launched in September 2009, the programme has ten contributing Member States plus Norway and a combined monetary value of €56 million. With the successful completion of projects the programme has proven to be

a vehicle for the effective delivery of technical solutions. Indeed, this programme structure, management and implementation has served as a model for similar Joint Investment Programmes (JIP), most notably the JIP on Remotely Piloted Systems under the European Framework Cooperation with the focus on Air Traffic Insertion (EFC JIP-RPAS).

The individual projects are characterised by varied participant geometry, and are undertaken by industry, national research centres and universities. The principle areas of focus centre on Mine Hunting and Minesweeping. Additionally the programme also addresses the non-technical aspects of autonomous systems such as safety and regulation, and standardisation and integration which are the upcoming challenges for any joint operations.

Maritime Mine Counter Measures – New Generation Project (MMCM-NG)

The Maritime Mine Counter Measures – New Generation (MMCM-NG) project aims at enhancing Member States' mine counter measures capabilities, developing a range of solutions technically feasible and financially affordable for a perspective from today out to 2030 and beyond. The MMCM capability must ensure safe transit for naval or commercial ships in both high seas and confined possibly shallow areas.

Under the lead of Germany, Belgium, Estonia, the Netherlands, Sweden as well as Norway have agreed on 8 October 2014 to launch a new research project regarding future Maritime Mine Counter Measures capabilities. Dubbed MMCM-NG (New Generation), the project analyses the shortfalls of the current capability against agreed scenarios and derive the capabilities required by the participating nations.

The solutions must be technically feasible and financially affordable. The Common Staff Targets (CST) developed will form the baseline for an Umbrella Common Staff Requirement (UCSR) and below these, single CSR for the various parts of the capability will, with the support of studies, be developed into business cases. For the planned follow on procurement, nations can select from those business cases in accordance with their national level of ambition. The expected outcomes of the different studies are practical business cases (tactical vignettes) which will fit with national requirements. The end of the project is expected by the end of 2018.

The future MMCM capability is envisioned as a system of modular systems. Possible co-operation has to be inspired by the concept of interoperability as well as inter-

changeability of modules and systems. In order to enable co-operation, standards, protocols and interfaces will be described and agreed upon commonly.

Project Team Naval Training

At the Steering Board in November 2011 eleven Pooling and Sharing (P&S) opportunities were identified for development, of which Naval Training was one. Consequently, EDA launched the Project Team Naval Training to advance training and education activities in the maritime domain at the end of 2013. Supported by ten participating Member States, two promising strands of work were identified in the course of the Naval Training Support Study.

First, the conceptual training of operations room personnel in the implementation of cross sectoral and multi-national maritime surveillance systems. The concurrent efforts in the Maritime Surveillance Network, building on a project launched by EDA in 2006, focus on the technical interoperability of national systems. All efforts made in the context of maritime security, including the implementation of the EU Maritime Security Study Action Plan have revealed, that technical interoperability needs to be strongly supported by a common understanding and a common mindset of the personnel actually facilitating the exchange of data and translating it into actionable information. Member States discovered by help of the study that common training standards in this regard would be invaluable in the implementation of the EU MSS Action Plan with regard to Maritime Surveillance Networks. Consequently, the PT Naval Training agreed on requesting EDA to create a Train the Trainers Course aiming to support Maritime Surveillance Networks such as MARSUR by delivering harmonised training standards.

The second most promising strand of work is diving. Diving naturally fits into the overall domain of Naval Training and is seen as an area of potential collaboration primarily due to its niche role within naval forces. In view of the

current EU NAVFOR MED Mission SOPHIA and other commitments following the EUMSS Action Plan there appears to be an increased demand for "lower end" military capabilities such as Rescue Divers/Swimmers and Ship Divers. Therefore, the PT Naval Training decided to focus on meeting this demand. Based on agreed definitions interoperability of member states personnel will be enhanced by the mutual recognition and certification of personnel and equipment.

European Maritime Capability for the Arctic

The Arctic region is becoming a region of geopolitical/strategic importance for Europe with a number of focus areas: trade routes, maritime environmental protection, critical maritime infrastructure, seabed exploitation, maritime surveillance, search and rescue, and disaster response.

Coming from the need to examine challenges and regarding the catalysing impact of the retreat of Arctic summer ice coverage, the EDA commissioned a dedicated study to identify shortfalls and potential scenarios for a European cooperation in the Arctic region.

Following a decision by the Steering Board in 2014, the Agency with Finland as lead nation established a Project Team on European Maritime Cooperation in the Arctic. Three Member States (Belgium, Germany, Finland) and Norway cooperate in the strategic initiative with a focus on naval capability building. The project team has already improved an Initial Strategic Context Case, followed Common Staff Target, Common staff requirements illustrated by business cases for further technical research implementation in various domains (communication, training, supply, SAR capability, critical infrastructures, etc.).