European Unmanned Maritime Systems (UMS)

The "European Unmanned Maritime Systems for Mine-Counter-Measures and other naval applications (UMS)" is the third EDA Category A programme. It represents the first major and concrete success of an ambitious technology programme directly connected to Maritime Mine Counter Measures (MMCM), one of the twelve EDA's Capability Development Plan priority actions decided by the Agency's participating Member States in July 2008. Through Research & Technology (R&T), demonstrators and de-risking studies, the UMS programme will prepare the next generation of technologies of the Category B programme MMCM, currently in the preparation phase for delivering an initial capacity by 2018.

The UMS initiative is a direct output of the European Defence Research and Technology (EDRT) Strategy together with the newly created system-CapTech on "Naval Systems and their environment", as it addresses one of the twenty-two R&T priorities agreed by the representatives of participating Member States. In addition it attempts to improve the current collaboration means by enabling coordination, reducing administrative burden and decreasing the idea-to-contract period associated to R&T project generation.

Ten EDA Member States (Belgium, Finland, France, Germany, Italy, Netherlands, Poland, Portugal, Spain and Sweden) and Norway are contributing to the four-year 53 Million Euro programme which aims at improving naval capacities by improving the capabilities of Unmanned Maritime Systems through a system-of-systems approach while taking into account the notions of interoperability, modularity, inter-changeability of modules and standardisation. As mentioned above, UMS projects focus mainly on MCM (influence minesweeping; drifting mines detection; and buried mines detection and neutralisation) but also address other naval applications including harbour protection and anti-submarine warfare. In addition, the programme includes projects with transversal impact, studying issues such as: underwater communications; improved autonomy; network enabled coordination; interfaces and standards; and even safety and regulations for unmanned maritime vehicles. A systems-integration group has also been established to coordinate the programme and examine future UMS R&T topics such as UMS launch-and-recovery, torpedo defence and energy supply for unmanned underwater vehicles.

The programme will allow the involvement of a wide range of entities including navies, national laboratories, universities and industries. It will also increase opportunities for contributing Members to co-operate with each other and to exchange information and know-how. A considerable network of more than a hundred experts has already been established and is envisaged as the main EDA forum for addressing R&T for Unmanned Maritime Systems in the future.