

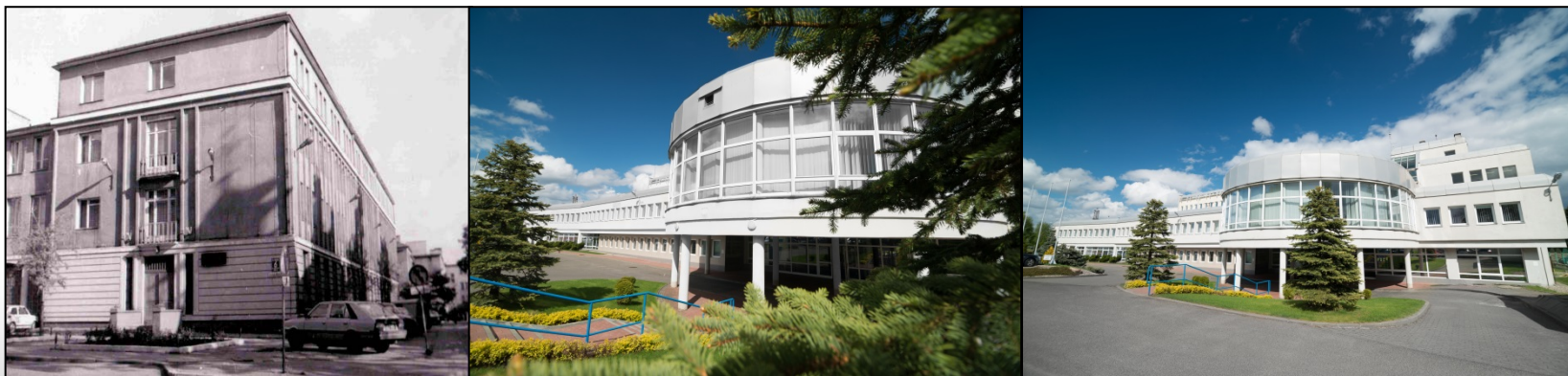
## ***RESEARCH & DEVELOPMENT MARITIME TECHNOLOGY CENTRE***

***THE RESEARCH AND DEVELOPMENT MARITIME TECHNOLOGY CENTER WAS ESTABLISHED IN 1982.***

***CTM HAVE EXPERTISE ALONG WITH TECHNICAL AND RESEARCH FACILITIES REQUIRED FOR TASKS IN THE FIELD OF CIVILIAN AND MILITARY TECHNOLOGY IN FULL PRODUCTION CYCLE (RESEARCH, DEVELOPMENT, IMPLEMENTATION AND SHORT-RUN PRODUCTION) .***

***THE CENTRE IS SINCE 2014 PART OF THE POLISH ARMAMENTS GROUP (PGZ).***

***CURRENTLY: 290+ EMPLOYEES, 70% WITH MASTER DEGREE, 10% WITH PHD, 1/3 AGED BELOW 35 YEARS***





(2) **PROTECTING OF HARBOURS AND PORTS**

(4) **COUNTERING IMPROVISED EXPLOSIVE DEVICES (IEDS)**

(10) **PROTECTION OF CRITICAL INFRASTRUCTURE**

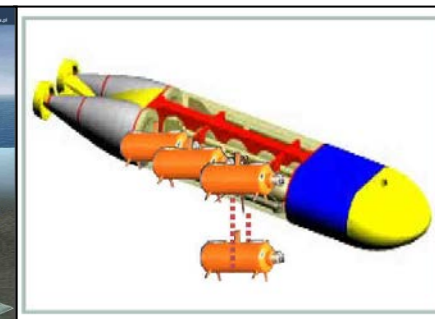
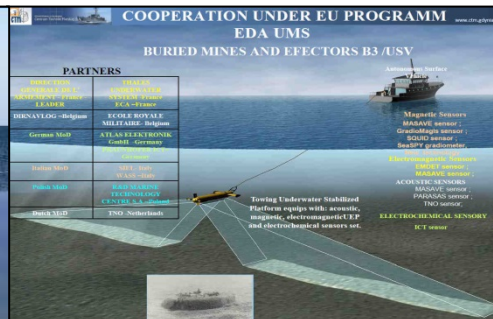
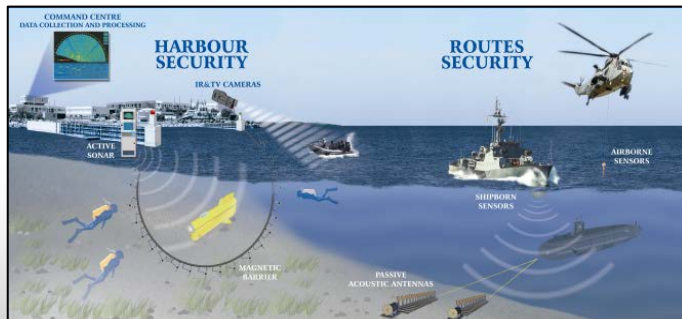


## „UNMANNED MARITIME SYSTEMS – UMS” – 2011-2015

### **B3: BURRIED MINES AND EFFECTORS**

## **B9: LIGHT WEIGH MODULAR MINE SWEEPING**

## **A10: STANDARDS FOR UMS; PROJECT SYSTEM INTEGRATION**





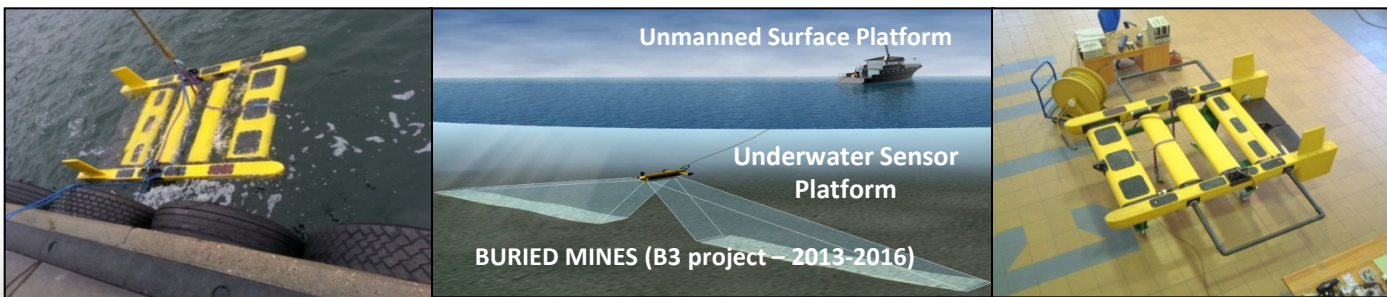
## MAIN PROGRAMMES

### ***PROJECTS IN THE AREAS OF UNDERWATER WEAPON SYSTEMS IMPLEMENTED UNDER THE UNMANNED MARITIME SYSTEMS (UMS) PROGRAMME OF THE EUROPEAN DEFENCE AGENCY (EDA)***

#### **MODULAR LIGHT MINESWEEP (MLM)**



#### **PROJECT (BURMIN) DETECTION, SEARCHING AND NEUTRALIZATION OF BURIED SEA MINES IN SEDIMENTS**



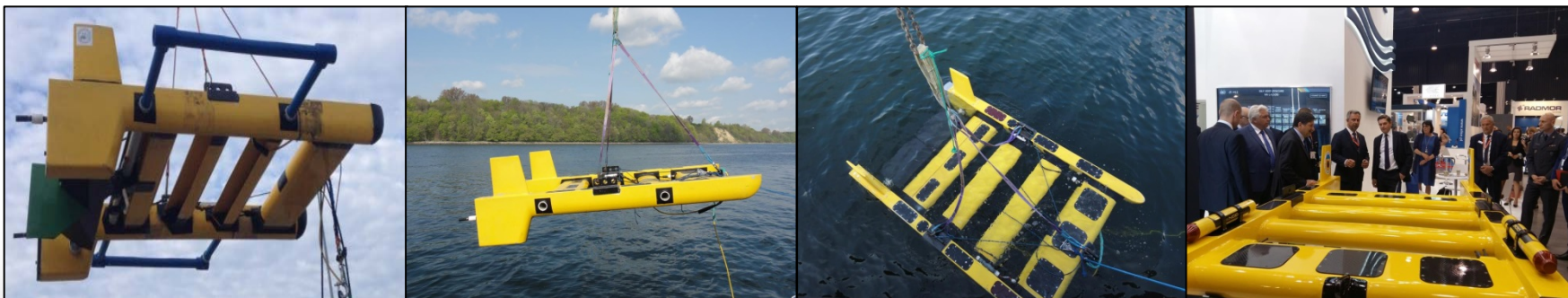


## MAIN PROGRAMMES

### ***THE STABILIZED UNDERWATER SENSOR PLATFORM FOR MCM OPERATIONS***

***THE UNDERWATER SENSOR PLATFORM WAS DEVELOPED BY OBR CTM WITHIN THE BURMIN PROJECT, CARRIED OUT BY A CONSORTIUM OF: TUS - LEADER (FR), TNO (NL), RMA (BE), WTD 71 (GE), FRAUNHOFER ICT (GE), IPHT JENA (GE), ATLAS ELEKTRONIK (GE) AND CTM (PL), IN EDA'S UMS PROGRAMME.***

***THE PLATFORM WITH INSTALLED HYDROACOUSTIC AND MAGNETIC NEW GENERATION SENSORS, TOWED BY A MOTORBOAT OR SMALL UNMANNED SURFACE VEHICLE, ALLOWS DETECTION AND CLASSIFICATION OF MINES, INCLUDING BURIED IN BOTTOM SEDIMENTS. THE PLATFORM IS STABILIZED AT A SET ALTITUDE OVER SEA BOTTOM WITH THE USE OF AUTOPILOT THAT SIMULTANEOUSLY MINIMIZES ITS PITCH AND ROLL.***





## MAIN PROGRAMMES „MODERN MINEHUNTER - KORMORAN II” PROGRAM

**ON THE 23rd OF SEPTEMBER 2013 AN AGREEMENT FOR THE IMPLEMENTATION OF THE DEVELOPMENT WORK „MODERN MINEHUNTER - KORMORAN II” WAS SIGNED. ON BEHALF OF THE CONSORTIUM, THE AGREEMENT WAS SIGNED BY THE CONSORTIUM LEADER-REMONTOWA SHIPBUILDING SA IN GDAŃSK, WHICH, TOGETHER WITH THE NAVAL SHIPYARD SA IS RESPONSIBLE FOR THE PLATFORM DELIVERY.**

**CTM ACTS WITHIN THE CONSORTIUM AS AN INTEGRATOR AND SUPPLIER OF THE INTEGRATED MISSION SYSTEM. THE CENTRE IS ALSO THE SUPPLIER OF THE PASSIVE DEFENCE SYSTEM AND HIGH CLASS SELECTED SENSORS AND EFFECTORS (TRIPLE FREQUENCY SHL-101/TM MCM SONAR, MCM SHL-300 SONAR, REMOTELY WIRELESS FIRED CHARGES „TOCZEK”).**

