

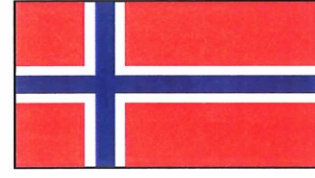
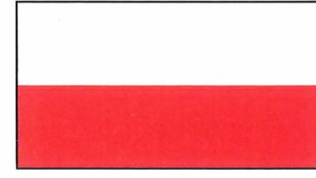
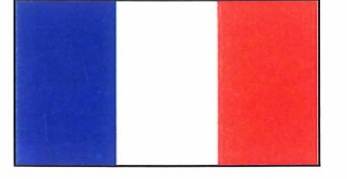
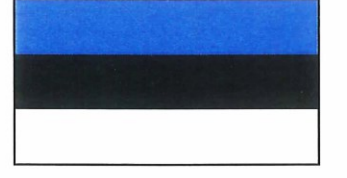
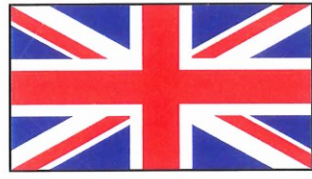
NORTH ATLANTIC TREATY ORGANIZATION
 ORGANISATION DU TRAITÉ DE L'ATLANTIQUE NORD



SCIENCE AND TECHNOLOGY ORGANIZATION

Scientific Achievement Award 2014

CMRE Glider Team



Dr Marco Cococcioni

Through practical experimentation and theoretical development, a CMRE team, led by Dr John Osler, demonstrated the feasibility of underwater gliders for the characterisation of the environment for naval operations. In six major scientific experiments at sea, including three major NATO exercises, gliders were used for oceanographic characterization tied to sonar performance, data assimilation into a numerical ocean model, adaptive mission planning, and incorporation of gliders into a heterogeneous data collection network comprising gliders, ship, buoys, and remote sensing. Scientists and the military staffs from six nations and two NATO commands joined 37 CMRE staff in this endeavour, contributing personnel, equipment, and forecasts from numerical models. The combination of these national contributions with CMRE's capabilities, enabled progress more rapid and cost-effective than any individual nation could have achieved, or would have ventured to undertake. Several engineering and scientific challenges were met, as has been documented in 31 CMRE reports and 25 peer-reviewed journal publications. The system developed by CMRE will enable underwater monitoring and information dominance in denied areas to counter anti-access and area denial operations. For their exceptional work, with a result of significant operational relevance, this 2014 Science and Technology Achievement Award is made to the CMRE Environmental Knowledge and Operational Effectiveness Programme.

Albert HUSNIAUX (Major General BELAF)
 Chairman, Science and Technology Board
 NATO Chief Scientist