

Foreword

The Royal Navy has an unequalled history of technological military innovation. From the age of sail, through steam, to nuclear and beyond, we have led the way. As the inventors of the Battleship, Aircraft Carrier, Steam Catapult, Sonar, Depth Charge, Torpedo and much more, the Royal Navy is determined to continue push the boundaries of the possible. Perhaps more than ever before, technology now enables it and the strategic context demands it.

Recently, the Royal Navy's UNMANNED WARRIOR, INFORMATION WARRIOR and COMMANDO WARRIOR series of exercises have taken us on again. And with the launch of the Secretary of State's Defence Transformation Fund we are determined to go even more robustly after faster, cheaper and better.

Our approach to delivering the RN's Transformation Fund programmes is to Learn-by-Doing, Fast-Fail, Show-not-Tell and to be led as much by our warfighters as our hierarchy. The central pillar in our embrace of modern entrepreneurial behaviours is our belief in the power of the multi-disciplinary 'rainbow team' - the Naval Service collaborating in one room, as a constant, with pan-MOD and international partners, traditional and non-traditional Defence Primes and SMEs and with academia. With the litmus test of our efforts being that they result in rapid, marked operational enhancement to the frontline.

These are exciting times and we look forward to working with you all.



DEFENCE TRANSFORMATION FUND: ROYAL NAVY



NavyX

NavyX is the Royal Navy's new Autonomy and Lethality Accelerator. NavyX will deliver rapid, continual transformational change in Mass and Lethality across all Maritime Environments - over water, on water, under water and across the littoral.

By empowering a standing, joint military, civilian and industry rainbow team and locating it in a cutting-edge tech integration facility, with doorstep access to land, air and sea ranges, NavyX will exponentially accelerate our speed of purchase, capacity to connect best-in-class autonomous technologies, our ability to prove them in the real world at a speed hitherto unheard of and, when ready, scale these game-changing techs into the hands of our warfighters at pace. One of its first outputs will be the rapid enhancement of a Batch 2 Offshore Patrol Vessel's Autonomy and Lethality.

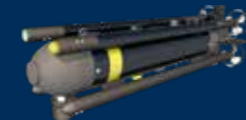
This radical new approach to capability procurement will cut through waste, cohere multiple autonomy efforts, increase industrial and academic interactions, enhance UK Prosperity and set the gold standard in tech-led delivery of autonomous systems.



Mine Countermeasures in a Box (MCMiAB)

MCMiAB will significantly accelerate the delivery of Mine Countermeasures Maritime Autonomous Systems to the operational frontline. The system will markedly increase the tempo of mine hunting operations using autonomous systems capable of working collaboratively to conduct concurrent search, classify and disposal of mines in complex waters with a high degree of accuracy.

Real time data transfer will enable Machine Learning analysis to be undertaken in parallel with the operation and offer the very real prospect of revolutionising the way Mine Countermeasures operations are undertaken with significant reductions in the time taken to complete missions. MCMiAB will deliver world-leading autonomous minehunting to the frontline at rapid pace.



Littoral Strike Ships

The Royal Navy are developing two new Littoral Strike Ships; innovative multi-role high-endurance vessels optimised for the embarkation and projection of specialised Commando Forces, allowing persistent global presence in areas of strategic national interest. They will be equipped with state-of-the-art command and control systems, medical facilities, helicopters, fast boats, autonomous and automated systems.

The ongoing rapid Concept and Development Phase will look to design these ships to offer cross-Government utility and to provide intelligence fusion afloat: vessels that have the flexibility to be able to accept different 'mission-fits', as well as sufficient resilience to operate in a range of environments. LSS represents a key programme in the transformation of our Littoral Strike capability, as we modernise our Commando Forces to provide strategic advantage now and in to the future.

