



**ROYAL
NAVY**

DSEI
DAY ZERO



MARITIME CAPABILITY CONFERENCE

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Exponential Change and the Royal Navy



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The Future RN – Major Programmes

- The RN is growing
- £6Bn/yr on equipment between Navy & DNO
- Conventional platforms are not enough
- The Equipment Programme must be considered
- We need to increase Mass, Lethality and our agility
- ... and exploit new technologies & processes





An Approach to the Future Navy

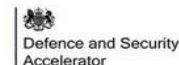
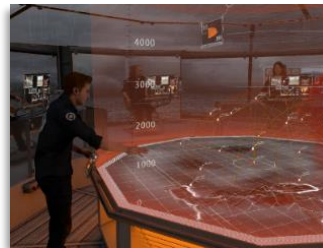
- Man an **unmanned Navy**
- Exploit **remote and autonomous modular off board systems**
- Exploit **COTS & MOTS solutions** in tandem with **alternative acquisition strategies**
- Integrate **Cyber and Space Domains** into the Task Group
- Develop capability to operate in satellite and EMS denied environments.
- Disaggregate & disperse the 'sensor-decider-shooter' in the Task Group kill chain
- Focus on meeting **ambiguous and asymmetric threats** to close gap





Delivering Things Differently

- Transformation culture
- Innovation
- Doing things differently
- Adapted acquisition strategies
- Targetted funding



Innovation Vision



RN Innovation Hub – Discovery, Assessment, Rapid Exploitation

- To energise and accelerate innovation throughout the Naval Service in order to support operational capability



Navy X

- NavyX - RN's Autonomy & Lethality Accelerator; rapid, continual transformational change in Mass and Lethality across all Maritime Environments
- Rainbow team with diverse experience to exponentially accelerate our speed of learning, our capacity to procure and integrate these best-in-class technologies, our ability to prove them in the real world at pace, and when ready, enable delivery to war fighters.





NavyX Mission



- Exploit autonomous systems, develop experience and processes to maximise comparative technological advantage and lethality and deliver to the war fighter
- Identify opportunities and gaps, through engagement with MoD, academia, SMEs, the defence industry and the S&T community
- Enable experimental and technical integration into existing systems to initiate the early adoption of interoperable autonomous systems
- Work with the innovation ecosystem to identify opportunities to accelerate and simplify existing acquisition processes





NavyX CONOPS



NavyX, working closely with DE&S, will set the standard in its capacity to **procure** both COTS and MOTS hardware

i. BUY IT



NavyX will **integrate**, drawing together COTS, MOTS and bespoke hardware. Collaborating and sharing knowledge across all stakeholders

ii. CONNECT IT



NavyX will conduct rapid, and **iterative** Test & Experimentation as new equipment is added to the trusted inventory

iii. PROVE IT

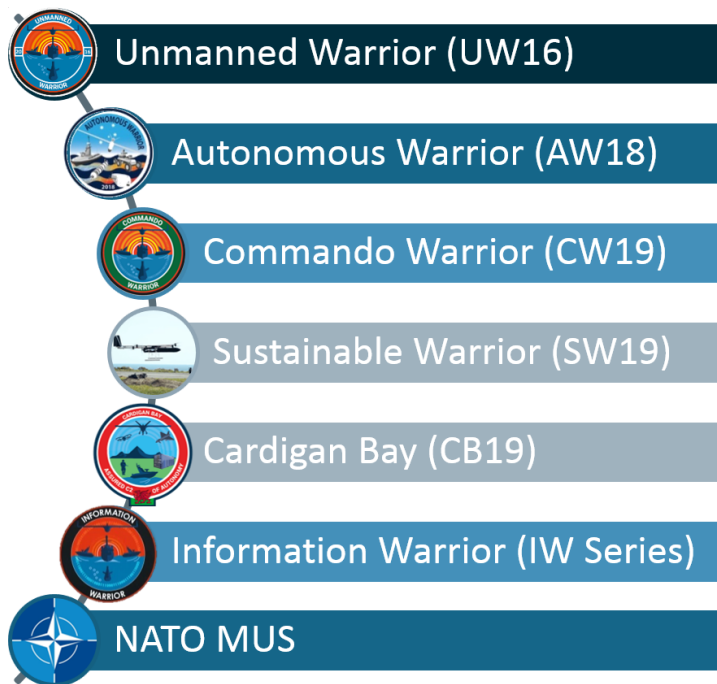


NavyX will work closely with the Warfighter to constantly improve, **developing** CONEMP, CONUSE and KURs as well as DLOD interaction

iv. SCALE IT



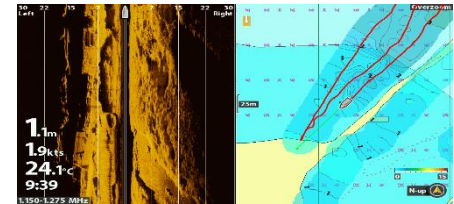
Operational Experimentation



19/20 Programme



- DASA Call for MUS Innovation
- Live demonstration at DSEI
- NavyX Trials Ship
- Operational Exercises (REPMUS, AAF 2.0. etc.)
- Autonomous Seaboat
- Submarine Launched UAV
- Amphibious Mini UAV
- Tactical Precision Strike
- XL UUV
- Tethered Sensors
- Innovation Programme – 45 Projects across a broad spectrum



Engage



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