



## Submarine External Communication System (ECS) 'Project Aurora'

**BAE Systems and the MOD have a common vision for the ASTUTE Boat 4 External Communications System (ECS). They seek a communication system which exhibits qualities of affordability and sustainability without compromising either availability or capability - enabling a common fit in the Astute Class and current and future UK submarine classes.**

The ECS solution that SEA is designing for BAE Systems offers all of these characteristics by building from the SEA Communications Coherency for Submarines (CCSM) system that is already fitted to TRAFALGAR Class submarines.

SEA's technical solution is underpinned by a depth of experience in managing and security accrediting submarine systems - derived from the delivery of numerous communications, combat system and sonar related projects for the Royal Navy.

The SEA ECS architecture abstracts the hardware elements of current systems, allowing a simple and low cost approach to adding upgrade communications equipment - and universal, open systems interfaces that maximise whole life cost savings by being both sustainable and supportable.

- **ECS acquisition cost** is minimised by a design that makes substantial use of commercial-off-the-shelf (COTS) hardware and software elements and a core design already proved on CCSM;
- **ECS upgrade costs** are minimised by the use of an open systems architecture delivered by a recognised exponent of Open Architecture (OA) design.

ECS is delivered by an experienced team with a track record of providing solutions on-time, to cost and embodying:

- an open and flexible architecture which is both modular and scalable;
- a system with low acquisition and upgrade costs;
- a system that exhibits long term sustainability out into future years



*This team developing the ECS has an enviable pedigree of successfully delivering military communications systems in the maritime domain*