DEFENCE Communications Systems

Optima Systems Consultancy

Optima's team of SC- and DV-cleared consultants has substantial experience in Military environments, within both public and private sectors.
Our combined capability extends **across all UK Defence domains**, including those of nuclear submarine and weapons programmes.

Our consultants' substantial experience in this field includes:

- Provision of independent customer support to BATCIS Delivery Team for the BCIP 6 Validation Phase. This examined many of the options for BCIP future development that has now been taken into MORPHEUS.
- Technology Readiness Level assessment for BCIP 5 and support across DLOD maturity tracking for fielding of BCIP increments. Engaging across Land DLOD owners to track plans for fielding.
- Provision of expertise to industry on the installation of BCIP and future MORPHEUS into land vehicle systems.
- Delivering expertise in open system architectures for combat systems across defence including support the Warrior CSP as both Chief Engineer and lead systems architect.
- Leading as Chief Architect for the Guidance to Engineering Activity and Review (GEAR) that is core to MOD Systems Engineering process across DE&S procurement and acceptance. Development of P-EMP for DE&S customers to support compliance to MSP requirements based on GEAR dimensions and review schedule.
- UK Technical lead to NATO developing interoperable IFF waveforms for mounted and dismount combat systems.
- Development and demonstration of ad-hoc, self-forming networks to support local Dismount Situational Awareness based in mmW technology with high cell reuse, GVA interfacing and integrated with BOWMAN for higher level Situational Awareness feed.
- PhD expertise in understanding and optimising complex networks to provide high resilience, high capacity networks based on balanced mixed technology solutions.

For case studies of our deployed capabilities visit our website at https://www.optimasc.co.uk/case-studies

Systems Engineering Services

Optima
Systems Consultancy

At Optima we use a **Systems Thinking approach** to **Systems Engineering** and broader consultancy, typically applied to complex technologies and industries. Systems Thinking aims to successfully manage the complexity and risk in a multi-faceted project, defining needs through all stages from architecture and design to delivery, disposal & replacement.

Systems Engineering best practice

- Engineering process development
- Systems Engineering & Engineering Management
- System Architecture design & review
- Requirements capture & management
- Trade-off studies
- Technology Maturity & Technical Risk assessment
- Technology Roadmaps and technology insertion planning
- Trials design, planning & conduct
- Data analysis
- System Verification & Validation
- Simulation & Modelling
- Management of Interfacing Programmes & Systems
- Programme & Project Management
- Systems Engineering Training

Independent Assessment & Assurance for Acquisition & Investment

- Independent Systems Analysis & Technical Assurance
- Technology Maturity & Technical Risk assessment
- Pan Defence Lines of Development assessments
- Tender assessment management
- Options assessment & Multi Criteria Decision Analysis

Enterprise Change

- Engineering process development, best practice & training
- Governance
- Stakeholder management
- Negotiations & facilitation