C2 SITUATIONAL AWARENESS

Real-time data fusion providing actionable intelligence to find a target, understand intent and determine action

Our scalable Command and Control (C2) solution integrates and fuses multiple sources of complex data providing real-time situational awareness across all domains. This enables users to build a single, common operational picture to make sense of the environment – providing actionable intelligence to find a target, understand intent and determine action.

COMMON OPERATING PICTURE

Our C2 environment consists of a number of configurable modules including Tracking and Fusion, Correlation and Situational Picture Display. The system provides a Common Operating Picture (COP) for the air, space, land and sea domains incorporating information from multiple integrated components and external sources in an open architecture framework.

ACTIONABLE INTELLIGENCE IN EVERY SCENARIO

Built upon an open architecture the solution provides a sensor and effector agnostic approach that offers flexibility, scalability and interoperability across a range of scenarios such as:

- Counter-UAS
- Counter-RAM
- GBAD
- BMD
- Space

INTEGRATED COMMAND AND CONTROL SOLUTIONS

Multi-domain capabilities:
- Air
- Space
- Sea
- Land

REAL-TIME DATA FUSION

Key benefits:
- Multi-source distributed plot and track fusion
- Supports radar, EW, electro-optical and infra-red sensors
- COP generation, correlation, visualisation and dissemination
- Integration of tactical data links including L16, ADS-B and AIS
- Modular and configurable open architecture
- Low latency, high throughput for simultaneous operations
- Immersive and interactive 2D and 3D display

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PROVIDING A COMMON OPERATIONAL PICTURE

By using a combination of MC\(^2\) and C2 SA capability the Commander can build a real-time COP enabling fast, decisive action without compromising the integrity of friendly comms.

C2 SA IN CONFLICT

PROVIDING A COMPREHENSIVE SUITE OF PICTURE COMPILATION AND DATA MANAGEMENT TOOLS

When it comes to mission success, systems for Situational Awareness (SA) are critical in building a Common Operating Picture (COP) to provide actionable intelligence. The addition of interoperable and secure communications enables the Commander to apportion forces, manage complex scenarios and to respond rapidly to mission changes, defending critical infrastructure and assets.

BASE PROTECTION SCENARIO

SA is a key factor to securing and operating military bases. The image below shows a typical military fixed operating base consisting of patrolling vehicles and dismounted soldiers. C2 SA as a stand-alone capability delivers information advantage by building a COP, enabling the Commander to deploy and command troops effectively. When paired with MC\(^2\), commands can be communicated securely not only across the base, but also to deployed assets, supporting command units within the UK and coalition forces as required.

Our C2 SA capability enhances the force’s effectiveness by utilising radar and other sensors to provide a real time COP. This information gives the Commander an advantage to make informed decisions and act on the intelligence gained, whilst MC\(^2\) maintains crypto compartmentalisation and communications sovereignty.
SCALABLE CONCEPTS

AGILE SOLUTIONS TO MATCH EVOLVING THREATS

C2 SA offers real-time, low-latency, multi-target, multi-sensor data fusion and tracking systems maintained within a multiple hypothesis tracking (MHT) architecture to ensure that tracks are formed as quickly as possible after entering sensor coverage or after separating from a parent object. Eliminating less-likely outcomes keeps the computing requirements within bounds even for dense target environments.

The solution provides robust, high-precision target tracking using data either from a single sensor, or from multiple, disparate sources, which can include any active or passive sensor providing plot or track data. It is configurable to track any combination of aerodynamic, ballistic, maritime or surface targets, ranging from ships, aircraft (fixed and rotary wing types), UAVs, cruise missiles, ballistic missiles, or space objects. Should the need arise to deal with new target types, new models designed to match their specific behaviour may be incorporated readily into C2 SA.

TECHNICAL FEATURES:

- Multi-source distributed plot & track fusion supporting radar, EW, electro-optical and infra-red sensors
- Unlimited number of contributing sensors
- Unlimited input plot rate
- Low latency processing architecture
- Technology covered under UK Export Regulations

INTEGRATION

Avoid the risks and dependencies involved in the integration of complex mission-critical software and infrastructure via:

- An inclusive management approach
- Deep technical expertise
- Extensive experience in coalition operations
PARTNER OF CHOICE
We are dedicated to helping our customers to make mission critical decisions with confidence.

For almost 35 years, we’ve established a strong software engineering pedigree in the development and through-life management of complex information systems, data fusion solutions and mission configurable communications.

We have the expertise and agility to meet time-critical operational requirements and with a proven record of assured delivery, we collaborate with customers to help them to generate actionable intelligence from the most demanding challenges of the information age.

25 YEARS+ DEVELOPING MISSION CRITICAL SOLUTIONS
Multi-domain capabilities:
> Domain awareness
> Strategic alerts
> Border security
> Intelligence integration

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