

FALCON

Broadband for the battlefield

Working to become a dependable partner of choice

BAE Systems Insyte's joint command & information systems solutions give decision makers the information to make mission critical decisions before opponents can react, minimising risk to our forces and creating greater operational effect.

FALCON brings secure deployable broadband voice, data and video communications to the British Army and Royal Air Force, providing the core of Network Enabled Capability. Rapidly deployable, FALCON interoperates with all current UK Network Systems and other NATO systems, enabling better information sharing and exploitation, improving military commanders' awareness and decision-making, and ultimately mission success.

BAE Systems has brought together a team, comprised of companies that are leaders in their field with best-of-breed equipment, capabilities, technologies and services to deliver the FALCON capability.

An incremental approach

BAE Systems was awarded the FALCON Increment A contract in 2006 to equip the Allied Rapid Reaction Corps. A year later the contract for Increment C, to provide FALCON capability to deployed Royal Air Force bases, was awarded.

The solution is flexible and future proofed to address the current requirement and to cater for upgrades in capability, scaling and capacity. Phase two FALCON will provide connectivity to Division and below and offer access for remote and mobile users as well as maritime platforms.



FALCON'S modular design means faster set-up times

Benefits

Reduced manpower: To manage, operate and support.

Lower through life costs: Takes advantage of commercial investment in IP.

Ease of technology refresh: Ensures high degree of future-proofing.

Ease of Use: Simple management system, self-configuring and 'plug and play' capability.

Faster set-up times: Modular design and reduced cabling. Sharing of voice & data infrastructure. Maximum automation of set-up and management.

Interoperability: Through the use of open standards.

Multiple security levels: Allows intra and inter-domain communication.

Lower training resources: Using computer assisted instruction and computer based training.

Increased Flexibility: Available in air portable palletised, containerised installations (dismounted and vehicle-mounted) for battlefield flexibility.

Resilient: Designed to counter hostile electronic and physical attack.

Less bulk, weight and power: Using the latest technology.

Features

- Incorporates Commercial-off-the-Shelf (COTS) and Military-off-the-Shelf (MOTS) technologies and equipment
- Maximum use of COTS technology - benefits from commercial investment (\$5bn/annum), upgrading and functionality
- Modular architecture allows equipment enhancement
- Flexible architectures for the network, security and management allow capability for many deployment types
- Designed to meet all types of operation
- Maximum de-risking conducted using in-house synthetic environment and CIS modelling capabilities
- Use of a single all Internet Protocol (All-IP) technology.

Installation variants

The Command Post Support (CPS) Vehicle -

Variants provide connections for local area system subscribers (voice, data and video) to all Command Posts (CP) and connection to the Wide Area System (WAS).

The Wide Area Service Provision (WASP) -

Provides the wide area system that links together all Command Posts and remote users.

FALCON Management Installation (FMI) -

Planning, configuration, monitoring and control of the networks. Other installation variants cover support, maintenance and repair tasks.

Main System Elements

Extensive use of COTS equipment with environmental packaging to meet military specifications.

COTS equipment (such as routers) are installed in packing cases mounted in the shelter on the vehicle.

Subscriber Group Access Unit (SGAU).

A central component for subscriber access. Contains Sentinel telephony software for the IP gatekeeper/telephony server function.

Ultra Band I/III and Thales Band IV radios give line of sight connectivity (fitted in WASP/CSP).

Ruggedised IP telephone.

Two levels of encryption provided by Thales DC3T Cryptos - Packet (for IP) and bulk (link protection).

The Team

The Team: In conjunction with MoD (DEC CCII) and DE&S Defence Wideband Networks IPT the BAE Systems FALCON Team comprises companies that are leaders in their field with best of breed equipment, capabilities, technologies and services

	PSI, system architecture and communication management system
	IP Technology
	Transmission sub-system, including radios and security (cryptos)
	Vehicles, installation design and fitting including field power generation
	Training and Training Needs Analysis (TNA)
	Sentinel telephony server, Subscriber Group Access Unit, Desk Access Unit, Ruggedised IP Phone.
	Gateway server

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