

# Satellite Communications Acquisition IPT

**IPT 133**

**Delivering  
effective Global  
Communications  
for Defence**

The Satellite Communications (SATCOM) Acquisition Integrated Project Team (IPT) evolved in 2000 from the merging of the "old" Future Satellite Communications (FSAT) IPT based at Abbey Wood under the PE and the Legacy Satellite Communications (LSAT) IPT based at Corsham under the DLO.

The SAT IPT is a through life, dual accountable team which manages a cluster of projects that include PFI, International Collaboration, conventional acquisition and in-service support. We are a team of some 120 personnel, both military and civilian based at DPA Abbey Wood, Saudi Arabia and DCSA sites at Corsham and Portsmouth.

The SAT IPT has a portfolio of projects ranging from the conventional acquisition or support activity through to groundbreaking service delivery through private and public/private partnerships. We provide reliable and secure long haul communications vital to the Royal Navy, Army, and Royal Air Force, NATO and other NATO Member Nations, during wartime and peacekeeping operations.

## **Skynet 5 PFI**

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project.**

Skynet 5 PFI is the most prominent project. It will deliver the next generation of military satellite communications services to support all UK operations, providing high capacity long haul communications and meeting expected traffic growth from 2005 to 2018. The programme includes ground infrastructure and terminals for static and mobile users in the land and sea environments. The Paradigm team led by Astrium (formerly Matra Marconi Space) was announced as the preferred bidder in February 02. The £2.5bn Skynet 5 PFI contract was awarded on 24<sup>th</sup> October 03. It is the largest PFI contract to have been awarded by the MoD. The Service Provider, Paradigm Services, has been operating the Skynet 4 UK ground stations and the satellite constellation from 30th May 03.

Services are being managed by an integrated MoD/Commercial team located within the DCSA's Global Operations and Security Control Centre (GOSCC), at Corsham in Wiltshire.

To access any of the services provided by Skynet 5, please contact the team at:

Partnership Manager: Martin Barker (93 52) 36237 ABW/ 0117 91 36237  
Service Delivery Manager: Wg Cdr A Barnes (94382) 5644 COR/ 01225 85644 or (9352) 36240 ABW/ 0117 91 36240

### **NATO Satcom Post 2000**

Supported by MoD, Paradigm are bidding to provide NATO's next generation of satellite capability as a member of a cooperative UK/FR/IT UHF/SHF initiative. This capability can be provided using the additional capacity that Paradigm have designed into the SKYNET 5 spacecraft and ensures that, following the demise of the existing NATO IV spacecraft, the UK can remain closely involved in the provision of NATO's Satcom capability for the next 2 decades.

Project Manager: Roger Claydon (9352) 36644 ABW/ 0117 91 36644

### **PSC 506 - Portable Satellite Communications 506**

PSC 506 is the tri-service version of Cheetah. PSC 506 terminals will operate as an autonomous network that employs advanced DAMA technology and will provide voice recognisable secure speech and secure data. Key elements comprise Fixed Communications Bases, portable Headquarters Terminals and Patrol Terminals.

Project Manager: Peter Bridger (9352) 36140 ABW/0117 91 36140

### **SCOT - Satellite Communications Onboard Terminal**

SCUG (Satellite Communications Onboard Terminal) Upgrade is the long awaited Upgrade to the existing SCOT and will be installed across 36 ships in 6 Classes of vessels (8 are currently Baseband only). It is part of the Skynet 5 PFI. Ships will have significant enhancements in performance and functionality. Ship Installations are to commence Dec 03 with a Customer 1 requirement to have all Platforms installed within 2 years.

Project Manager: Marc Rickett: (9352) 36245 ABW/0117 91 36245

### **Submarine Command & Control (SMC2)**

The Submarine Command & Control (SMC2) programme is responsible for maintaining UK/US interoperability capability by migrating the Royal Naval Submarine Satellite Information Exchange System to an Internet Protocol environment.

Project Manager: John Wharton (9352) 36649 ABW/0117 91 36649

### **Submarine Demand Assigned Multiple Access (DAMA) Satellite Communications System (SDSCS)**

Replacing the existing UHF DAMA with the new US procured Mini DAMA and associated Thales Communication masts.

Project Manager: Phil Seaman (9352) 33790 ABW/0117 91 33790

### **TSC 503 - Transportable Satellite Communications 503**

TSC 503 will provide a number of transportable SHF Satcom terminals. The terminals are composed of a number of man portable containers.

Project Manager: John Colman (9352) 36461 ABW/0117 91 36461

### **Welfare Communications (WELCOME)**

Provision of welfare communications, voice and internet to all UK forces deployed overseas on operations.

Project Manager Sqn Ldr Raph Brown (94382) 4305 COR/01225 81 4305

### **SANGCOM (Saudi Arabian National Guard Communications) Programme**

Supply HF/VHF & UHF systems to give telephone, facsimile and telegraph facilities to SANG sites across the Kingdom of Saudi Arabia. Provide secure mobile radio comms. Provide training for the SANG to use new telecomms equipment.

Project Manager: Jeff Cook (9352) 33258 ABW/0117 91 33258

*signed & passed  
6 Aug 2003  
Mach '03*



### INMARSAT

Provision of Inmarsat Services to MoD. Primarily providing all FLEET vessels with high speed (64k) service using contractor owned Inmarsat A and B terminals. Additionally, providing competitive Inmarsat equipment and airtime through the DCSA Catalogue for all other MoD Stakeholders.

Project Manager: Flt Lt Giles Peeters: (94382) 5610 COR/ 01225 815610

### NEST (NAVAL EHF/SHF SATCOM Terminals) & AEHF

The Naval EHF/SHF SATCOM Terminals system will provide robust, high data rate satellite communications to UK submarines, allowing them to participate in modern high tempo operations involving both UK and allied forces. The Skynet 5 PFI design studies indicated that it would be more cost-effective for the MOD to secure EHF capacity from the US by joining the proposed "Advanced EHF" (AEHF) MILSATCOM programme than to obtain EHF services under a PFI arrangement. The option to join the US AEHF programme is now being taken forward as part of the NEST Main Gate submission. Skynet 5 will provide the required SHF capacity.

Project Manager: Mike Thorn: (9352) 36269 ABW/ 0117 91 36269

### TALON

Talon Terminals were brought into service in July 2002. They provide a portable facility to communicate. Each terminal can be carried in a single vehicle, towing the generator mounted on a trailer.

Project Manager: Chris Riley: (9352) 36648 ABW/0117 91 36648

### Reacher

The purpose of the Reacher Project is to deliver into service the mobile satellite ground terminals (MSGT) that will give military ground forces communications access through the Skynet 5 system. There will be 3 variants, Reacher Medium, Royal Marine Reacher and Reacher Large. The communications systems are being provided under PFI arrangements by Paradigm Secure Communications.

The vehicles are to be provided as Government Furnished Equipment, and the containers of the communications system will be designed to mount on to these vehicles.

Project Manager: Chris Riley: (9352) 36648 ABW/0117 91 36648

### Commercial SATCOM services

Commercial Satcom is the umbrella for Project Welcome which provides all personnel in "entitled operations" areas to 20 mins phone calls and Internet access to their families at home per week.

Project Manager: Flt Lt Giles Peeters: (94382) 5610 COR/ 01225 81 5610

### NALLA UK

A National Long Lines Agency (NALLA) is established in each NATO country to provide an interface between Demanders (Service Ordering Authorities) and Telecommunications Providers. It provides Commercial International Private Leased Circuits.

Section Head: Maj (Rtd) Alan Dunbar: (94382) 4330 COR/01225 81 4430

### Commercialisation of Balkans Communications

Provision of support via a contract with BAE Systems for the provision of all Wide Area Communications to support Operations in the Balkans, Bosnia and Kosovo.

Project Manager: Sqn Ldr Raph Brown: (94382) 4305 COR/01225 81 4305

EHF  
com to subs  
will depend  
on US



US →  
AN (usc-38(u))



### **Project Synergy**

Provision of Commercial Satellite Communications to support the Commercialisation of Military Communications in the Middle East Joint Operational Area, centred around Iraq.

Project Manager: Sqn Ldr Raph Brown (94382) 4305 COR/ 01225 81 4305

### **TELIC**

A full welfare provision was provided to Op Telic. This included voice and Internet Access. Over 1000 satellite phones were dispatched, along with over 300 Internet terminals. 17 Commercial VSATs provided data to the Operation.

Secure Iridium services were provided for the first time, supplementing provision of mobile communication services provided using Iridium and Inmarsat. Interim REACHER terminals were deployed on operation for the first time.

### **Service Delivery - Task Management Cell**

WO Bruce Paterson: (94382) 5093 COR/01225 815093

Cpl Helen McWilliam: (94382) 5303 COR/ 01225 815303

### **Stakeholders**

DCSA, PJHQ, JFHQ, HQ LAND, FLEET, HQSTC, HQ DSF, LAND-JHC, DCSA(G), AWC, SANG, NATO C3 AGENCY, FOSM, HQ SoinC, CSD, 1 Sig Bde, 2 Sig Bde, 11 Sig Bde, HQ ARRC, 2 Sig Regt, 7 Sig Regt, 21 Sig Regt, 30 Sig Regt, 264 (SAS) Sig Sqn, 63 (SAS) Sig Sqn, TCW, MoD DG(S+A), DCRS, PPPU, GII CWG, GII Reachback CWG, Terminals/Air/Mar & Fixed Networks CWG, CinCFleet

### Customers

Customer 1: EC(CCII) FII 3a

Customer 2 represented by: D CBM/J6

HQ NATO represented by NC3A and

NACOSA Ops SP

MoDs of NATO Member Nations

### Industry

ACAL

Astrium Ltd

BAE SYSTEMS

Basys Technology

BT

Cable & Wireless

Cogent Defence & Security Network Systems

Deloitte & Touche

DSTL

EADS

Lockheed Martin

LogicaCMG

MCI

Nortel Networks

Paradigm Secure Communications Ltd

Paradigm Services Ltd

QinetiQ

Raytheon

SERCO

SERCO Communications Messaging

STS Defence Ltd

Thales Comms

Thales Defence

Thales Underwater Systems

Thomson Marconi Sonar

Associated IPT's	
Future Offensive Air System (FOAS) IPT	Potential Satcom Host Platform
Support, Amphibious & Battlefield Rotorcraft (SABR) IPT	Potential Satcom Host Platform
INTERPRET (Nimrod R replacement) INTPT IPT	Satcom Host Platform
Multi-Role Armoured Vehicle (MRAV) IPT	Potential Satcom Host Platform
Tactical Unmanned Air Vehicles (TUAV) IPT	Potential Satcom Host Platform/Satcom Alternative
Tactical Reconnaissance Armoured Combat Equipment Requirement (TRACER) IPT	Potential Satcom Host Platform
A400M IPT	Potential Satcom Host Platform
CASOM: Conventionally Armed Stand Off Missile IPT	Potential Satcom User
C-17	Potential Satcom User
Attack Helicopter IPT	Potential Satcom Host Platform
Typhoon IPT	Potential Satcom Host Platform
Nimrod MRA4 & ASSS IPT	Potential Satcom Host Platform
Military Airborne Comms & Homing (MAC) IPT	Airborne Satcom Platform Integration
Joint & Battlefield Trainers, Simulation and Synthetic Environments (JBTS) IPT	Potential Satcom User
Sensor Avionics and Navigation Systems (SANS) IPT	Potential Satcom User
Air Command and Control Systems (ACCS) IPT	Potential Satcom User
Airborne Stand Off Radar (ASTOR) IPT	Airborne Satcom Platform Integration
Command Support Information Systems (CSIS) IPT	Potential Satcom User
Communications Messaging (CMMSG) IPT	Potential Satcom User
Imagery and Geospatial Systems (Image) IPT	Potential Satcom User
Land Electronic Warfare (Land-EW) IPT	Potential Satcom User
Future Carrier (CVF) IPT	Potential Satcom User
Joint Combat Aircraft (JCA) IPT	Airborne Satcom Platform Integration
Attack Submarines (ASM) IPT	Satcom Host Platform
Landing Platform Dock (Replacement) (LPDR) IPT	Satcom Host Platform
Type 45 Anti Warfare Destroyer (T45) IPT	Satcom Host Platform
Special Projects Procurement (SPP) IPT	Potential Satcom User
BOWMAN & Land Digitization (BLD) IPT	Boundaries/Interfaces
Tactical Datalinks (TDL) IPT	Impact of Datalinks CONOPS
Strategic Terrestrial Radio Systems (STRS) IPT	Boundaries/Interfaces
Special Comms & Management Radio Systems (STRS) IPT	Potential Satcom Integration
Theatre & Formation Comms (TFCS) IPT	Satcom Host Platform (FALCON)
Crypto & Secure Systems (CASS) IPT	Crypto & Secure Speech harmonization

Initial contact points for the SAT IPT:

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#### Useful names and numbers

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SAT Commercial Manager	Derek McGinley 0117 91 36246
Skynet 5 Project Manager	Roger Claydon 0117 91 36644
Services Manager	Alistair Barnes 0117 91 36240
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SAT Requirements Manager	Barry Cox 0117 91 36655
User Terminals Business Area Leader	Ian Pirie 0117 91 36673
SAT Business, Contract/Partnership	Martin Barker 0117 91 36237