



Fujitsu in Defence & National Security

Committed to Defence & National Security

A new world is emerging, transformed by technology. It's a world of connectivity where people and the things around us are linked together, allowing us to readily share information. More connectivity means more collaboration, vanishing boundaries, and changes to the way businesses work and interact with each other. In this new world the key to effectiveness is how people can exploit ICT to enhance lives and increase productivity. For the Defence and National Security sector the innovative use of technology can enable information to be a real Force Multiplier, delivering dramatic increases in both the efficiency and effectiveness of limited resources.

Committed to UK Security

Fujitsu has a long-standing heritage supporting the Defence and National Security sector, and has been a major supplier to the UK Ministry of Defence (MOD) for nearly 50 years. Our support of important UK Defence projects covers a diverse range of advanced command, control and communications systems as well as extensive research into the application of new technologies. Across the UK and Ireland we have 3,500 security cleared staff and our National Defence Centre is staffed with dedicated specialists, collectively providing support to over 220,000 UK MOD users.

Fujitsu is also part of the ATLAS consortium made up of four of the world's leading IT companies who have collaborated to fulfil the MOD plan, launched in 2005, to create a single integrated defence information infrastructure (DII). DII is the largest IT programme in Europe, providing the single worldwide system for MoD users - both civilian and military - in both Base (fixed/office) and Deployed (operational) environments.

As a Tier I risk-sharing partner of the ATLAS consortium, we are enabling the modernisation of the UK defence sector with a single, global, secure integrated platform for 150,000 devices, supporting 220,000 users across 2,000 sites. Within the ATLAS consortium Fujitsu provides:

- Service Management - including service desk and onsite support (both in the UK and overseas)
- Implementation - both fixed and maritime

Furthermore, Fujitsu provides critical technological support and delivers the ICT backbone for a number of ongoing military operations abroad. This includes Fujitsu international field engineers who work and live alongside military personnel to ensure MOD systems are fully functional, whether in the UK or on operations overseas including in war zones.

Fujitsu's vision is to deliver Defence network services that enable operational users the freedom to access through supplied or a compliant Choose Your Own Device (CYOD), the right information services wherever and whenever they are needed; both in the UK and when deployed overseas.

The MOD's Grapevine 2 Global Connectivity solution makes this possible by bringing together a number of disparate connectivity services provided by multiple providers to deliver a network solution that includes both the Wide Area Network (WAN), Local Area Network (LAN) and related service components. The Fujitsu Global Connectivity solution replaces the Defence Fixed Telecommunications Service (DFTS) and the LAN services provided by the ATLAS consortia, with a modern, agile and robust set of network (LAN/Wireless LAN and WAN) services designed to improve service levels and align to the new ways of working demanded by the modern Defence users.

shaping tomorrow with you

FUJITSU

The services provided are founded on the Public Services Network (PSN) framework and offer proven value for money when benchmarked against Industry standards. The various services will support circa 200,000 users, producing more than 250 million emails a year at over 1,000 sites in the UK and overseas whilst network capacities will be increased to meet current and future needs.

Fujitsu – Committed to Defence & National Security

Fujitsu understands the modern-day complexities and challenges facing military organisations and intelligence communities. Partnering with Fujitsu can help to improve the quality of your information and how you use it. By exploiting a wide range of ICT-based solutions we enable this information to deliver a real Force Multiplier effect, dramatically increasing the efficiency and effectiveness of limited assets and resources.

- A major supplier to the UK Ministry of Defence (MOD) for nearly 50 years.
- Our National Defence Centre is staffed with dedicated specialists, collectively providing support to over 200,000 UK MOD users.
- 3,500 security cleared staff across the UK and Ireland.
- Part of the ATLAS consortium, creating a single integrated defence information infrastructure (DII), the largest IT programme in Europe.
- Corporate Friend of the Armed Forces charity SSAFA, helping to provide support to 57,000 Armed Forces personnel, veterans and their families every year.
- Investing more than \$2.2 billion a year in R&D resulting in more than 100,000 global patents.
- Global Defence and National Security portfolio supports customers across Europe, the Middle East and India, Asia Pacific, Canada and the USA.

Complete ICT capability to enable information to be the Force Multiplier

Fujitsu has the global capability to deliver the full spectrum of ICT services from generic industry offerings such as public cloud, storage, servers, laptops, desktops, tablets, phones, networks, application development and support, through to specialist military services such as command and control applications and research and development in to new technologies like Gallium Nitride chips that deliver enhanced radar capability. Fujitsu works in close partnership with our customers to enable technology to unlock the potential of information to deliver this new force multiplier.

- **Fujitsu Fabric – delivering a fully flexible, secure workplace**
Fujitsu Fabric is a highly-resilient, secure, private cloud-based solution that delivers a fully flexible workplace environment, without compromising the integrity and security of your existing infrastructure. Fabric is an inherently secure system that is agile enough to adapt to individual business needs, making it an ideal 'workplace anywhere' solution for the Defence sector. With such in-built cybersecurity capabilities, Fujitsu Fabric is completely trustworthy, taking advantage of public networks and open standards without exposing an organisation to external threats and their associated risks.
- **Flexible, secure access to training & simulation resources**
Fujitsu Fabric enables the delivery of a fully flexible training and simulation environment giving your people instant, secure access to the training and simulation resources they need, when and where they need them. The need to use expensive thick client devices used in the traditional classroom is removed and replaced by an agile, thin client approach that enables the seamless access and sharing of information across any device. Effectively creating a virtual classroom, Fabric significantly increases the effectiveness of your training and simulation provision, while reducing expensive hardware costs.

■ Instant, secure access to intelligence to support early entry operations

Fujitsu Fabric gives your early entry operations instant, secure access to the mission-critical applications and resources they need, when and where they need them. With an emphasis on reducing size, weight and power, Fabric utilises cloud technology to give deployed personnel instant access to the information and intelligence they require from any device, without compromising the integrity and security of an organisation's existing infrastructure. As such, Fujitsu Fabric is an ideal platform to support early entry operations, where speed, mobility and agility are of the essence as the situation faced by personnel on the ground can change in a heartbeat. By enabling this secure access to vital information Fabric can enable personnel to do their role more effectively.

■ Delivering Commander's critical information needs in established operations

The emergence of the global battlespace means wars are being fought against an increasingly dispersed enemy, including in cyberspace. The result is an increase in coalition activity and a far greater reliance on collaboration between Forces and military partners. Fujitsu enables the provision of the right level of trusted and accurate information to support a Commander's critical information needs in established operations where multiple communities of interest must come together to work as a coherent force. The ability to access and share different sources of intelligence and present the resulting information accurately and securely, enables critical decisions to be taken rapidly, reducing the decision-making cycle.

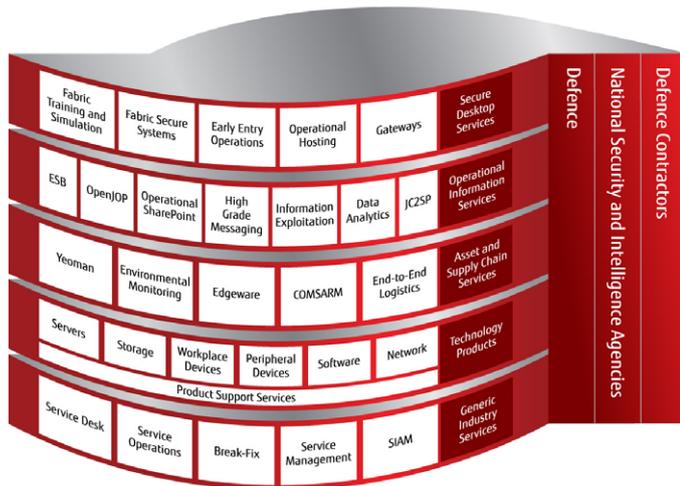
■ Real-time intelligence to enable better support chain management

Capturing and sharing error-free data and translating it in to insightful information with military context delivers real-time intelligence that enables highly informed decision-making. Fujitsu's Edgware technology automates data capture from a wide range of Automated Identification Technology (AIT) readers and sensors, like barcodes, RFID tags or contact memory buttons. These tags can be encrypted to protect sensitive data from compromise as the asset moves through the supply chain. The result is improved efficiency in supply chain management, reducing costs as resources can be deployed faster, and more effectively.

■ End-to-end munitions management enables trusted decision-making

Keeping track of the full breadth of munition stocks requires a complete, end-to-end system capable of delivering through-life controls and support for optimal performance of these high-value assets. Fujitsu's specialised munitions management system COMSARM (Computer Systems Armaments) enables the management of a wide variety of explosive ordnance and associated technical assets providing a single source of truth for ordnance planning and reporting. Data capture and information provision can further be enhanced using Fujitsu's Edgware capability, delivering an integrated munitions management capability that we call YEOMAN.

- Delivering end-to-end visibility across Military supply chains**
 Delivering a comprehensive and effective end-to-end visibility in military supply chains depends on the timeliness and quality of data appropriately shared between stakeholders, with unambiguous performance measurement and diagnostics. Fujitsu can deliver this solution using its proven Edgware solution, enhancing supply chain performance on inventory and cost while minimising risk to military output. There is no need to amend the core functionality of any of the systems involved. Fujitsu's end-to-end data repository stores the data and builds a comprehensive record of relevant supply chain transactions, effectively time stamping every asset as it moves through the supply chain.



Global Defence Capabilities

We're expanding our Global Defence and National Security portfolio, supporting customers across Europe, the Middle East and India, Asia Pacific, Canada and the USA. Our commitment to military deployed infrastructure is unrivalled among ICT companies and we provide the same high level of support to Defence and National Security customers wherever they are, be that in the office, at headquarters, on the road, on foot, at sea, in the air or in combat. Here are some examples of the support we're currently providing around the world:

- Rapidly deployable secure command information facility**
 Fujitsu has developed a rapidly deployable secure command information facility (SCIF) as a robust alternative to tented operations. The unit can be pre-configured to exacting requirements and is based on a standard shipping container, making it easily transportable via land, air or sea. Once the container has been sited, it can be rapidly deployed into a fully functioning operational facility that provides significantly more flexibility, security and comfort than a tented operation. The ICT equipment installed is housed in a more appropriate environment, including a dedicated server room with built-in cooling requirements, ensuring it can work at its optimal performance.
- Sophisticated support for today's maritime operations**
 The advent of the global battlespace and the dramatic rise in immigration issues have exacerbated the challenge for Defence departments around the world to protect their National security. This landscape has placed a far greater level of importance in a nation's ability to protect its maritime space. In recognition of this, Fujitsu has developed a range of sophisticated solutions to support modern-day Maritime Operations. Such solutions have the ability to significantly increase the efficiency and effectiveness of limited assets and resources.

- Automatic Vessel Surveillance System (AVSS)**
 Using infrared technology Fujitsu has developed an Automatic Vessel Surveillance System (AVSS) for use by military patrol aircraft (MPA) to identify ships and other surface vessels. Unlike line-of-sight capability, AVSS has the capability to identify and recognise vessels from a greater distance and through mist, fog and other adverse weather conditions. The technology picks up heat signatures that are given off by the vessels and their crew. This information is then collated against a database of known vessels by command and control to deliver an improved common operating picture for everyone involved in the mission.
- Tactical Air-Operation Command System for Military Patrol Aircraft (TACS-M)**
 Ensuring all parties involved in maritime operations have a shared view of the environment in which they are operating is a crucial requirement to support trusted decision-making. Fujitsu's Tactical Air-Operation Command System (TACS) for military patrol aircraft is an onboard command and control system that links the MPA with ground control. TACS enables the MPA to share mission data in real-time with both other surveillance aircraft, and command and control units to deliver a rich situational awareness. Pilots flying the surveillance missions and command and control personnel located on the mother ship, or thousands of miles away at a land base have secure access to the common operating picture.

- PRIMETUNE Servers**
 Fujitsu has developed its PRIMETUNE range of high performance, compact servers specifically for confined spaces, like the maritime environment. The PRIMETUNE range are half the size of conventional servers, yet still deliver the same high performance and high levels of reliability of comparable models. Available in rack mounted and blade configurations, PRIMETUNE servers are rugged, robust systems built to withstand the high levels of shock and vibration, as well as large variations in temperature and humidity that they are likely to encounter in the maritime environment. Yet their low power consumption means they have reduced cooling requirements compared with conventional servers.

Our Commitment to Research and Development

Working closely with our customers, Fujitsu has been delivering innovative solutions to improve people's lives for over 80 years. Today, innovation continues to be at the heart of everything we do and we believe it's the key to creating a more connected and sustainable society. Fujitsu is committed to remain at the forefront of innovative, state-of-the-art technology solutions which is why we invest more than \$2.2 billion a year in R&D.

Globally, Fujitsu innovations have resulted in more than 100,000 patents with Fujitsu Laboratories in Japan the driving force behind the Group's R&D strategy. Since 1990, the UK has been the headquarters of Fujitsu Labs Europe (FLE), Fujitsu Laboratories' European subsidiary. FLE partners with research institutes and universities in projects as diverse as using cloud technology to enable wireless networks to better cope with high data traffic, to using high performance computing techniques to predict the effect of pharmaceutical drugs on an individual's heart rhythm.

Our Commitment to Cloud Computing

Over the past decade, Fujitsu has created the industry's broadest portfolio of cloud solutions and services. This portfolio underpins our vision of how cloud will transform business and society, both today and in the future. Globally, our investment in developing cloud technology has now surpassed \$2bn. Cloud computing offers a fundamental and far reaching change in the way ICT is sourced, delivered and managed. It enables users to access computing and data storage capabilities without investing in their own infrastructure, or training new personnel. Running a business application in the cloud, rather than onsite, is also a significant way to cut energy use by serving more customers at the same time.

Fujitsu supports a number of public sector customers and offers a framework for the delivery of shared ICT services, which currently supports four major Government departments. The service incorporates data centre hosting and virtualisation onto cloud platforms. Since 2010 we have reduced carbon emissions by 15.6%, but the real benefits come when data centre virtualisation acts as an enabler for other areas of the ICT service. The overall emissions for the whole service, incorporating client device support, has delivered further savings. By investing in cloud platforms and the use of thin client technology, our customers have realised a reduction in energy consumption and carbon emissions. Fujitsu continues to look at ways to assist government departments to reduce their energy consumption and carbon emissions further, thereby contributing to their Greening Government Commitments.

Our Commitment to the Armed Forces

In January 2014, Fujitsu signed the Ministry of Defence Armed Forces Corporate Covenant. The Armed Forces Corporate Covenant sets out the moral obligations of society towards members of the Armed Forces community, and by signing Fujitsu has pledged to support the British Armed Forces by upholding these key principles.

Our longstanding affiliation with the British Armed Forces comprises a major part of our responsible business drive, with a particular focus on supporting veterans and their families. Over the years, our Defence and National Security business has helped veterans make a smooth transition from military service into the commercial sector. To enable this we maintain links with the Career Transition Partnership to not only facilitate a recruitment process that recognises British Armed Forces skills and qualifications, but to also ensure that Fujitsu's own job vacancies are widely promoted to the service-leaver community, creating a strong pipeline of talent that benefits everyone involved.

Commenting on these obligations and commitments, Duncan Tait, Fujitsu Senior Vice President for EMEA, said: "As an organisation that has a proud history of not only supplying products and services to the MOD but also employing many citizens who form part of the voluntary reserve forces, Fujitsu recognises the invaluable contribution these individuals make to our community and our business. We also recognise that those individuals, previously employed by the Armed Forces, can contribute a wealth of transferable skills and experience and that it is therefore important for us as a business to support their integration into the civilian workforce in any way we can."

"As a former serving member of the Armed Forces, I appreciate and admire the huge commitment Fujitsu is making in support of the Corporate Covenant. As a company, it truly understands the obstacles faced by many reservists and family members of those in active duty – and endeavours to meet the needs of individuals within this group of employees by recognising their valuable contributions."

- Glen Hymers, Operational Security Manager, Fujitsu DNS (former RAF)

Our Commitment to Responsible Business

Fujitsu believes that conducting responsible business is about creating tangible benefits. It's about ethical practices and working to benefit society. With this in mind, we strive to place our resources and expertise at the service of local communities while supporting a wide range of organisations. Our efforts have been recognised by commercial network Business in the Community, who awarded Fujitsu a five-star (99%) Platinum rating in their Corporate Responsibility Index, recognised as the UK's leading voluntary benchmark for responsible business practices.

Fujitsu is a long term partner of the Armed Forces charity SSAFA whose work provides practical, financial and emotional support to 57,000 armed forces personnel, veterans and their families every year. Since 2007, Fujitsu has been a Corporate Friend of SSAFA via a number of initiatives including sponsoring and participating in the Ride of Britain - a five-day, 501-mile cycle ride from Edinburgh to London - and enabling 300 of our staff to volunteer to help plant ceramic poppies around the Tower of London to commemorate the centenary of the First World War. Year-on-year, Fujitsu's relationship with SSAFA has strengthened, and since partnering in 2007 Fujitsu has raised over £121,000 for the charity.

"SSAFA is proud of our relationship with Fujitsu and incredibly grateful for their support and commitment over the last 10 years. This support is both vast and diverse; from being part of our Corporate Friends Programme, sponsor of the SSAFA Ride of Britain or through encouraging employee engagement and fundraising. This multi-faceted help and support from such a well-known and respected company is truly appreciated, and crucially achieves much needed awareness and funds for SSAFA so our Force's family will have the committed practical, financial and emotional support they deserve."

- General Sir Kevin O'Donoghue, Chairman, SSAFA



Fujitsu is also a proud sponsor of British Soldier, the Army Sailing Association (ASA) racing yacht. This relationship reinforces a shared belief in fulfilling potential beyond the expected through experience, resourcefulness and determination, all in a day's teamwork that Fujitsu is proud to be part of.

"The opportunity to race a highly competitive yacht, British Soldier, at national and international level is made possible only through our partnership with Fujitsu. It is a clear demonstration of the company's commitment to the men and woman of the British Army. And on their behalf I thank Fujitsu very much for their continuing and essential support." – Lieutenant General A R Gregory, CB, Chief of Defence Personnel, Admiral, Army Sailing Association

In April 2015, Fujitsu was nominated by Basingstoke MP Maria Miller as the constituency's Responsible Business Champion. Fujitsu was nominated because of the longstanding positive impact in the local community, supporting the Vyne School, SSAFA and a secondment of two Business in the Community Business Connectors in the area.

"Fujitsu's Basingstoke team has made a fantastic contribution to not only the local community...They are a credit to Fujitsu and a welcome part of my constituency, and I am proud to nominate them as the Basingstoke constituency's Responsible Business Champion."

- Maria Miller, MP for Basingstoke

Fujitsu as an Employer of Choice

Fujitsu's commitment to responsible business also makes us an employer of choice. We are a major business, employing thousands of people with different skills and ambitions. We invest in these individuals by:

- Creating career opportunities,
- Ensuring diversity,
- Developing skills, and
- Promoting wellbeing.

By supporting our staff – as well as our local community, our children, and our Armed Forces – Fujitsu is among those leading the way in responsible business practices in the UK, helping to create a positive future for all.

Our Commitment to Transparency

Our mission to drive responsible and sustainable business also encompasses ethics and transparency. We apply stringent principles to all export engagements and relationships, and are certified against BS10500:2011 Specification for our Anti-Bribery and Corruption Management System. This certification is the first of its kind to be awarded by Bureau Veritas, and guarantees our compliance with the

Bribery Act 2010. In an examination of defence companies around the world – carried out by Transparency International UK – Fujitsu was ranked in the top ten for anti-corruption measures, out of a total of 129 companies considered.

Our Commitment to SMEs

In the UK & Ireland, almost a quarter of our spend with third parties is with SMEs, which make up almost half of our total supplier network. In delivering our services to the Defence and National Security sector, Fujitsu works closely with an extensive SME supply chain. Our company has longstanding relationships with hundreds of very successful SMEs, who are capable of providing the niche skills and specialist technologies needed to meet the requirements of the Armed Forces.

Why Fujitsu?

Enabling information to be the real Force Multiplier

Fujitsu understands the modern-day complexities and challenges facing military organisations and intelligence communities. As a result of our work across the Defence sector we have an excellent insight in to the challenges that surround the 'joining up' of information across many large agencies in order to respond effectively to any situation in the emerging new global battlespace.

That's why partnering with Fujitsu can help to improve the quality of your information and how you use it. By exploiting a wide range of ICT-based solutions, we enable this information to deliver a real Force Multiplier effect, dramatically increasing the efficiency and effectiveness of your Force's limited resources.



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