



ATKINS

Member of the SNC-Lavalin Group

Defence

Atkins supporting the Defence sector as it evolves to meet the challenges of the future.

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Introduction

The global Defence sector is facing some of its toughest challenges yet. The threats to our safety and security are continuously evolving - the rapidly changing digital environment, climate change, health emergencies, and economic and political uncertainty are all putting people's way of life at risk.

But while the organisations responsible for protecting us have the increasingly difficult job of staying a step ahead of potential threats, they're meeting these challenges by ensuring their own operations are fit for the future. They're developing inclusive and diverse teams, finding ways to do more with less, and demonstrating how their activities offer value for money for taxpayers.

If we're to meet these challenges, the Defence sector must continue to explore the opportunities created by digital transformation and take advantage of new and emerging technologies. We should also look to the civil sector, particularly infrastructure, aerospace, nuclear and transportation, for innovation and approaches that will help us adapt and succeed in this ever-changing world.



Who We Are



Atkins, a member of the SNC-Lavalin group, is one of the world's most respected design, engineering, and project management consultancies.

We have a long and proud history of supporting the organisations that protect our people and national interests. That includes their land, naval, air, cyber and digital operations.

Working alongside our colleagues in government departments, the Armed Forces and Defence and security contractors for more than three-quarters of a century, we understand the breadth and complexity of the sector. That's how we deliver the right solutions to the right people at the right time and ensure they maximise efficiency and optimise safety and performance.

We also draw on our experience of working across the aerospace, physical and cyber security, nuclear, infrastructure and transportation sectors. Bringing knowledge, technologies and learning from private industry to the Defence market is central to our approach.

We work in secure environments to enable our customers to exploit data from satellites to gain tactical advantage – improve situational awareness and enhance communications networks.

Our teams are prepared for the complexities of military-preparedness operations, encompassing everything from damaged infrastructure to critical response times.

Connected across the world

- › More than 38,000 colleagues worldwide
- › Offices in 50 countries and operations in 160
- › Experience in remote locations and challenging geographies
- › Long history working with the U.S. Department of Defense (DOD) and operating in the Middle East
- › One of the largest providers of engineering and technical services to the UK Defence market including to the Ministry of Defence (MOD)
- › Supporting Canada's Department of National Defence to patrol one of the longest shorelines in the world



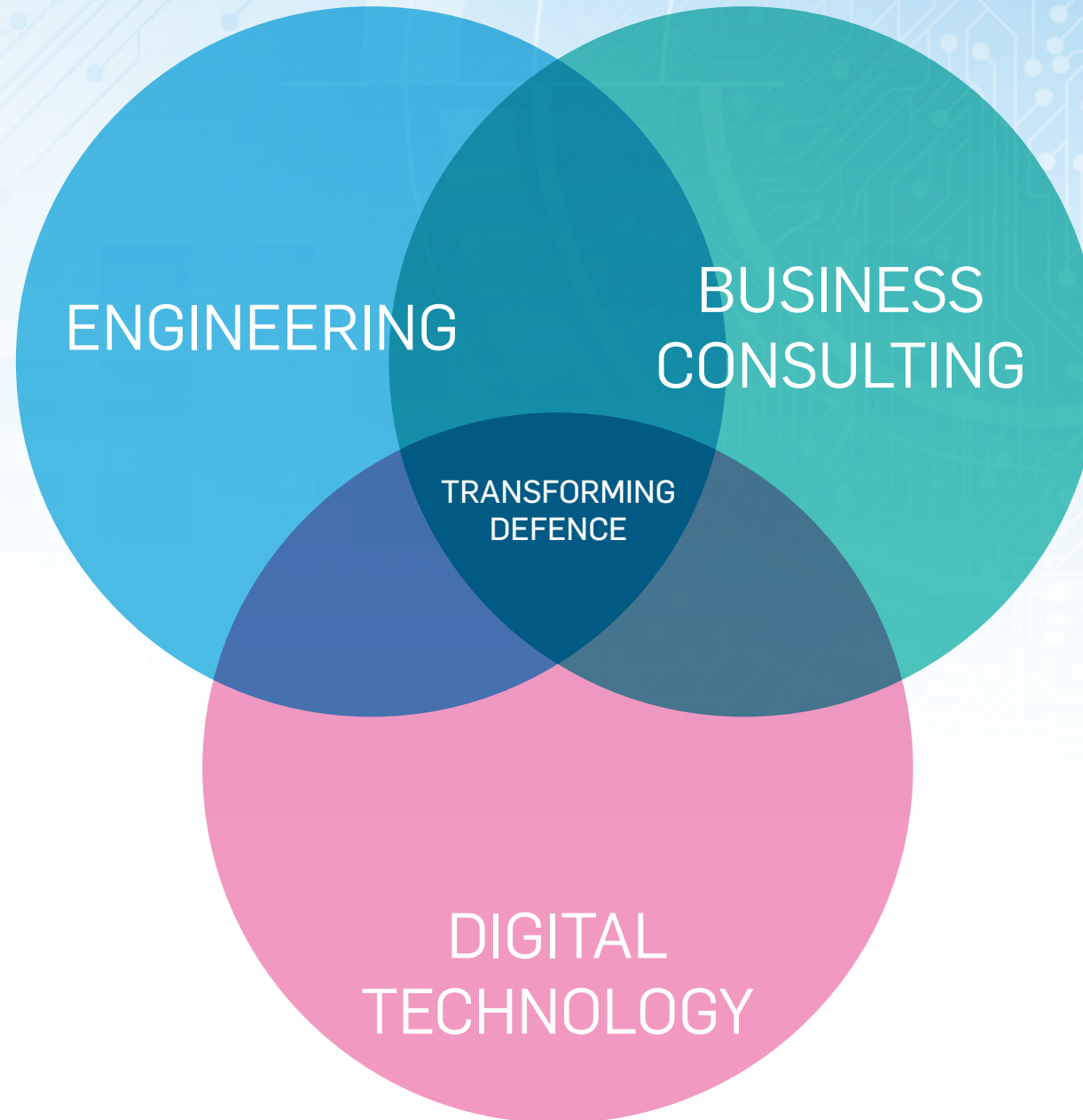
Our Capabilities

We deliver large-scale, transformational programmes that help drive the Defence sector forward.

We use our world-class engineering expertise, industry knowledge and business consulting experience to generate efficiencies and reduce costs. Our approach is underpinned by our ability to develop, integrate, and exploit digital technology to deliver innovative and sustainable solutions.

- › Our deep **engineering** expertise enables us to solve complex, technical challenges.
- › Our broad industry knowledge and **business consulting** experience mean we can forge valuable partnerships, manage change and deliver transformational programmes.
- › We exploit **digital technologies** so we can improve value for money, understand our progress against targets and meet the challenges of tomorrow.

It's our ability to bring all three capabilities together that sets us apart from our competitors.



Engineering

We have a strong engineering heritage and commitment to delivering operational benefits to our clients, including faster design, reduced downtime, and lower costs.

Our design and engineering teams have an unrivalled breadth of expertise. Our **mechanical** and **systems engineering** experts work at the forefront of innovation and use their in-depth technical expertise and the latest materials to deliver lightweight, efficient, and high-performing structures. We focus on the **safety, security,** and **sustainability** of our solutions to ensure we're looking after our people and our clients', especially when we're operating in hazardous environments.

Our **resilience engineering** teams, in particular, have been set up to cut across traditional engineering disciplines to ensure the human element is considered in our projects. It's increasingly important to have the ability to respond, absorb, adapt to, and recover from a disruptive event. A resilient structure, system, or community is defined as one that is sufficiently able to recover from an extreme incident with minimal impact and maintain functionality during the event. After the event, it should be able to rapidly recover to, or be even better than, the pre-event standard.

Advanced materials – composites

Composites are emerging as the right solution for lightweight and efficient aerospace structures, and a significant proportion of a modern aircraft's primary components incorporate these technologies. We have extensive experience of working with composite materials, including on Airbus' A380, A350 and A400M aircraft, and we've worked closely with the UK's National Composites Centre to further research into their use. We're also developing lighter weight structures through our use of additive manufacturing. This process enables us to reduce waste and speed up production times for our clients.

Atkins to keep RAF Air Cadet training glider, the Viking, in the sky.

[> Read more](#)

Design and certification

We deliver high-quality engineering services to clients that operate in safety critical environments. That includes the design of structures and systems using lightweight composite components, for example, wing structures and landing gear; supporting the certification of civil and military aircraft and air-to-air refuelling systems; and the delivery of a range of military platforms and flagship projects in space.

Our work on flagship programmes includes the A350, A330 and A320; BAe 146; C-130J; and the Chinook.

Global Design Centre

Our Global Design Centre was established in India in 1995 and is recognised by our clients as an industry-leading centre of excellence in design and engineering. It's fully integrated with our client delivery teams around the world, and all are held to the same high standards. For example, our teams in all locations work to maintain compliance with our Design Organisation Approval, which assures clients that we're well-placed to carry out design, repair, and modifications to aircraft. Our highly capable offshore specialists enable us to reduce project costs, as well as work across multiple time zones, which increases efficiency.

Design Organisation Approval

Our clients benefit from our Design Organisation Approval which allows us to use our aerospace expertise to approve modifications to their existing aircraft and confirm their airworthiness.

We've spent decades working with leading aircraft original equipment manufacturers on the design, analysis, certification, and repair of their newest aircraft. And now, by combining our engineering capability and in-house digital technologies with industry standard tools we can help our clients design faster, reduce downtime and lower costs.

We can provide structural modifications and repairs to CS-23 small aircraft including very light aircraft; CS-25 large aircraft; and unmanned air vehicles.

We improve aircraft operations through:

- › Supplemental type certificate (STC) major and minor changes
- › Major and minor repairs (metallic and composite)
- › Primary and secondary structures
- › Loads static strength and proof of structure
- › Fatigue and damage tolerance materials and manufacturing
- › Aeroelasticity
- › Crashworthiness
- › Rapid recompression
- › Impact
- › Fuselage
- › Wings
- › Empennage
- › Control surfaces/moveables
- › Landing gear
- › Support for external equipment



Maintenance Repair and Overhaul MRO



The maintenance, repair, and overhaul (MRO) sector is undergoing significant change due to evolving pressures and advances in technology.

MRO is an increasingly important element of any programme, as the Defence sector faces pressure to extend the life of their assets, but reduce emissions, all whilst ensuring operational readiness.

Availability is critical for both commercial and military aircraft. Advances in the reliability of aero-engines, aero-systems and avionics, and improved diagnostic capability have, over 50 years, transformed availability.

We're taking our extensive experience and the technology we've developed for our work in the civil aerospace sector, including during the COVID-19 pandemic, to move our Defence clients from reactive to proactive maintenance. Utilising advanced technologies such as digital twins and AI, to enable decision making to improve safety and minimise downtime.

Composites are also being used more and more in the maintenance and repair of aircraft, and we have a deep understanding of the materials and processes involved in reducing the weight and cost of components.

Wherever you are on your MRO journey we have the right skills to help.

[Read about the role of composites in MRO](#)

[> Read more](#)

Consultancy

It takes in-depth technical expertise and cross-sector experience to deliver transformation programmes of national significance.

We provide timely and trustworthy information to business leaders so they can make informed decisions and we ensure the use of digital technologies and new ways of working reduce operational costs and create leaner, more agile organisations that can respond at pace.

We achieve this through:

- › **Business case development** – informing confident, strategic decision making with robust, evidence-based business cases.
- › **Procurement and commercial** – maximising value from the procurement lifecycle and delivering commercial solutions that achieve successful outcomes and drive savings.
- › **Operational analysis and cost modelling** – using advanced analytics methods and models to enable our clients to make better decisions, which improves value for money.
- › **Operational improvement** – ensuring operations and processes are optimised for efficiency, quality, and user experience.
- › **Change and engagement** – manage and embed change, and engage and mobilise stakeholders to bring changes to life.

- › **Utilise and integrate technology** – to make better use of data.
- › **Manage digital transformation programmes** – ensuring transformation goals are achieved.

Project and programme management

We have a track record of driving forward transformation programmes and successfully delivering complex Defence projects that maximise the benefits of public sector investment. Our flexible delivery models and exceptional products and approaches enable us to de-risk our clients' schemes.

We operate under quality and technical assurance processes aligned to industry standards ISO 9001 and AS 9100D. We are also:

- › A founder member of the PRINCE2 methodology, MSP03/07 and Management of Risk framework.
- › A member of the Association for Project Management (APM), Board and corporate member of the APM.
- › Certified SCRUM Masters with significant experience of managing software development projects.





Digital transformation



It's hard to keep up with the current pace of technological change but we ensure clients can navigate the complex and dynamic operating environment. We develop an organisation's digital capabilities systematically, so transformation programmes are delivered successfully – even in complex, regulated or secure environments.

We create a clear strategic vision, digital roadmap, and procurement strategy to achieve sustainable and lasting change. Our analysts will make sure the right processes and procedures are in place to maximise the value of data, whether it's design and in-service data that's being used to inform decisions about maintenance and safety; data from the supply chain that helps to improve efficiency and performance; or high-level information that provides leaders with useful insight into their organisation's operations. We also ensure new technologies and ways of working are embraced and embedded in day-to-day operations through effective change management and engagement activities.

Data intelligence



In a data-driven world, organisations must be able to collect, analyse, share, and store data securely. We enable our clients to develop the processes, skills, tools, and approaches needed to turn their data into an asset. Our end-to-end service is designed to help organisations reach a high level of maturity.

We start by developing bespoke strategies, so our clients understand their entire data ecosystem and put data at the heart of their business strategy. Then we help teams limit the information that's captured to what has value; and identify the best approaches to storing, analysing, and gaining insight from it, so they can make informed strategic and tactical decisions.

Increasingly, data intelligence is being used to track an organisation's carbon footprint and understand the progress it's making towards Net Zero. We'll make sure data delivers timely, intelligent, and actionable insights and that organisation can clearly and credibly report on their carbon impact.

Operating Model Design



Our services cover the full lifecycle of operating model design, from discovery through design, to implementation.

Our structured and flexible approach to understanding our client's needs ensures we are able to successfully design, implement and embed a new operating model, covering the full transformation journey.

Digital Technology

Utilising advanced digital technologies

Organisations must leverage digital technologies to help them respond to the challenges they face. For example, using data visualisation, or virtual and augmented reality, to drive efficiencies and enable faster and more informed decision making. Or digital twins and advanced modelling to manage operational performance and risk and increase the life of their assets. But to deliver a robust and future-proof digital backbone the Defence sector must learn from other large-scale transformations, which identified that integration is important. Our technical and transformation experts give clients the tools and approaches they need to understand their entire IT estate and current processes so they can successfully embed new technologies into existing systems. The result is seamless transition and fully integrated technologies that enable change.

We helped the UK's Ministry of Defence adopt new technologies and ensure information was available to the right people, at the right time, and remained secure.

[> Read more](#)

Artificial Intelligence (AI) – AI has the potential to change the way we work and create new business models or revenue streams, but if organisations are adopting the technology, it must be because they're trying to achieve a particular business goal. Without that focus, implementation will fail. We ensure our clients understand AI's strengths and limitations so they can maximise the benefits of it to their organisation.

Machine Learning (ML) – machine learning is a branch of AI that uses algorithms to help us find patterns in data and make predictions.

Digital Twins – digital twins are already being used in other sectors to track components throughout their lifespan, helping to pinpoint when a component needs to be upgraded or replaced. We deploy digital twins to connect the virtual and physical environments and optimise the design of assets, so they can be built efficiently and running costs can be minimised.



Cyber Resilience

Organisations are benefitting from being better connected but bringing important information, processes and equipment online also puts us at risk.

Our cyber experts work with our clients to develop their cyber resilience. That is, we help them understand the threats to their organisation, put appropriate and proportionate protection in place, and ensure that operations continue, and services can still be delivered in the event of an incident.

We already provide cyber resilience expertise to the critical national infrastructure, government, national security, and Defence sectors. To protect people and an organisation's assets, the journey towards resilience must start with strategy, and then consider the steps that need to be taken to build up defences and maintain resilience. We also ensure clients have a sound understanding of how they can reduce the risks to their supply chains and work with partners to minimise threats.

To ensure cyber security is considered from the outset, or that organisations are secure by design, we provide:

- › Cyber vulnerability investigations (CVIs)
- › Cyber maturity assessments
- › Risk assessment services
- › Vulnerability investigations
- › Behavioural analysis
- › Threat analysis
- › Advice on governance and policies
- › Resilient system architecture designs
- › Security management
- › Auditing and compliance reviews

We'll help you develop cyber resilience.



Understand the threats you face



Implement proportionate protection



Recover quickly from a security breach



Sustainability



We must change our approach to asset and resource management and speed up our adoption of new technologies if we're to reduce the Defence industry's carbon emissions.

The [Intergovernmental Panel on Climate Change](#), in its [latest report](#), has confirmed what many of us feared: that unless there are "immediate, rapid and large-scale reductions in greenhouse gas emissions" we won't be able to reduce the impact of climate change, which will have a potentially devastating effect on people's lives. Fortunately, more than 100 countries have committed to reaching carbon Net Zero, and the UK, U.S. and Canada have pledged to achieve this target no later than 2050.

The Defence sector has, historically, been a major contributor to greenhouse gases and we must find ways to reduce its emissions – before it's too late.

To do this, decisions must be made about the assets to invest in or retire, how vehicles and aircraft can be operated more sustainably and what new behaviours need to be embedded within organisations. We ensure our clients can answer these questions by enabling them to take advantage of new and emerging technologies from other sectors and driving innovation within Defence.

We also enable clients to explore the potential of alternative fuel options and more carefully consider how we source, manufacture, and use resources, while using data to drive our decision making.

We've explored how we can decarbonise energy generation and consumption in depth on our [Engineering Net Zero microsite](#).

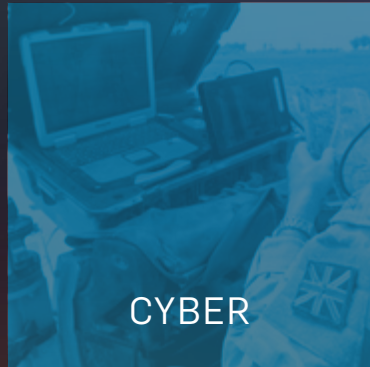
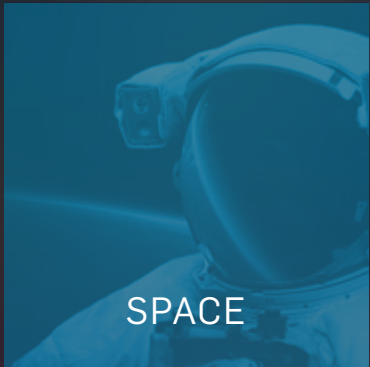


**Engineering
Net Zero**

In partnership with our planet



Domains



Land

We've supported the Armed Forces around the world on many domestic and international land projects over almost a century.

SYSTEM

- Concept Development and Trade Off Analysis
- Concept and trade studies
- Operational analysis (e.g. MCDA)
- Defence Lines of Development (DLOD) assessment and planning
- Programme and Project Management
- Cost modelling
- Benefits assessment
- Bid support (including Red team reviews)

FIREPOWER

- Medium calibre cannon and ammunition
- Self defence weapons
- Vehicle and weapon qualification

ASSET MANAGEMENT

- Integrated Logistics Support
- Supply modelling, LSA, Level of Repair Analysis, codification
- Availability, reliability and maintainability
- Failure analysis (FMEA, FMECA)
- DRACAS
- Maintenance optimization
- Reliability centred Maintenance/Condition Based Maintenance
- Fleet management
- Health and Usage Monitoring Systems
- Facilities and Infrastructure design
- Obsolescence and REACH

SYSTEMS ENGINEERING

- Enterprise architecture, SOSA
- UML, EA, MooD , MODAF, Archimate
- Use Case development
- Requirements development (DOORS)
- Integrated Test, Evaluation and Acceptance Planning
- Trials management

SAFETY AND ENVIRONMENTAL MANAGEMENT

- Safety & Environment Management systems
- Safety & Environment Case development
- HAZID and risk assessment
- Environmental Impact Assessment and Management
- COMAH
- Legislative

PEOPLE AND TRAINING

- Training Needs Analysis, design and development
- Training delivery and Instructor development
- HFI Assessments and optimisation
- Human performance (e.g. JACK modelling)

DEPLOYABLE INFRASTRUCTURE

- Rapid Assessment & Planning for Infrastructure Design Tool
- Deployable infrastructure operational analysis
- Optimised theatre Infrastructure planning
- 3D/VR collaborative design environment
- Generic Base Architecture (DefStan 23 013) compliant design, including SCADA FM services
- Optimisation of key cost driving utilities and services (e.g. water and power)
- Asset and facilities management
- GIS/Geospatial services
- Geomatic survey services

COMMUNICATIONS AND ICT

- Networked data communication with Ethernet connections and switches
- Network Management Systems, VOIP and Intercom installations
- Security and Cyber
- Knowledge of VLAN
- Knowledge of military connectors and harness definition
- Knowledge of AES (Advance Encryption Standards)
- SCADA
- Networked communications
- Military installations and radio installations
- Knowledge of military communication protocols

MODELLING & SIMULATION

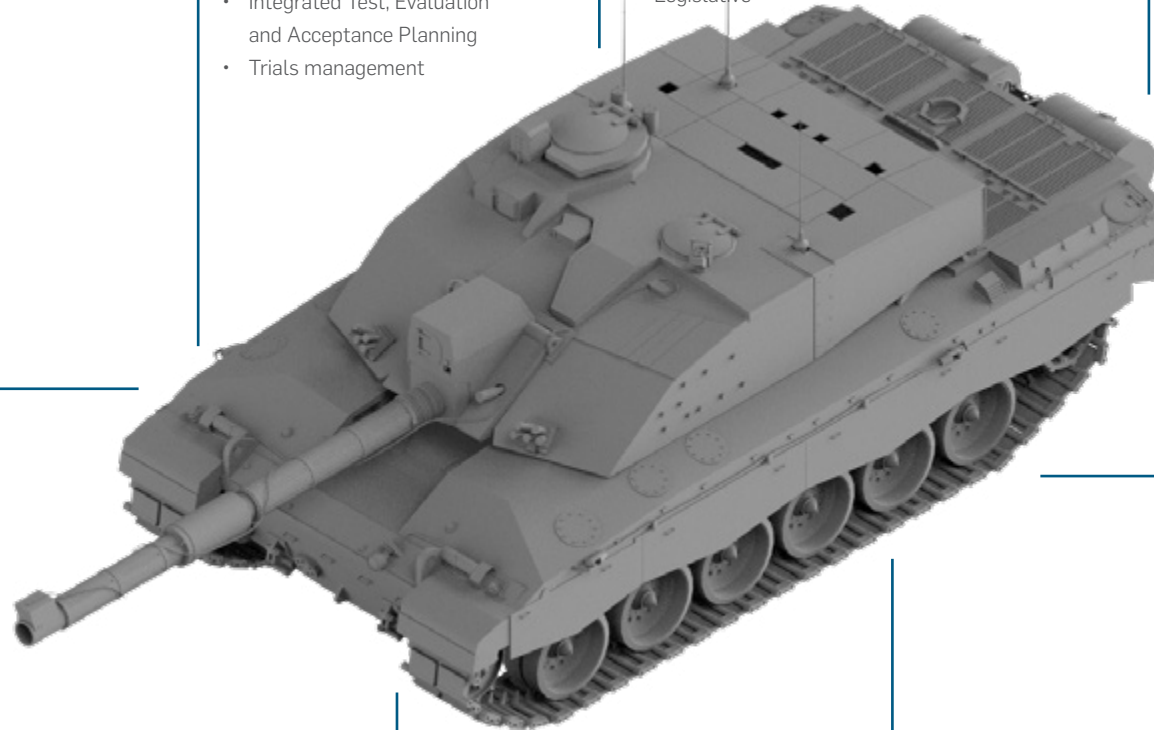
- Blast and ballistic impact simulation including 3D
- CAD and Non-linear Analysis
- Mechanical design and analysis
- Materials modelling
- LIDAR analysis
- Virtual reality Tech Lab

INTEGRATED SURVIVABILITY

- Signature management
- Passive and active protection systems
- Physical protection
- CBRN analysis
- Spall liner design

SYSTEMS INTEGRATION

- Generic Vehicle Architecture
- EMC assessment and mitigation
- Information assurance and cyber vulnerability investigation
- Software design and assurance



Military Air

Supporting airborne defences for nearly a century.

From early concept studies and design through to compliance assessments and Military Airworthiness Reviews, we've helped ensure the highest standards in safety and support to our defence customers.

SAFETY AND ENVIRONMENTAL

- Independent technical evaluation
- Independent airworthiness reviews
- Safety case preparation
- Hazardous materials management
- Legislation compliance
- Probabilistic safety assessment and aircraft airworthiness reviews
- Corporate functional safety management, system design & safety culture assessment
- Detailed safety hazard and risk analysis
- Air safety management training
- Independent safety and environmental assessment/auditing
- Environmental management and assessment

AIRWORTHINESS CERTIFICATION

- Military aircraft certification
- Military aircraft certification of civil derivatives
- Defence standard evaluation and comparison with alternative certification standards
- Safety case preparation

WEAPONS

- Independent safety assurance
- Independent technical evaluation
- Ordnance safety review panel submissions
- Safety case reports
- Hazard identification and assessment

TRAINING AND HUMAN FACTORS

- Training strategies and plans
- Scoping studies
- Training needs analysis (TNA)
- Training design and development
- Training validation, compliance and audit
- Human factors integration (HFI)
- HFI strategies and plans
- Human simulation modelling/error & reliability analysis
- Work-load & anthropometric analysis

INTEGRATED LOGISTICS SUPPORT

- In-service support planning & strategy
- Spares provisioning
- Obsolescence management and REACH compliance services
- Reliability Centred Maintenance (RCM).
- Supply chain and availability modelling
- Asset management
- FMECA and LORA studies
- Through-life cost modelling

AVAILABILITY, REPAIRABILITY AND MAINTENANCE

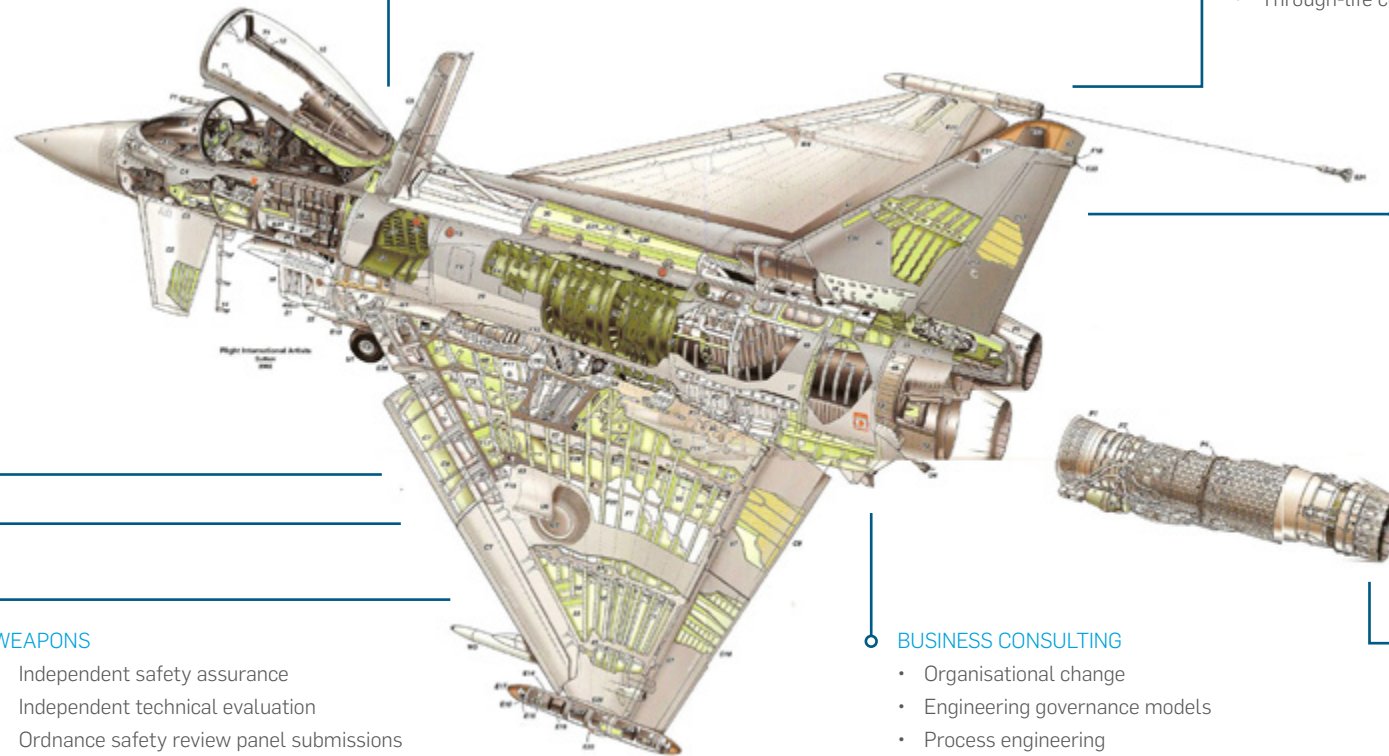
- Reliability and maintainability strategy
- Sensitivity analysis
- Maintenance and resource planning
- Cost analysis
- Fault tree analysis
- Options studies

BUSINESS CONSULTING

- Organisational change
- Engineering governance models
- Process engineering
- Engineering authority
- Skills and capability development strategies

REQUIREMENTS ENGINEERING

- Requirements engineering – URD, SRD
- Options analysis
- Requirements trades



Civil Air

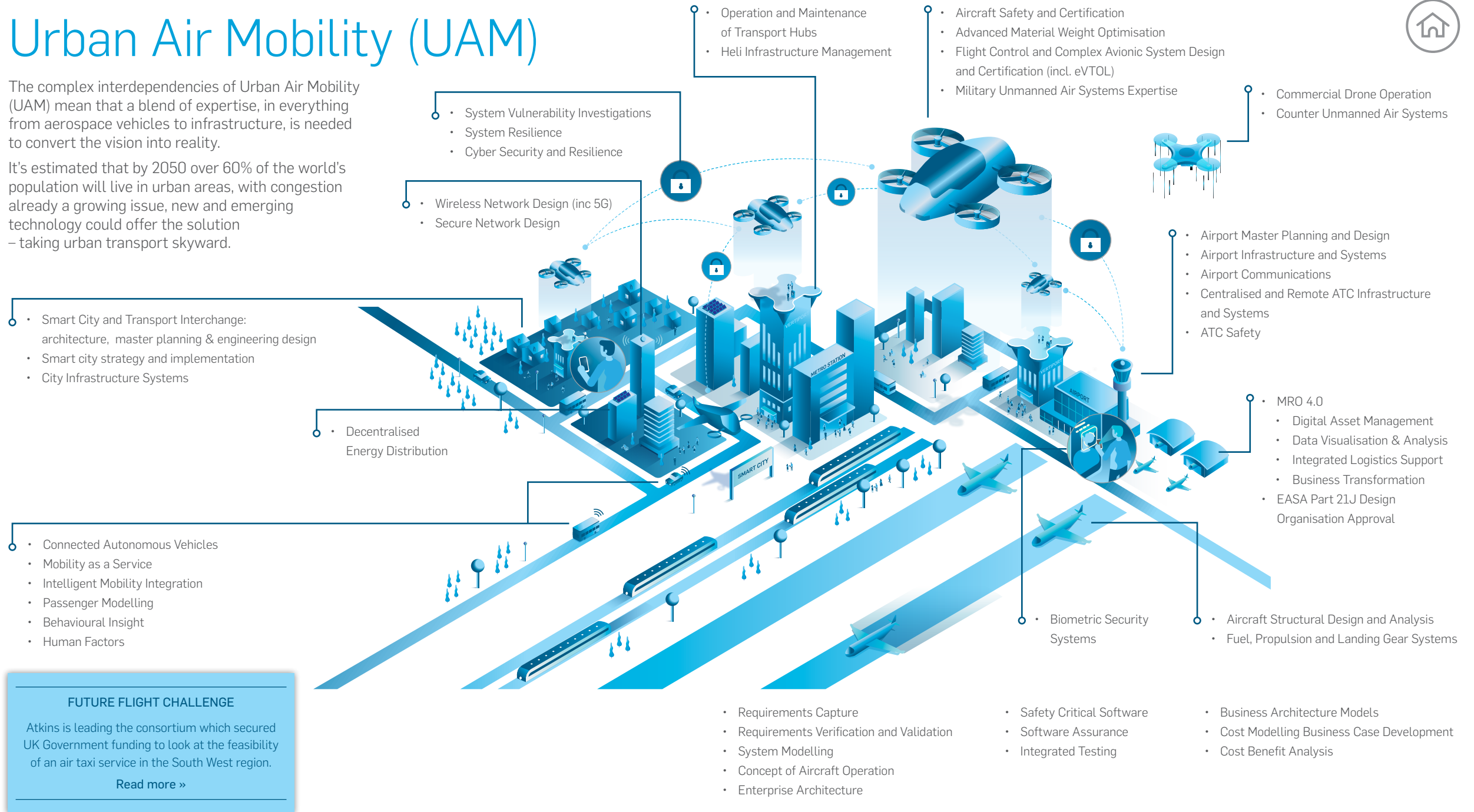
Operating at the forefront of aerospace innovation for more than 30 years, we've utilised rapid advances in technology to reduced aircraft manufacturing and operating costs while extending the life of our clients' fleets.



Urban Air Mobility (UAM)

The complex interdependencies of Urban Air Mobility (UAM) mean that a blend of expertise, in everything from aerospace vehicles to infrastructure, is needed to convert the vision into reality.

It's estimated that by 2050 over 60% of the world's population will live in urban areas, with congestion already a growing issue, new and emerging technology could offer the solution – taking urban transport skyward.



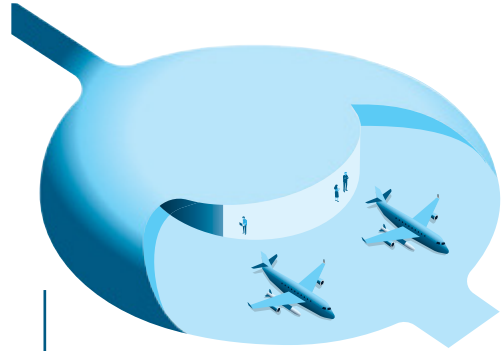
FUTURE FLIGHT CHALLENGE

Atkins is leading the consortium which secured UK Government funding to look at the feasibility of an air taxi service in the South West region.

[Read more »](#)

Space

The missions of tomorrow require the convergence of the aerospace, infrastructure, communications and data science worlds.



SPACEPORTS

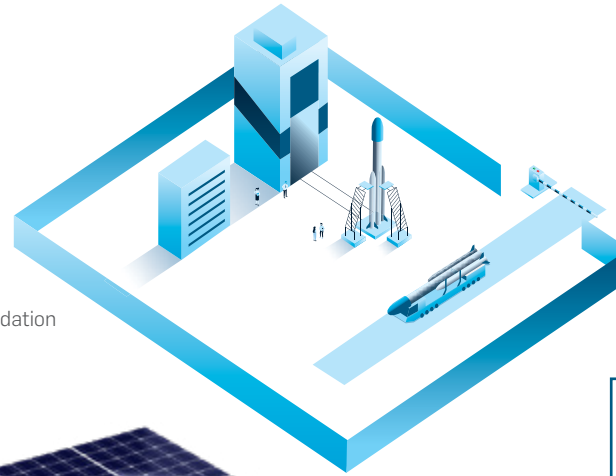
- Airport planning and terminal design
- Architecture
- Engineering services for runways and launchpads
- Civil Engineering and construction
- Security systems
- Noise and acoustics
- Ecological survey
- Air Traffic Management
- Facilities management
- Master planning and terminal design
- Engineering runways and launchpads
- Biometric security

SOFTWARE

- Critical software development and verification
- Embedded SW for satellites and launchers
- Simulation SW development
- Web SW development and support for military ground systems

AIRCRAFT/LAUNCH VEHICLES

- Horizontal and Vertical take-off
- Airframe engineering
- Landing Gear
- Fuel systems
- Requirements Verification & Validation
- Safety
- Certification analysis

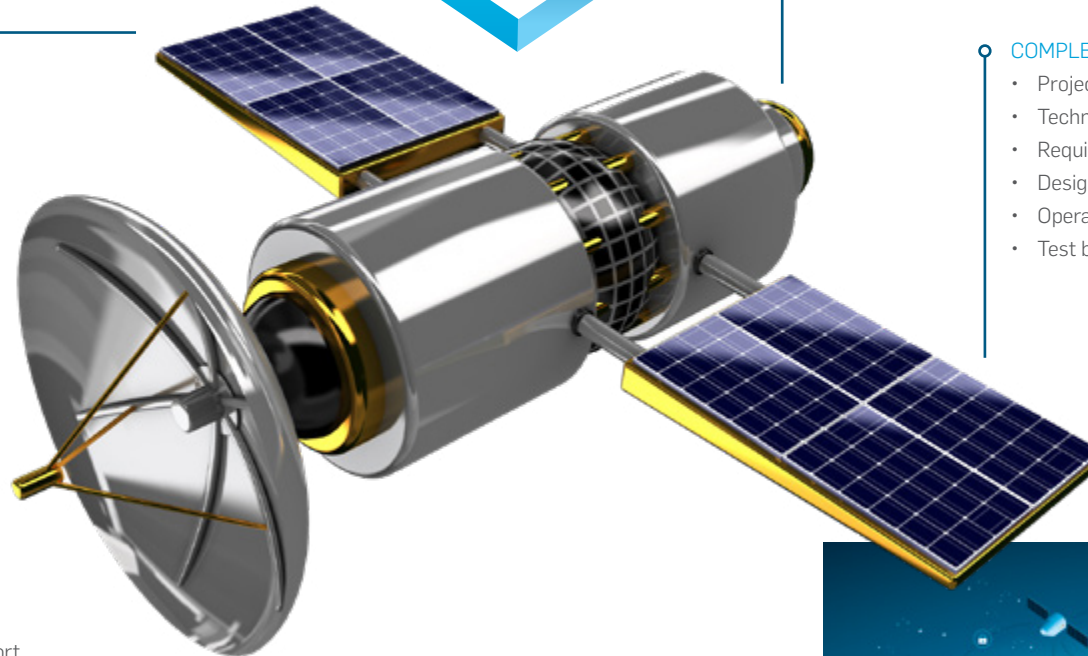


SATELLITES

- Spacecraft, instruments and equipment
- Mechanical design and analysis
- Thermal analysis
- Finite Element Analysis
- Advanced composite materials
- Systems and software engineering
- Test definition, support and evaluation

COMPLEX ENGINEERING

- Project management
- Technical management
- Requirements engineering
- Design optimisation
- Operations for Earth observation systems
- Test bench design and realisation



BUSINESS CONSULTING

- Satellite commercial models
- Service incentivisation
- Procurement strategy and option development



Cyber and Digital Systems

The cyber domain cuts across all others in the Defence sector and has become just as important as the other physical domains.

In an era of increasing digitalisation and cyber threat, we need to adopt a more agile approach to delivering the latest digital technologies which includes focussing on the people, process and data and security. This enables our clients to have resilient and sustainable digital capabilities that provide them with a digital advantage.

We're able to bring our experience from other sectors where we've helped our clients to remain cyber resilient, whilst realising the value of digital systems, with examples such as: world-leading digital biometric security at Heathrow Airport, Digital Twins of Critical National Infrastructure and embedded innovative technologies for one of the world's largest fully automated commuter rail lines.

DIGITAL SUSTAINABILITY

- Transformation, change & engagement
- Digital strategy & operating models
- Business case development
- Operational analysis & cost modelling
- Business change management
- Operational improvement & agility
- Benefits strategy & management
- Organisational culture development
- Programme delivery
- Digital asset management – including digital twins
- Availability, reliability & maintainability
- Safety critical software and systems assurance
- Software operational technology & industrial control systems

DIGITAL ADVANTAGE

- Technology leadership & business analysis
- Business systems and enterprise architecture
- Dataarchitecture and governance
- Platform and technology solutions
- Digital infrastructure
- Data science and visualisation
- Service architecture and integration
- Systems engineering
- Communications and networks design and assurance
- Site coordinating installation design Authority support
- Full lifecycle software development

CYBER RESILIENCE

- Cyber security
- Awareness, behaviour and culture
- Cyber Vulnerability Investigations
- Cyber risk management
- Security operations
- Secure by Design
- Security architecture
- Data & analytics
- Strategy and road mapping
- Security assurance
- Training solutions and human factors



Maritime Support Infrastructure

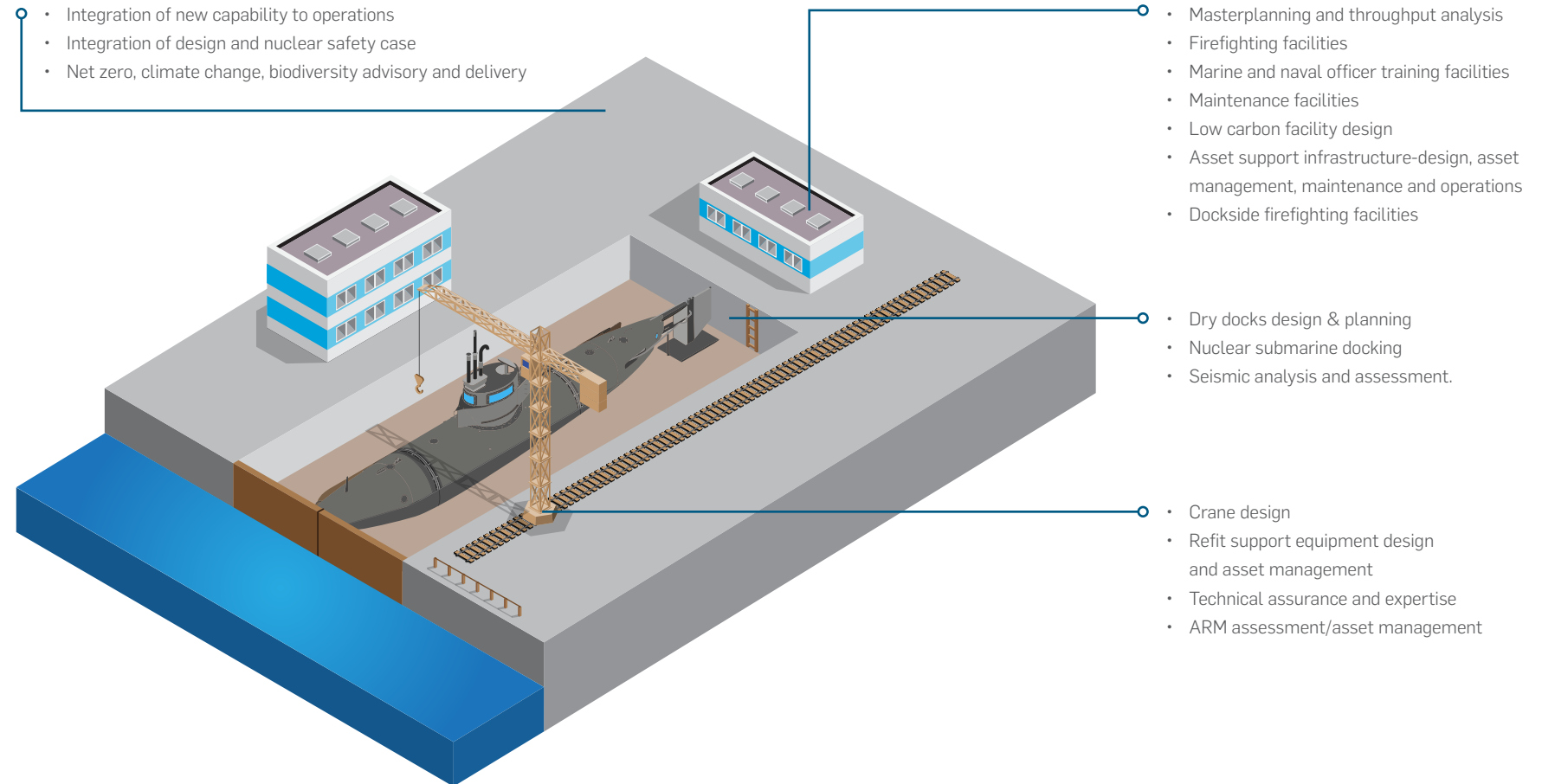


Our experience ranges from highly-specialised modifications in nuclear submarine facilities, to bathometric works and dredging dockyards, to designing entirely new naval facilities –whilst also encompassing the entire range of support facilities, infrastructure, security, integrated logistics support (ILS) and communications.

We work closely with our clients to deliver solutions and facilities that meet the operational and environmental requirements of the future while improving asset effectiveness.

We understand first-hand the complexities of working within naval bases and have extensive experience of working with civilian port authorities.

Many of the naval bases that we work with in the UK are of historic interest and require specialist conservation, for example at Portsmouth, Plymouth and the Royal Britannia Naval College at Dartmouth. Whilst in Canada, we help naval and marine organizations as they patrol one of the longest shorelines in the world, with limited resources and often operating in challenging environments, maintaining high reliability and availability is critical.



Maritime Platforms



Atkins is the design partner of choice and is uniquely positioned to successfully enable transformation, whilst also improving and assuring programme performance.

STRESS ANALYSIS

- Assessments of primary circuit components on the Nuclear Steam Raising Plant (NSRP)
- Support to Scoping and Planning Reviews (SPR), Structural Technical Analysis Reviews (STAR) and Independent Technical Review (ITR) processes
- Finite element assessments (ABAQUS, ANSYS)
- Fatigue assessments of components subjected to thermal and pressure loads
- Fracture assessments using R-Code
- Shock assessment

SYSTEM DESIGN CAPABILITY

- Generation of system concept studies for future plant arrangements
- Equipment reduction/simplification of existing systems
- Resolution of Design Review Actions with respect to system designs
- Independent Technical Assessment and verification of system designs
- Plant Lifetime Extension Studies
- Review of extant Safety Substantiation Reports
- Nuclear Plant As Low As Reasonably Practicable (ALARP) Studies

MECHANICAL HANDLING

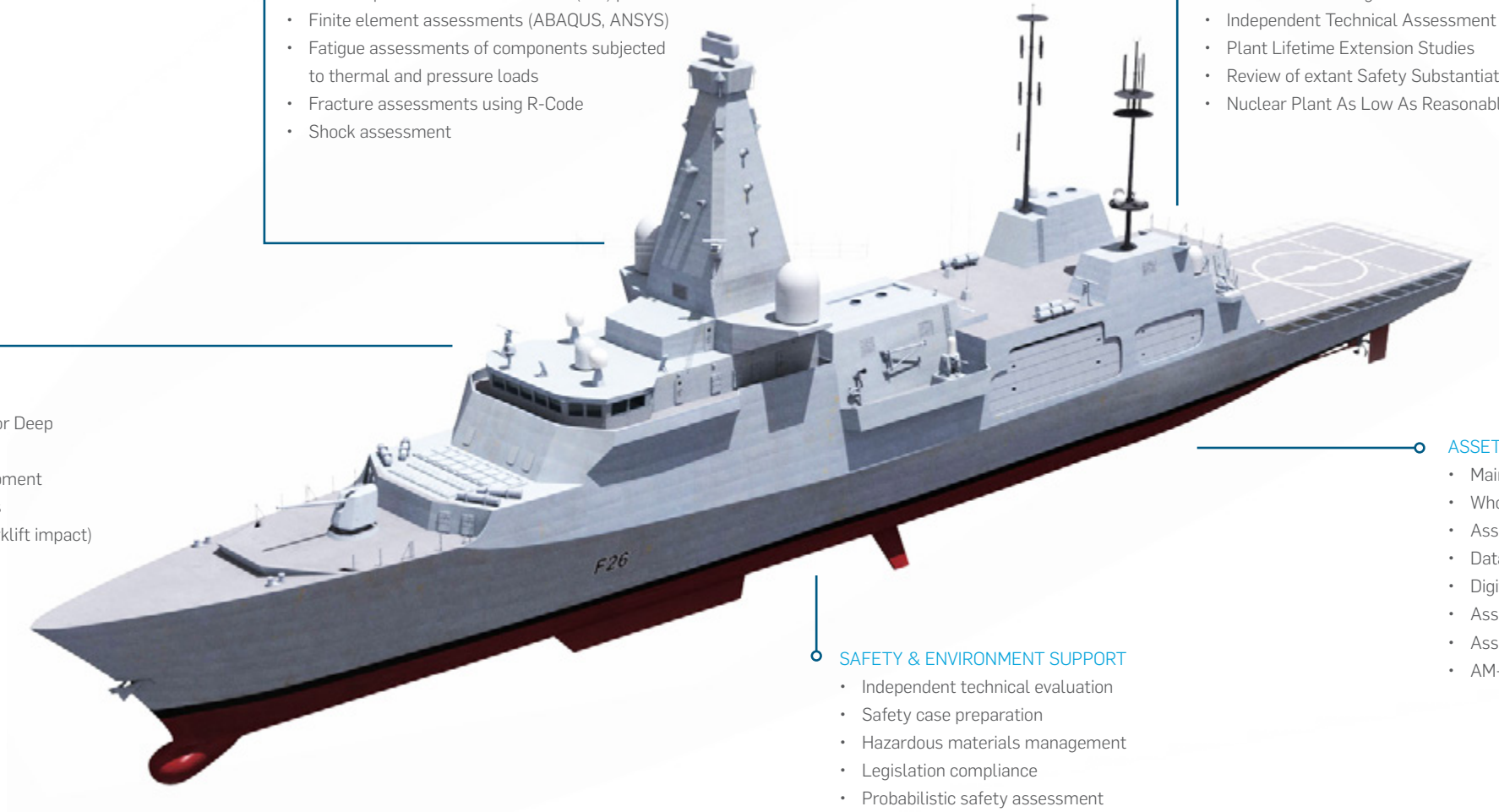
- Propulsor removal concept design for Deep
- Maintenance Period (DMP)
- Design of power module lifting equipment
- Design of hydrofoil removal systems
- Impact assessments (drop loads, forklift impact)

ASSET MANAGEMENT

- Maintenance Optimisation
- Whole-Life Optimisation
- Asset Investment Optimisation
- Data Exploitation
- Digital-AM Systems Integration
- Asset Intelligence P-as-a-S
- Asset Management Advisory
- AM-as-a-S (Managed Service)

SAFETY & ENVIRONMENT SUPPORT

- Independent technical evaluation
- Safety case preparation
- Hazardous materials management
- Legislation compliance
- Probabilistic safety assessment
- Corporate functional safety management, system design & safety culture assessment
- Detailed safety hazard and risk analysis training
- Independent safety and environmental assessment



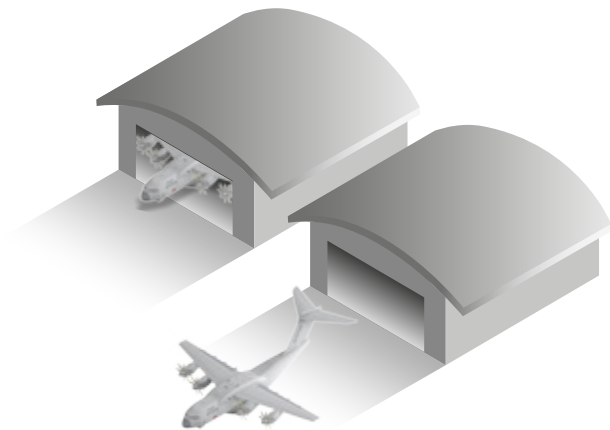
Operational Infrastructure and Military Facilities

Complex defence infrastructure programmes that deliver real added value from cradle to grave.

Our work across everything from residential to aviation this has given us a depth of knowledge and a clear understanding of best practice and how to approach large scale, complex infrastructure projects.

We can support the development and delivery of all types of Defence infrastructure projects, delivery value across all stages of a programme and through operational life.

Through our understanding and expertise of Defence estates we are enabling our clients to maximise their assets and make informed investment decisions around capital expenditure, while working towards a Net Zero future.



CONCEPT DESIGN & DETAILED DESIGN

- Master planning
- Architecture design
- Digital design tools and platforms – BIM level 2
- Secure facility design

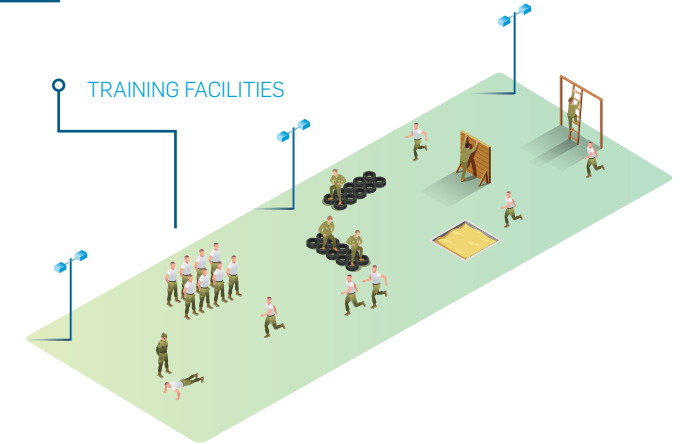
CONSTRUCTION

- Project and programme management
- Supplier validation
- Cost monitoring

APPROVALS & PROCUREMENT

- Business case development
- Information management
- Cost modelling

TRAINING FACILITIES



STRATEGIC ASSET MANAGEMENT

- Estate optimisation
- Energy management
- Through life planning

COMMISSIONING

- Life cycle auditing
- Performance monitoring and reporting
- Operational training

DIGITISING MILITARY ESTATES

- Digital twins
- Digital design and engineering
- Construction rehearsal

THROUGH LIFE OPERATIONS

- Integrated logistics support (ILS)
- Asset management
- Through life support
- Life extension programmes

NET ZERO ENGINEERING

- Decarbonising defence estates
- Carbon calculation and offset strategies
- Alternative energy sources
- Energy management strategies



Equality, Diversity, and Inclusion

We want to ensure that everyone that works for us and partners with us feels respected and empowered.

Successful organisations employ and empower people who have a different perspectives, new ideas, varied experiences, or novel ways of thinking about problems. And the benefits of their diverse and inclusive cultures are well documented. Several global management consultancies have been highlighting the positive impact on profitability, teamwork, and innovation for years.

We're working to ensure our people, organisation, and the wider Defence industry benefit from the robust equality, diversity, and inclusion policies that we've put in place and the steps we're taking to bring them to life.

In the UK, we're proud signatories of the [Women in Aviation and Aerospace Charter](#) and the [Women in Defence Charter](#), which were signed at DSEI 2019. By supporting these initiatives, we're demonstrating our commitment to putting strict targets in place to make our aviation, aerospace, and Defence teams more gender-diverse and provide fair opportunities for women to succeed at the highest levels.

“Defence is driving a transformation agenda. Transformation requires innovation, and innovation depends on diversity and inclusion.”

Dave Clark, Aerospace and Defence Market Director, UK

Why a career in engineering is a great choice for women

> [Watch here](#)



Partnering with the Armed Forces

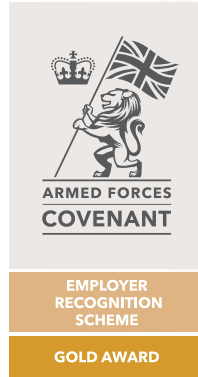


We're helping service leavers and reservists settle into civilian life with our advocacy programme.

Our [Partnering with the Armed Forces](#) scheme in the UK is part of our wider equality, diversity, and inclusion initiatives. It helps ex-military and reserve team members make the transition to civilian life and promotes engagement with the wider Armed Forces community. Service leavers and reservists make an important contribution to our team. They have invaluable skills and experience, for example, leadership, stakeholder management, problem-solving, teamwork and specialist engineering expertise, as well as different ways of overcoming challenges.

Their input is vital to our ability to deliver large, complex infrastructure projects.

To demonstrate our commitment to the UK Armed Forces community, we've been a signatory of the Armed Forces Covenant since 2014, and we've re-validated our Gold Award under the Ministry of Defence's Employer Recognition Scheme, which we've held since 2015.



Training



Our Technical Training Academy offers a portfolio of world-leading training courses delivered by our experts.

We offer engaging and inspirational courses to suit professionals at all levels. They're designed to help people develop the knowledge, skills, and competencies they need to work in safety-critical industries.

All courses are designed and delivered by our experts and in line with industry best practice. Training events are held in modern facilities and can also be offered as in-company sessions. Clients who would like us to develop bespoke training courses to meet their individual needs are welcome to get in touch.

Our current courses include:

- › Safety & Environmental Management Training
- › Maritime Environmental Management Training
- › Air Safety Management Training
- › The Development and Certification of Complex Software Intensive Avionics Systems
- › Defence CIDA training course

To learn more, please contact:

technical.training@atkinsglobal.com

AtkinsCIDATrainer@atkinsglobal.com



Further Reading



Thought leadership



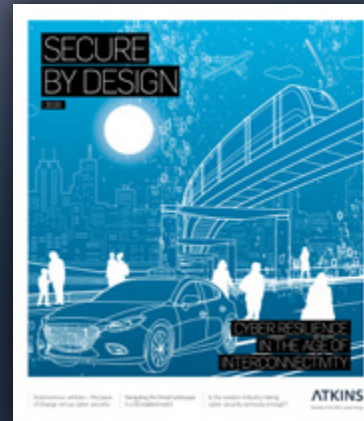
Transformation in Defence

Thought leadership magazine exploring some of the key issues in the Defence sector in 2021 and 2019.



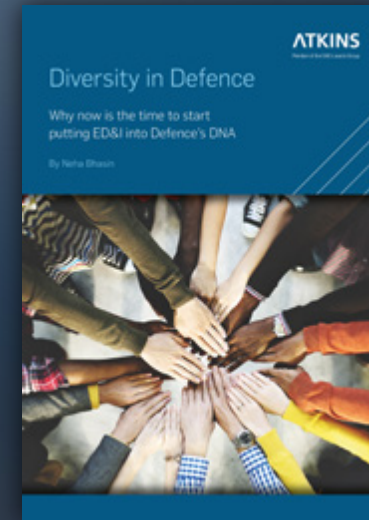
Future of Flight 2020

Magazine offers an insight into the technologies and approaches that are changing the aerospace industry.



Secure by Design 2020

Our annual magazine looking at the evolving cyber threats and how we protect our Critical National Infrastructure.



Diversity in Defence



Why aerospace must consider production in its move towards Net Zero



Fuelling the future towards sustainable aviation

All of our thought leadership articles can be read at [Beyond Engineering](#) here »



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