ATKINS
Member of the SNC-Lavalin Group

Delivering borders of the future

Integrating world class security
and seamless border journeys

GET STARTED

The line that clearly defined the UK border has become increasingly blurred. Advances in technology have enabled us to expand our physical borders into the virtual world. So much so, that the process of entering or leaving the UK often starts long before we reach an air, rail or maritime port.

This merging of the physical and digital creates new opportunities for the organisations that manage our border, especially as we seek to reinforce the UK's position as a world-class trading, visitor, education and investment destination. And yet, progress has to be balanced with the need to protect our people, assets and systems from an increasing and evolving range of threats.

Atkins, a member of the SNC-Lavalin group, has been helping authorities, Governments and operators navigate the complex and critical border environment for more than 30 years. We're one of the world's most respected design, engineering and project management consultancies, and our knowledge and experience span the rail, aerospace, maritime, defence, highways, and physical and cyber security sectors.

Delivering borders of the future

We're supporting the organisations that enable the flow of people and goods across our border.

Digital Twin
We improve operational effectiveness, reporting and control by creating digital twins of infrastructure and leveraging our world leading digital engineering and Building Information Management expertise. Drawing on our deep experience of information management and suite of digital tools we can help you build and deliver the benefits of a digital twin.

Sustainability planning
Ports need detailed plans for sustainability, adopting green energy sources, providing facilities green shipping, and testing and delivering green innovation.

Integrated security
We integrate the latest cargo and baggage scanning security with advanced biometric identification and authentication to improve the level of security and provide regulatory compliance.

Digital integration
We integrate digital systems and operations for Government ensuring the best intelligence is made available to maintain security and drive efficiency. We work with new and legacy technology to maximise ROI.

Government
We help governments plan for the future by developing new places and strengthening existing connections to promote economic development and help improve people's quality of life.

Seamless traveller journey
Our teams are enabling seamless passenger journeys to improve people's experience at the border. We integrate biometric technology and use modelling to optimise passenger and cargo flow.

Data
Data is key to the future of ports, it should underpin all port operations and expansion plans. Data can offer a huge range of benefits to port customers, as it is shared and integrated with their processes. We can help with data strategy, standards and integration to maximise the benefits to your operation and customers.

Integrated transport
With data driven geospatial modelling we make sure borders facilitate and don't delay travel and trade.

Critical infrastructure
We work to ensure Critical National Infrastructure is resilient to cyber and physical threats to keep our international gateways open.

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METRO STATION

AIRPORT

PASSPORT CONTROL

MARKET

TRAIN STATION
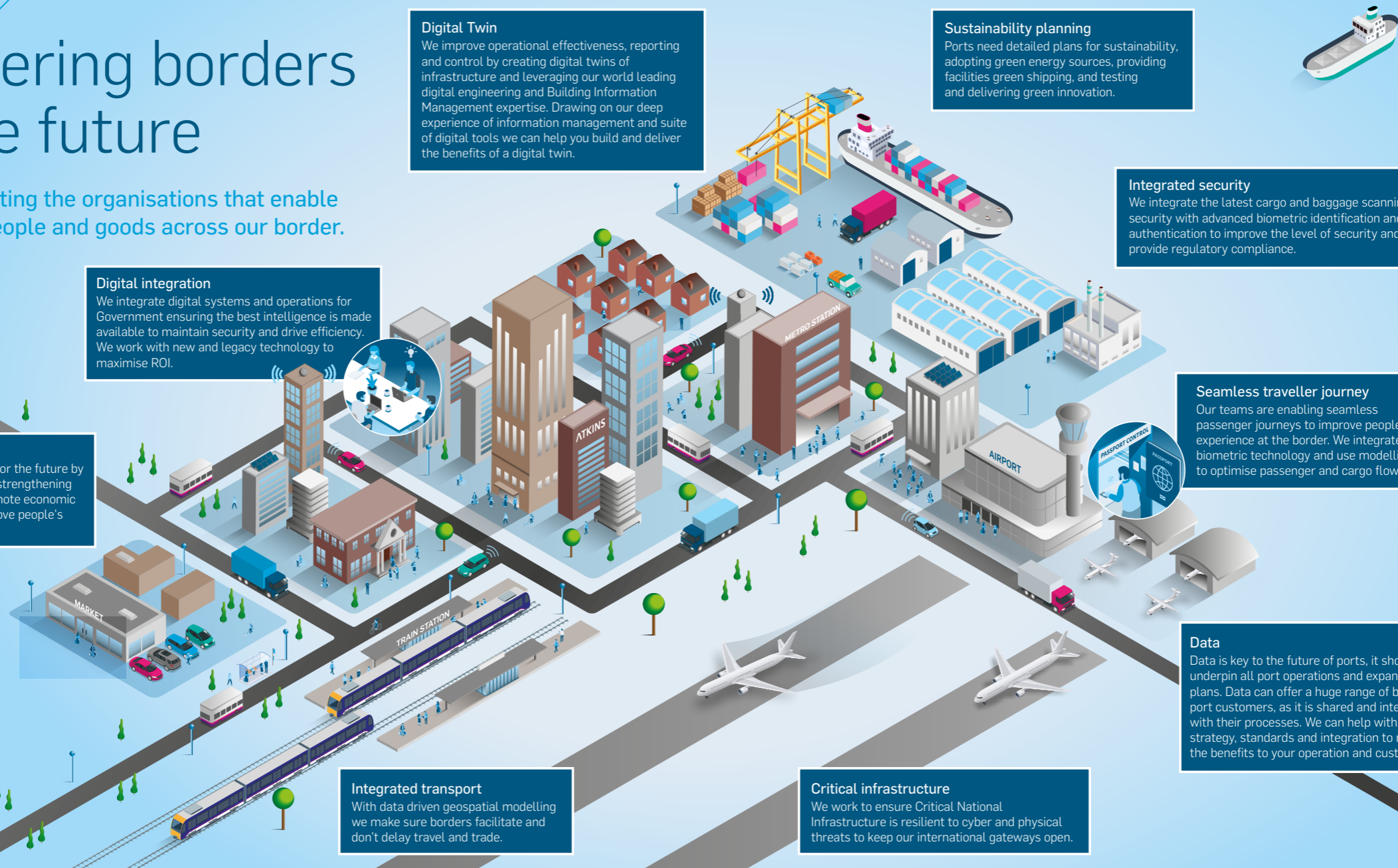
A secure border

We're using the breadth and depth of our expertise to support the organisations that are securing and managing our borders.

Many of the organisations that work at our international gateways perform a critical role – they secure our borders – and they're under more pressure than ever before. We're uniquely placed to help them identify and combat attempts to subvert border controls. Our teams will work alongside organisations to model passenger and cargo movements and put the right interventions and alerts in place to detect and address threats. We're the largest supplier of client-side advisory services to the UK's security and intelligence sector, and we work closely with Heathrow Airport Limited and a number of other air and sea ports.

> Passenger, cargo and traffic flow modelling.

> The integration of identification, and cargo and baggage scanning technology.

> Enabling intelligent risk management.

> Developing resilience in critical operating environments.

Resilient physical and digital operations

Our air, rail, and maritime ports are complex, fast-moving and critical environments that are sensitive to disruption. Bad weather can bring activity to a sudden halt and, with the increasing reliance on digital connectivity, we are reliant on the flow of data across Cyber space, which exposes us to greater risk.

We support organisations throughout the life cycle of a project – helping you design-in resilience from the outset or mitigate risk and minimise downtime in established operations. We'll use our experience of working on some of the UK's largest and most complex digital and infrastructure projects to help you protect physical assets and ensure digital systems remain operational in the event of an attack. We're a recognised supplier of cyber security services to government, including the Ministry of Defence.

› Protecting your physical and digital assets, including through Critical Vulnerability Investigations.

› Engineering and cyber security expertise.

› Business continuity planning.

Enhanced passenger experience

A record number of people crossed the UK border in 2019. First impressions of the UK count and that's why we're working with high profile transport operators to create a seamless passenger experience.

They choose to work with us because of our in-depth understanding of the border environment and regulations, which drives our ability to design, implement and deploy advanced technologies, including automated biometric identity management solutions. We've successfully integrated new and legacy systems and processes, and introduced them into some of the busiest environments in the world.

› Designing for a seamless passenger experience.

› Solutions that enable faster identification and authentication.

› Faster and more secure processing of cargo and luggage.

› Successfully embedding new processes and systems that help to enhance the UK's appeal as a trade and visitor destination.

Efficient cargo handling

The benefits of quick and secure identification and processing extend to cargo too. Advances in technology can enable, detailed supply chain information and seamless tracking, which means authorities can improve targeting of checks at, or away from, the border and reduce delays for low risk cargo.

Through our global experience and work with international regulatory authorities we can help to design and deliver systems that will enable this straight-through processing and help to protect and increase revenue by making declaration and payment easier. We can design your target operating model to facilitate stronger collaboration and information sharing between departments or organisations, and help you invest in the right technology, delivering better access to intelligence and greater insight.

› Target operating model development.

› Design of systems to track materials and goods through the manufacture process through to export and make declaration and payment easier.

› Design of data standards and interfaces to integrate government and supply chain data.

Improved data management

Authorities at the border aren't just managing more people and cargo, they're also collecting and analysing more data. Our teams will help to maximise the benefits of emerging technologies, including artificial intelligence and machine learning, without putting sensitive information at risk.

We'll work with you to ensure compliance with General Data Protection Regulation (GDPR) and the Network and Information Systems (NIS) Regulations for the operators of our critical national infrastructure. We'll help you focus investment and interventions in the right areas, so you benefit from greater efficiency, and work within the legislation to maximise security.

› Maintaining compliance with important legislation, including GDPR and NIS Regulations.

› Transforming organisations to generate intelligence from meaningful data

› Agile discovery and development of data and risk services in high security environments.

Future proofing

The way we manage the border is changing. Changes in the economic or political landscape, technological advancements and societal opinions all affect operations. We'll help you ensure you have the flexibility to function effectively even in times of uncertainty.

The increasing use of technology, including digital twins, can help you navigate change and accommodate growth. We can test a large number of scenarios in a virtual environment before making changes to the physical asset or infrastructure. We can also help you see how disruption, including automation, will impact on your operations and revenue.

› Digital twin technology to help you understand the impact of your decisions on existing infrastructure.

› Change programme planning and management.

Advanced technical solutions

Automation can help to improve security and make it quicker and easier to carry out identity checks at the border. We've developed biometric security management software, we call it our Identity Management Toolkit (IDMT), to automate this security process.

Our identity management software installed at Heathrow Airport checks 40 million passengers per year and has been praised for its simplicity and the efficiencies it has delivered.

IDMT is design to integrate with a wider range of the latest and legacy technology, integrating systems to increase the accuracy of ID checks and improving the efficiency of business processes, leading to more positive identification of fraudulent and non fraudulent identities.

› The use of biometric sensors reduces instances of human error, and saves time and money.

› It works seamlessly with existing exit control systems.

› Approved for use by UK Border Force.

Freeport planning and design

Border crossing points are closely connected to the communities that surround them, and as the economic environment changes, these places and spaces also have to be re-invented and rejuvenated.

The UK Government believes freeports will help our recovery from the COVID-19 pandemic and contribute to the levelling up agenda, bringing new jobs, investment and hotbeds of innovation to the areas surrounding our air, rail and maritime ports. We'll help you plan and design all aspects of the freeport including its strategy, business organisation, business case, infrastructure masterplan, detailed design, and Net Zero and social value initiatives.

We'll work with a wide range of stakeholders to draw together infrastructure, digital, transport, skill and housing plans into a single strategy that delivers the freeport vision and explore the possibilities of new industries, for example, Net Zero technologies. Our strategic thinking, programme management and design heritage experience will help you bring your vision for the area to life in a way that enriches the region and promotes social cohesion.

- › Strategy and master planning
- › Business case and planning
- › Programme and project management
- › Net Zero analysis and design

The border
of the future

The way we think about our international gateways is being transformed – by political, economic and environmental factors, and by technology. At Atkins, we believe in embracing innovation to meet the challenges of tomorrow and to ensure we continue to evolve as a trading and visitor destination.

But we also know we have to balance progress against the risks new processes and technologies expose us to. We have decades of experience of applying new ideas and delivering without disruption in complex and critical environments. That means we can help you ensure the promise of technology is indeed reflected in the real world.

Get in touch

Richard Gutsell
Client Director at Atkins and a Borders and Identity Specialist

EMAIL

Richard is a Client Director and a Borders and Identity Management specialist with a breadth of experience across Government and Commercial sectors. For 20 years Richard has been enabling organisations in the security sector to deliver their core missions whilst providing the appropriate level of security and resilience.

Richard has worked on some of the most exciting Borders and Identity projects in the UK and Internationally and is passionate about delivering borders which enable seamless trade and travel whilst improving security and resilience.

John Drever
Technical Director for Future Borders at Atkins

EMAIL

John is Technical Director for Future Borders in Atkins. He has a multidisciplinary background in consultancy, project management, enterprise architecture and innovation for mission critical systems.

In his 30 year career John has focussed on complex projects ranging from border systems to military planning and intelligence and fighter aircraft.

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More information:

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