



Roke

Part of the
Chemring Group



Digital resilience

a partnership between Ricardo and Roke

A new approach to cyber security

- Technology is reinventing our urban environment, changing the way we design and maintain complex and integrated transport networks.
- Digital resilience is a new approach for managing digital risk in connected transport systems.
- Roke and Ricardo are working with Bombardier to assure the first “NIS compliant” train.

Passenger safety and system reliability sit at the heart of a rail network. Now, digital technology is driving optimisation across the railway industry, providing opportunities to manage operations better and enhance passenger services. Everything from signalling through to ticketing and passenger information systems rely on networks and information systems. However, the increased integration, connectivity and automation increases the need to secure these systems against attack.

So, how are Roke and Ricardo helping to improve the digital resilience of the railways? Working with Bombardier, we are conducting a full cyber risk assessment of their **AVENTRA** platform. Three of the UK's largest railway franchises use this platform to ensure resilient rolling stock for Bombardier and their customers.

Roke are cyber security experts and Ricardo have a deep understanding and experience of railways. Together, we are ideal partners to support clients in linking digital risk to system design and a secure development lifecycle including operations and maintenance. Digital resilience recognises the sheer complexity of today's transport infrastructure and ensures that we always have one eye on the economic realities of the railway industry.

Test and fix

We map your cyber threats, investigate and identify vulnerabilities, assess potential impacts and prioritise business risks, planning appropriate mitigations to deliver digital resilience.

Secure by design

We quantify your business goals, integrating digital resilience into vehicle design, assessing risks, setting security priorities for systems engineering and supporting secure development lifecycle.

Assurance

We define what digital resilience means for your business, prioritising the greatest risks for immediate action and making longer term plans that test systems against defined metrics.

About our partnership

Roke and Ricardo bring together 160 years of innovative engineering experience. Our unparalleled combination of expertise in secure, resilient systems, railway engineering and certification means, together, we are ideal partners to support the whole rail industry, as manufacturers and operators become digitally resilient.

BOMBARDIER

Find out how we can support your operations:
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