As the volume, variety and velocity of data associated with military platforms continues to grow exponentially, the value and importance we place on this data is also rising sharply. Accessing and sharing this data securely becomes increasingly important to enable accurate and informed decision making. This is particularly the case in the Defence & National Security (D&NS) sector, where partners collaborate across boundaries on programmes of national and international importance.

Fujitsu understands this rising importance of data. But we also acknowledge the unique challenges faced in the military environment as new military systems are data rich but remain non-interoperable and are neither designed with, nor supported by, a global data management environment. This results in there being no coherent view of the data available, caused by 'gaps':

- Within the individual programmes between the various elements of industry and government
- At the edge between national or legacy systems and the industry and government platform support solutions.
Co-creation underpins data integration vision

Utilising Fujitsu global capability with a presence on every continent, along with our extensive business, technical and security expertise, we are the only IT partner capable of delivering this comprehensive data integration vision. The Fujitsu approach is underpinned by an innovative co-creation strategy that pulls together an evolving ecosystem of collaborative inputs and insights from all related stakeholders. This enables the secure integration of programme-specific data platforms with national data platforms, as required.

Where possible, we will always harness and integrate existing capabilities, but can also offer our own leading-edge capabilities, if required, whilst maintaining a holistic enterprise perspective. The ultimate aim being to create a tailored integrated data management environment that encourages interoperability between data consumers and meets client’s specific critical knowledge needs whilst minimising the need for standalone systems and apps.

Creating and integrating a secure data management environment

The unique Fujitsu approach provides any programme with information to support decision-making by creating and integrating a data management environment that can be accessed by users in any location, on any device. Depending on the client’s needs the direct benefits can be quantified in terms of:

- **Efficiency**
  Reduced manual workload through increased automation capabilities in both data collection and decision-making

- **Effectiveness**
  Easier access to timely and accurate data allows quicker, more pro-active management

- **Economics**
  Improved data access and quality for analysis and modelling informs both operational and procurement decisions.

At the highest level, this approach can be broken down into four coherent stages:

1. **Connect and Integrate the Data**
2. **Store and Protect the Data**
3. **Visualise and Share the Data**
4. **Analyse and Model the Data**
Stage 1 - Connect and Integrate the Data

The volume and array of data being created in the digital age is increasing at a rapid rate. So, the first stage of the process identifies the most important data that is required to support decision makers and identify where this data resides. Once the data requirements have been established and prioritised, we can build a secure network to establish the required connectivity between the relevant stakeholders and their various locations, both at programme and national level.

Data integration can be provided across all security levels with interfaces into existing legacy solutions, using innovative Internet of Things (IoT) platform tools, such as the Fujitsu iMotion™ capability. As the provider of one of the largest secure defence network services anywhere in the world, Fujitsu is ideally placed to provide high-speed software defined network connectivity, harnessing best-in-class tools.

Stage 2 - Store and Protect the Data

We then need to provide a secure data hosting and storage solution at the requisite security levels dictated by the programme, ensuring adequate cyber protection for the data environment. Our approach also provides sovereign data protection capability while providing a suitable data archive solution which allows timely recall. Drawing on the Fujitsu global experience of delivering cloud-based technologies, and based on our next generation digital infrastructure, the Fujitsu High Security Cloud Service gives an organisation the digital transformation platform they demand, in highly secure environments.

The service enables the migration of legacy environments to a modern cloud-based infrastructure, delivering the benefits of a more efficient and effective hosting environment.

Stage 3 - Visualise and Share the Data

Creating the capability to visualise and share the data provides all verified users with real-time data access from a single source of truth, irrespective of location or device. With this access, users can analyse the data structure to allow drill down, investigation and interrogation of the data, commensurate with their role and responsibility and associated security clearance. We can also identify what outgoing legal or national data requirements need to be satisfied, relating to the agencies or stakeholders involved with a specific program. Building accredited data access rules into the data structure will provide greater levels of assurance, and thus reduce compliance scrutiny.

**Types of data**

- Support systems data
- Contract performance
- OEM technical data
- Repair status data
- SE management
- Air system performance
- Cost data
- Supply chain data
- Configuration data
- Training systems data

Stage 4 - Analyse and Model the Data

With the data management environment created, users can then harness and fully exploit the data. Detailed data analysis capability can be applied using machine learning methods and data automation using Artificial Intelligence (AI) to allow trending and diagnosis which will enable predictive modelling capability. By analysing Key Performance Indicator metrics such as operational output, systems performance and technical failures allows applications of predictive modelling to be created to help inform future planning and decision-making in areas like supply chain, budget setting and contractual arrangements, for instance.

Providing programmes with access to secure data in this way generates real-time information for users regardless of their location, or the device they are accessing the information from. Such capability supports accurate decision-making at demonstrable best value reducing through-life costs for any programme.
Proven security and information assurance

Our ability to deliver services and solutions at heightened security levels is well-proven. The Fujitsu approach to data integration provides decision-makers with secure access to real-time, accurate data wherever they are, on any device and is fully compliant with or exceeds the relevant National Defence Security Classifications.

Fujitsu will work closely with customers to ensure our information security standards meet the customer’s own security and risk management requirements. In addition, Fujitsu shall adhere to all requirements stipulated by industry regulators, including Cyber Protection, National Defence Security Policy Frameworks and supporting Security Policies.

Why Fujitsu in Defence & National Security?

Our world is being disrupted. But together with you, Fujitsu's ambition is to build a brighter, more sustainable future for us all.

We want to work together to navigate this digital disruption collaboratively, and explore solutions to the evolving threats we face today. Together, we can exploit technology that will drive high-impact improvement, transform our digital future, and help to make us more sustainable in every way.

We can do this by harnessing technologies such as AI, machine learning, digital twin, quantum, and high-performance computing. Our vision uses the power of everyone, bringing together our integration capabilities and knowledge in managed services with cognitive and advanced technologies that will drive your digital transformation. By elevating people higher up the value chain allows the smartest ideas to emerge to tackle tomorrow’s big challenges today – whatever they may be.

With our technological inspiration and business vision from Japan, we touch the lives of millions of people around the world every day. For over 60 years, we’ve been working at the highest levels of security demanded by militaries, governments, and industry to ensure the UK’s most critical infrastructure operates smoothly, 24/7.

We’ve continually had to adapt to a changing world, and we will keep evolving in the face of future threats. We are diverse, creative, talented, and different. And we are committed to building new possibilities for everyone. By connecting people, technology and ideas, we are making the world more sustainable by building trust in society through innovation.