Workspace Technology Limited

Case Study Defence Infrastructure Organisation

Defence Infrastructure Organisation

Workspace Technology in Partnership with Carillion Amey Deploys New UK Energy Efficient Data Centre for Defence Infrastructure Organisation (DIO)

The DIO plays a vital role in supporting our armed forces by building, maintaining and servicing all the critical infrastructure required to support the MOD and its operations. The DIO recognised that their legacy data centre was inefficient and unsustainable for current use and future growth. As a result, they initiated a systematic program to enable a streamlined mechanism to deliver the project, modernise and improve the physical critical infrastructure, reduce energy consumption and increase operational efficiency including reducing the frequency of maintenance schedules.

The Challenge

The DIO selected specialist data centre design and build contractor Workspace Technology, working in partnership with Carrillion Amey, to provide them with the DIO's 'Next Generation' data centre that would be used as the design blueprint for all forthcoming data centre projects.

The design needed to meet the requirements of both the MOD 'spend to save' initiative and that of the Defence Sustainable Development Strategy. A key requirement is to utilise new energy efficient technology that reduces energy consumption, delivers operational excellence, resilience and security enablng maximum value for the tax payer's pound.

DIO Data Centre Blueprint benefits

- Standardised Model
- Energy Efficient
- Resilence
- Security
- Adaptable, Scalable & Re-Deployable
- Rapidly Deployable
- Easily Maintainable
- Cost Effective

Standards & Accreditations

ECA REGISTERED MEMBER

SSIP

ACS REGISTRARS
Quality Assurance
ISO 9001
UKAS

ACS REGISTRARS
Environmental Assurance
ISO 14001
UKAS

The Solution

Workspace Technology delivered the project which included designing a diverse, highly efficient modular infrastructure. The project saw the construction of a room with secure modular composite panels, electrical switchgear & distribution, expansion of existing Schneider Electric/APC UPS systems, equipment racks, aisle containment, structured cabling and InRow cooling systems. Also deployed was a 400kVA generator set with custom built external switchgear. All installations were completed in-line with current MOD JSP standards.

A complete wrap around 24/7 planned preventative and emergency call-out maintenance and optimisation support package formed part of the project offering providing complete peace of mind.

The required level of security combined with rapid construction deployment were crucial to the success of the project. Workspace Technology selected a specialist 'pre-engineered' unique high security composite system delivering robust levels of security; protecting against attack, fire, water and temperature. This industry leading UK manufactured product ensured full compliance creating the 'white space' for the internal data centre fit out phase.

A strict design, review and agreement regime was implemented by Workspace Technology throughout the project to ensure that the delivery team were able to engineer to absolute levels of accuracy, which ensured first time success. This was supported by input from our ex-military engineers who ensured our full compliance with the latest MOD JSP standards for all aspects of the design.

The Benefits

Through the incorporation of specialist energy monitoring technology, the latest in energy efficient devices, including UPS and PDU systems, combined and operated by real time Data Centre Infrastructure Management (DCIM) platform, the DIO operates a data centre that performs at an industry leading level of efficiency of sub 1.25 PUE compared to the original PUE level of 2.0.

The DIO's investment in their new energy efficient and scalable micro data centre facility is forecasted to save approximately £100,000 a year on energy costs. Through the successful investment in effective network critical physical infrastructure (NCPI), the facility's efficiency has almost doubled. This has resulted in a significant reduction in carbon emissions and overall power consumption within this next generation, scalable and adaptable network environment, which is ready to support ever changing operational IT requirements.

Additionally, the DIO now has a data centre design that can be easily replicated without the requirement for additional investment in future consultant costs.

Modular Data Centre Benefits

- Easily replicated throughout the MOD property portfolio regardless of location

- Cost savings achieved by delivering similar projects in the future as no duplication in design is required

- Easy and rapid to deploy

- Secure due to built-in physical and electronic security

- Easily maintainable due to the ease of access

- Energy efficient delivering industry leading PUE levels

APC by Schneider Electric

Interested in finding out more?

Our friendly team are on hand to take your call on **0121 354 4894** or send us an email at **sales@workspace-technology.com**

www.workspace-technology.com

Workspace Technology Limited
Data Centre Solutions Expertly Engineered