



# Customer Story

## Increasing operational performance and significantly reducing transportation costs for the UK MOD

Defence organisations increasingly require high-performance computing and networking solutions to connect, protect, and analyse mission-critical information at the edge of the battlefield. These systems need to be tough enough to work in diverse and challenging environments, small enough to be transported easily and cost-effectively, but powerful enough to support the wide range of applications required to ensure mission success.

The UK Ministry of Defence (MOD) invited Drumgrange to tender for a rugged networking and computing solution to replace an existing 19" rack solution. Drumgrange teamed with Cubic to overcome several project challenges, including environmental requirements, the ability to support customer-specific virtualised applications, and reduced deployment times.

The team collaborated for over two years to create the M3-SE-SKIT networking and compute platform to meet the needs of the project. Powered by Cubic's M3-SE modular server and networking architecture, the M3-SE-SKIT delivers high-speed Cisco switching and routing, Intel Xeon processing, and a large data storage capacity.



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By including Deployable Virtual Infrastructure Configuration Engine (DVICE) software, end users without specialist skill sets can build and deploy virtual infrastructures and services with only a few clicks, reducing both system configuration times and training burden.

### Project Timeline:

- **Spring 2017**—Cubic was down-selected to provide mission-critical communications and computing technologies for a UK Ministry of Defence project.
- **December 2017**—Cubic was awarded the contract to supply over 30 modular networking and virtual server systems to Drumgrange for supply to the UK MOD.
- **June 2018**—Cubic collaborated with Drumgrange to further enhance the systems to ensure compliance and “fit for service” requirements set by the UK MOD.

### Several program-specific certifications were undertaken:

- CE, EU Harmonised Standards for WEEE, EMC, LVD, and RoHS
  - DEF STAN 59-411 Land Class D in all respects and Land Class C in most respects
  - Built to meet MIL-STD-810G and MIL-STD-461-F
- **Early 2019**—Cubic delivered the new flagship M3-SE-VSVR5 Virtual Server to Drumgrange, allowing the prime contractor time to create a mission-critical virtual environment to support user-specific applications.
  - **Spring 2019**—Following successful acceptance tests and user trials, Drumgrange delivered the Final Operational Capability to the UK MOD.

### ABOUT DRUMGRANGE

Drumgrange Ltd is a leading independent UK Defence Contractor specialising in the design, development, system integration, delivery, and through-life support of military systems across the UK Armed Forces, NATO, and foreign militaries.

Visit [www.drumgrange.com](http://www.drumgrange.com) for more information.

## Objective

Provide a scalable ruggedised networking and computing platform to UK MOD.

## Challenges

Reduced Size, Weight and Power (SWaP) to lower transportation costs, program-specific environmental certifications, and support for software virtualisation.

## Results

A 65% reduction in SWaP, program-certified hardware, lower training overhead, and successful support for customer’s virtualised applications.

“ The M3-SE-SKIT provides major advantages and clear benefits over the legacy 19” rack-based equipment. Greater flexibility, modularity, and enhanced system performance, the M3-SE-SKIT allows smaller, specialised teams to rapidly deploy with less environmental impact. ”

**Sean O’Pray**  
Drumgrange Project Manager

