Delivering critical value securely for *Smart DCC*

As part of the Dual Control Organisation (DCO) project, Capgemini has been working with the Data Communication Company (DCC) to guarantee a reliable and secure network infrastructure service for its smart meter programme.

To protect the planet and achieve our net-zero ambitions, consumers and energy suppliers need to have a detailed picture of energy consumption. This is made possible by a secure network, separate from public broadband, that connects smart meters to energy suppliers. This telecommunications network is operated by the Data Communications Company – the DCC.

The collaboration between Capgemini and DCC began in 2018 with a contract to deliver the infrastructure and run the DCO. DCO provides a common security and messaging service for SMETS1 meters (first-generation smart meters) using the existing service request variants used by SMETS2 meters (second-generation smart meters).

Client: Data Communications Company (DCC)

Region: UK

Industry: Energy Transition and Utilities

Client Challenge:

DCC needed to ensure the secure and reliable operation of its smart meter telecommunications network. Being deemed Critical National Infrastructure meant this came with stringent availability and performance standards that need to be met.

Solution:

Capgemini partnered with DCC to deliver and operate the Dual Control Organisation (DCO) project, providing a secure, high-availability infrastructure for smart meter and data communications.

Benefits:

- Consistent 5/5 scores on customer satisfaction surveys for 4 years in a row for security service delivery.
- Robust vulnerability management and penetration testing to strengthen DCC's security posture against evolving threats.
- Continuous security enhancements by refining use cases to reduce false positives and enhance real-time threat detection.
- Zero security breaches during the delivery of the service – over 7 years.

The DCO project and smart meter network is deemed Critical National Infrastructure, meaning it must adhere to stringent security and availability requirements – 99.999% availability being able to process each service request variant (for example a meter read which typically consists of 30 separate transactions) within 4 seconds.

Secure service delivery for Critical National Infrastructure

Capgemini delivers a comprehensive and adaptive security service within the DCO contract, ensuring operational resilience and proactive threat management. By closely collaborating with DCC Security, Capgemini provides the client with strategic oversight in safeguarding critical assets, maintaining a seamless security posture, and driving continuous improvement. The commitment to operational excellence is reflected in a structured approach to incident response, ongoing enhancements in security log ingestion, and a forward-thinking mindset that anticipates emerging risks. Through meticulous documentation and streamlined processes, Capgemini facilitates efficient issue resolution, minimises service disruptions, and strengthens the overall reliability of DCC's security operations.

The service is underpinned by an innovative mindset and commitment to continuous improvement. Strategic foresight has been successfully embedded into security operations by refining use cases to reduce false positives, enhancing real-time threat detection, and fostering a robust knowledge transfer framework. Through proactive penetration testing and robust vulnerability management, the Capgemini team has ensured a heightened security posture for DCC. As part of the service, Capgemini also played a key advisory role during service transition challenges, allowing DCC to navigate complex security challenges with greater confidence. Regular structured monthly engagements promote thought leadership, ensuring that action items are efficiently addressed and help foster a collaborative working environment. To reinforce this engagement between the two teams and further promote thought leadership, a regular quarterly cadence is set up between DCC's Chief Information Security Officer (CISO) and Capgemini's CISO to further connect on lessons learned, what's in the pipeline, and current industry trends. All of these efforts have contributed to consistent positive qualitative feedback, reinforcing Capgemini's role as a trusted security partner that delivers innovation and efficiency – with a lasting impact.

A high-quality experience in a high-performing partnership

To ensure delivery standards remain high, a customer satisfaction survey is conducted to help gauge performance and identify areas for improvement. The scores are submitted by DCC on a quarterly basis and throughout the partnership Capgemini has been consistently rated 5/5 on every category.

This success is largely attributed to the strong relationship between the two organisations. DCC considers Capgemini as a trustworthy, high-quality partner, using a deep understanding of DCC business challenges and industry processes to not only support them, but also help transform the way Britain uses energy. Ensuring that delivered solutions consider the impact on the broader ecosystem.

To further underline this success, in 2024, Capgemini won DCC's prestigious 'Excellence Award' in the Annual DCC Supplier Conference for the continued excellence in service delivery maintaining stable and green service. The award was presented by Karin Meurk-Harvey (DCC Chief Commercial Officer). It is a great reward and testament to all the hard work from the Account delivery team in maintaining a 'Green' service for over a long period of time under challenging circumstances.

> I have found Capgemini to be responsive in addressing issues that arise from technical challenges in what is not always a perfect technical landscape. Their security team is collaborative and generally pragmatic. While no partnership is ever entirely harmonious, my experience with Capgemini has been marked by consistently collaborative behaviour and strong communication, which has developed over time through some difficult challenges. Overall, Capgemini has proven to be a reliable partner, willingly working with my team to find the right solution to any given problem when required.

Chief Information Security Officer, DCC

> Anticipating potential threats and challenges is crucial in security, and Capgemini excels in this area. Their exceptional foresight allows them to stay ahead of risks, ensuring they are consistently prepared for emerging threats. This proactive mindset clearly indicates their deep understanding of the security landscape and their unwavering commitment to providing top-level protection for their clients.

Security Business Partner, DCC

About Capgemini

Capgemini is a global business and technology transformation partner, helping organisations to accelerate their dual transition to a digital and sustainable world, while creating tangible impact for enterprises and society. It is a responsible and diverse group of 340,000 team members in more than 50 countries. With its strong over 55-year heritage, Capgemini is trusted by its clients to unlock the value of technology to address the entire breadth of their business needs. It delivers end-to-end services and solutions leveraging strengths from strategy and design to engineering, all fueled by its market leading capabilities in AI, generative AI, cloud and data, combined with its deep industry expertise and partner ecosystem. The Group reported 2024 global revenues of €22.1 billion.

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