DCC
Smart Metering for the UK

01 THE CHALLENGE

DCC (Data Communications Company) is a subsidiary of Capita PLC, one of the biggest Business Process Outsourcing and IT companies in the UK. The company plays a key role in the UK's Smart Metering Implementation Programme (SMIP), an unprecedented national infrastructure project that will see 53 million gas and electric meters installed in homes and small non-domestic properties across the country.

The rollout of smart meters will be an important part of the United Kingdom's transition to a low-carbon economy, helping to meet some of the long-term challenges faced in ensuring an affordable, secure and sustainable energy supply.

DCC will provide communications between smart meters and control systems, helping to give consumers real-time control of their energy consumption through a widely distributed system supporting bi-directional, secure communications.

02 THE SOLUTION

Critical Software's Parse & Correlate software has been selected to help smart meter communication across the network. The 'correlate' process checks that the semantic meaning of a transformed message, originating from an energy supplier's Service Request, remains intact across the smart meter network and at the point of receipt. Correlate capabilities will be required by energy suppliers and Network Operators when sending critical commands. Similarly, for responses and alerts provided by smart meters, the transformation of these messages into a standardised technical format cannot occur in the DSP domain as this would invalidate a given smart meter's electronic signature. Instead, users will receive responses from smart meters in their native HAN-ready format.

03 THE RESULTS

On completion, end-consumers will be able to see what energy they use and how much it costs, putting them in control of consumption. Smart meters will also bring an end to estimated billing – consumers will only be billed for the energy they actually use, helping them to better manage their budget, as well providing other benefits such as faster switching between providers.

04 THE STANDARDS

• Java
• XSD
• Maven
• TestNG
• JBOss
• TomEE
• Rest(jax-rs)
• JaxB
• Perl
• Log4j2
• JEE v6.0
• GBCS (Protocol)
• DLMS (Protocol)
• ZigBee (Protocol)
• ASN1 (Protocol)

05 THE CLIENT

Data Communications Company

ABOUT CRITICAL SOFTWARE

Critical Software provides systems and software services for safety, mission and business-critical applications. We work closely with our clients, helping them to meet the most demanding standards for performance and reliability.

We were founded in 1998, with NASA our very first client. Today, we work across many international industries and have offices across the globe.

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We are CMMI Maturity Level 5 rated.
For a list of our certifications & standards visit our website.