

Arqit Demonstrates Industrial IoT Security

DCMS supported project enhances IoT security standard

LONDON, May 11, 2022 (GLOBE NEWSWIRE) -- Arqit Quantum Inc. ("Arqit"), a leader in quantum encryption technology, and Blue Mesh Solutions Limited ("Blue Mesh"), a UK-based sensors and IoT specialist, have successfully completed and demonstrated a Quantum Secure "MQTT" (MQ Telemetry Transport) service for Industrial IoT.

The project was funded by the UK Government's Department for Digital, Culture, Media and Sport (DCMS) 5G Trials and Testbeds programme.

The global market for Industrial Internet of Things is potentially very large. However due to the limited computing resources typically used in IoT sensors and the proliferation in the number of endpoints, encryption is often overlooked with 83% of all online IoT transactions being in plain text according to the cloud security company Zscaler.

Arqit and Blue Mesh collaborated to integrate Arqit's QuantumCloud™ to secure sensor network equipment through a security enhancement to an internationally standardised protocol known as MQTT which is a ubiquitous method used for sending data from Industrial IoT devices to cloud servers for data manipulation and analysis.

Adding a security layer to the existing MQTT standard increases the protection of IoT systems used in strategic assets such as ports, petro-chemical industries and rail networks.

Arqit Founder, Chairman and CEO David Williams, said: "We are delighted to have delivered this capability to enhance the security of Industrial IoT. Our core product QuantumCloud™ delivers stronger, simpler key agreement technology to counter the threats that we read about every day, and it has built in protection against the future threats from quantum attack. We believe that QuantumCloud™ delivers a significant advantage to many potential customers in strategic IoT networks by solving the encryption problems of MQTT and guaranteeing privacy."

Managing Director for Blue Mesh Solutions, Richard Brooks said: "Having the opportunity to work with Arqit's QuantumCloud™ to build the world's most secure over-the-air IoT Sensor Data Solution is hugely important for the future of IoT, artificial intelligence, condition monitoring, autonomous transport and any number of digital systems that require the highest level of asset and data security. By increasing IoT data security to a quantum secure level, we can help to protect all power, chemical, transport and energy assets that need the highest level of operational data security."

About Arqit

Arqit supplies a unique quantum encryption platform-as-a-service which makes the communications links of any networked device secure against current and future forms of attack – even from a quantum computer. Arqit's product, QuantumCloud™, enables any device to download a lightweight software agent, which can create encryption keys in partnership with any other device. The keys are computationally secure, optionally one-time

use and zero trust. QuantumCloud™ can create limitless volumes of keys in limitless group sizes and can regulate the secure entrance and exit of a device in a group. The addressable market for QuantumCloud™ is every connected device.

Media relations enquiries:

Arqit: contactus@arqit.uk

FTI Consulting: scarqit@fticonsulting.com

Investor relations enquiries:

Arqit: E: investorrelations@arqit.uk

Gateway: arqit@gatewayir.com

About Blue Mesh Solutions (BMS)

BMS is a leading UK technology company providing innovative IoT solutions to improve traditional ways of doing things. They work closely with UK5G and the DCMS 5G Testbed Programme.

Their mission is to help make sense of the data collected from sensors via 5G networks and help their customers to turn an experimental idea or system into tried and tested solutions.

The ongoing projects they are currently involved in, include:

1. Smarter Parking - using bluetooth sensors - and Google Maps so the parking space tells drivers when it is free.
2. AI powered Predictive Maintenance - using 5G and our own sensor data network, helping make the long-term management of large assets AI powered.
3. Making IoT data unbreakable - using QuantumCloud for security and MQTT for the communications layer.

They have technology collaborations with Nordic Semiconductor, Wirepas, Cambridge University and Arqit, as well as collaborations with Google, Wayra, Cambridge University, Centre for Smart Infrastructure, Cambridge Science Park and Three.

Media relations enquiries:

BMS: richard@bluemeshsolutions.com

Caution About Forward-Looking Statements

This communication includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, may be forward-looking statements. These forward-looking statements are based on Arqit's expectations and beliefs concerning future events and involve risks and uncertainties that may cause actual results to differ materially from current expectations. These factors are difficult to predict accurately and may be beyond Arqit's control. Forward-looking statements in this communication or elsewhere speak only as of the date made. New uncertainties and risks arise from time to time, and it is impossible for Arqit to predict these events or how they may affect it. Except as required by law, Arqit does not have any duty to, and does not intend to, update or revise the forward-looking statements in this communication or elsewhere after the date this communication is issued. In light of these risks and uncertainties, investors should keep in mind that results, events or developments discussed in any forward-looking statement made in this communication may not occur. Uncertainties and risk factors that could affect Arqit's future performance and cause results to differ from the forward-looking

statements in this release include, but are not limited to: (i) the outcome of any legal proceedings that may be instituted against the Arqit related to the business combination, (ii) the ability to maintain the listing of Arqit's securities on a national securities exchange, (iii) changes in the competitive and regulated industries in which Arqit operates, variations in operating performance across competitors and changes in laws and regulations affecting Arqit's business, (iv) the ability to implement business plans, forecasts, and other expectations, and identify and realize additional opportunities, (v) the potential inability of Arqit to convert its pipeline into contracts or orders in backlog into revenue, (vi) the potential inability of Arqit to successfully deliver its operational technology which is still in development, (vii) the risk of interruption or failure of Arqit's information technology and communications system, (viii) the enforceability of Arqit's intellectual property, and (ix) other risks and uncertainties set forth in the sections entitled "Risk Factors" and "Cautionary Note Regarding Forward-Looking Statements" in Arqit's annual report on Form 20-F (the "Form 20-F"), filed with the U.S. Securities and Exchange Commission (the "SEC") on December 16, 2021 and in subsequent filings with the SEC. While the list of factors discussed above and in the Form 20-F and other SEC filings are considered representative, no such list should be considered to be a complete statement of all potential risks and uncertainties. Unlisted factors may present significant additional obstacles to the realization of forward-looking statements.



Source: Arqit