

## WHAT IS 5G?

5G is a standards-based terrestrial and non-terrestrial network (NTN) communication system providing global mobile broadband communications and Internet of Things (IoT) connections. The DoD can leverage secure, resilient, real-time, military and commercial 5G networks for joint communications, enhanced operations, situational awareness, and Joint All-Domain Command and Control (JADC2). Access to 5G satellite networks can be through direct handset access to a Radio Access Network (RAN) in space or through satellite 5G backhaul, as driven by proliferated-LEO, MEO, and GEO satellites.

## LINQLAB

In its integration laboratory in Chantilly, VA, LinQuest creates digital threads of 5G User Equipment (UE) to RAN and Cell Base Station (gNodeB) access through terrestrial and NTN (satellite and UAV) emulation and over-the-air testing with a full suite of network and cybersecurity emulation, analysis, and test equipment. These tests are all remotely accessible through a web-based portal for Lab-as-a-Service (LaaS). LinQuest is an accredited Trusted Integrator through National Security Agency's (NSA) Commercial Solutions for Classified (CSfC) program.

The graphic features the text '5G CAPABILITIES' in a large, stylized font. The '5' and 'G' are outlined in blue and red, with a globe and network patterns inside them. 'CAPABILITIES' is in red. The background is a dark blue space with a globe and satellite network connections.

**FAST, SECURE,  
RESILIENT**

## CORE STRENGTHS

### Satellite Communications (SATCOM)

With over 40 years of delivering SATCOM SE&I to the DoD, LinQuest leads the way in designing, integrating, testing, and evaluating 5G-over-satellite solutions and technologies for direct 5G handset access and backhaul from remote locations such as USN ships at sea, USAF aircraft in flight, or battlefields.

**Digital Engineering (DE)** Apply our industry-leading DE qualifications to 5G solution architecting to ensure secure, resilient, interoperable, end-to-end terrestrial-NTN communications.

**Security** Make 5G cybersecure for the military environment, including AES 256-bit-and-beyond encrypted data transport and sandboxed, zero-trust core architecture.

**Resiliency** Leverage our years of architecting and measuring resiliency to make 5G robust, reliable, and recoverable for the military environment through cybersecurity, flexible network interfaces (FNI), AI/ML predictive algorithms to anticipate channel conditions, software-defined network orchestration, network slicing, edge computing, multiple input multiple output (MIMO) SATCOM links, and high-gain, multi-access, mmwave, steerable antennas. Quantify DoD-unique performance related to Quality of Service (QoS), security, and other parameters across networks.

Learn more at:

[www.linquest.com](http://www.linquest.com)

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