



Proving the Value of Private 5G in Manufacturing

Accedian to monitor the network of the largest 5G project in the UK targeting industrial applications

What is 5G-ENCODE Project?

The 5G-ENCODE (Enabling Connectivity for Digital Engineering) Project is a £9 million collaborative project aimed at developing clear business use cases and value propositions for 5G applications in the manufacturing industry. Partially funded by the Department for Digital, Culture, Media and Sport of the UK Government as part of their 5G Testbeds and Trials Programme, the project is one of the UK Government's biggest investments in 5G for manufacturing to date.

Led by Zeetta Networks, the project officially launched in early 2020 and it will run until March 2022.

Accedian is a key partner providing the project with performance monitoring and assurance capabilities.

“ One of the most innovative and useful benefits associated with a private 5G network is that it can host slicing and splicing technology. Partnering with Accedian enables us to gain greater insight into the accuracy of this functionality, to help manufacturers redirect network capacity to where it's needed on the factory floor. Not only will this have a positive impact on the manufacturing sector's economic output but also on the industry's steps towards working more sustainably*.”



- Vassilis Seferidis, co-founder and CEO at Zeetta Networks, leading partner at 5G-ENCODE

Other consortia partners include the National Composites Centre (NCC), Telefonica, Siemens, Toshiba, Solvay, Plataine, Mativision, and the University of Bristol while the West of England Combined Authority (WECA) provides additional support through their DETI Programme.

Key objectives

The key objective of the project is to design and deliver a private 5G network within the National Composites Centre (NCC) and explore new business models and 5G technologies, including network slicing and splicing, within an industrial environment.

Three manufacturing use cases would be demonstrated on the 5G testbed:

- AR/VR to support design, manufacturing and training
- Monitoring and tracking of time sensitive assets
- Wireless real-time in-process monitoring and analytics

The Advantages of 5G in Manufacturing

According to an analyst research from Analysys Mason¹, co-sponsored by Accedian, the most important attributes of private 5G networks for manufacturers are reliability (82%), which help improve operational efficiency, and security (78%).

Other advantages of 5G technology include:

- IT and OT convergence to automate and process data
- Data privacy for more control and visibility
- Replacement of legacy networks to support new applications and processes
- Better alternative to Wi-Fi which is limited in terms of reliability

The Importance of Network Visibility for Assured Applications Performance

With 5G holding the key to unlocking digital transformation for manufacturers, both in the UK and around the world, Accedian's monitoring capabilities will support the project's goal to accelerate the realisation of several business use cases. According to CapGemini Research Institute analysis "2 out of 3 industrial companies believe that guaranteed quality of service is critical for their digital transformation."

It will enable granular and accurate real-time visibility, anomaly detection, and analytics on the performance of 5G-ENCODE's private 5G network.

“ 5G technology promises to revolutionize manufacturing not only with much needed additional security for critical applications, but it delivers illusive “dedicated resources” with guaranteed quality of service. Our collaboration with the 5G-ENCODE project, takes us one step closer to proving the capabilities of a network that will deliver quantifiable business value with visibility and assurance for critical applications and the end user experience. What we learn impacts the art of the possible with artificial intelligence and virtual reality to enable a new generation of remote interaction across industries from manufacturing, healthcare to gaming.

- Richard Piasentin, Chief Strategy Officer at Accedian

The Role of Accedian

Accedian will deploy its solution, Skylight, a performance monitoring and test generation virtual platform, at the National Composites Centre (NCC) to help demonstrate the power of industrial 5G use cases ranging from digital transformation to improving sustainability.

Accedian's ability to assure that network performance meets the requirements for a manufacturers' critical business applications provides vital visibility into 5G performance to improve application performance.

Accedian Skylight turns KPIs and performance data into actionable insight (metadata) to enable better decision making and provide quick and effective root cause analysis. Turning performance data into feedback for Zeetta Networks' slicing automation tools helps to improve decision making via APIs.

¹The survey from Analysys Mason was conducted among more than 200 IT professionals from the U.S.A, Germany, UK and Japan to better understand how enterprises plan to adopt and manage private 5G networks. [Click here](#) to view our infographic based on Analysys Mason's research.

About Accedian

Accedian is the leader in performance analytics, cybersecurity threat detection and end user experience solutions, dedicated to providing our customers with the ability to assure and secure their digital infrastructure, while helping them to unlock the full productivity of their users.

Learn more at accedian.com