CASE STUDY

# BT Group leverages Nokia's 5G slicing technology to enhance live event experience at major sporting event in the UK

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“Supporting this event on its return to the UK is a major milestone, and delivering a world-class, tech-driven event was critical to the success of it. Partnering with Nokia has allowed us to push the boundaries of what’s possible in sports connectivity. For the first time at this event, BT Group’s use of 5G standalone network slicing ensures the global championship can maintain real-time communications, telemetry and live video from the racecourse – this collaboration showcases how cutting-edge connectivity can transform the delivery of major events.”

**Greg McCall**
Chief Networks Officer
BT Group

BT Group is the UK’s leading provider of fixed and mobile telecommunications services, serving millions of customers through its well-known brands BT, EE and Plusnet. It provides communications, digital connectivity and IT services to households, enterprises and the public sector, with the EE mobile network rated as the best in the country for a record-breaking 12 years in a row.

BT Group is making significant investments in next-generation networks to accelerate the UK’s digital transformation. A key part of this strategy is the rollout of 5G standalone (SA) technology and advanced capabilities such as network slicing, which allows connectivity to be tailored for specific customer requirements. By combining its trusted infrastructure with innovations from partners like Nokia, BT Group is helping to shape the future of digital services.

Large-scale sporting events provide an ideal showcase for BT Group’s innovations. They create demanding network conditions that test reliability and performance while offering the opportunity to trial new commercial models. By successfully deploying 5G network slicing during a major sporting event, BT has been able to demonstrate the practical and commercial value of differentiated connectivity services.

## OBJECTIVE

# Delivering assured connectivity and exploring monetization opportunities at high-volume sporting events

The return of a major international sporting competition to UK waters attracted many thousands of spectators, global broadcast partners and teams who are reliant on precise, real-time data. BT Group set out to ensure that every aspect of the event was supported by seamless connectivity, while at the same time proving the potential of network slicing as both a technical and commercial innovation.

Our 5G network slicing technology enhanced the live event experience for visitors, with multiple dedicated slices provisioned to support applications such as point-of-sale terminals, broadcasting and fan entertainment. 5G slicing delivered high-quality connectivity for applications and services, even in crowded areas. For payment services, dedicated slice bandwidth provided a stable connection and smooth operation. Behind the scenes, BT Group's sliced network enabled race boat connections for live video and photography uploads, as well as the transmission of telemetry data.

In parallel, BT Group saw the event as an opportunity to assess the business potential of slicing. The company sought to validate not only the technical capabilities of assured, differentiated connectivity, but also the commercial appetite for such services. For retailers, dedicated point-of-sale slices ensured transactions were completed instantly and securely, resulting in higher throughput and more revenue. For media and broadcasting teams, stable, high-capacity slices guaranteed live coverage and real-life uploads, extending the event's reach to online audiences and increasing commercial value. Meanwhile, race crews relied on telemetry slices to share performance data directly from the boats, providing information that could be monetised through analytics and fan engagement. Each of these use cases demonstrated how slicing not only delivers technical assurance but also creates measurable business outcome.

SOLUTION

# End-to-end network slicing deployment with Nokia solutions

To achieve these goals, BT Group worked with Nokia to design and implement an end-to-end slicing-enabled 5G SA network. Eight sites in and around the event stadium were upgraded to support 5G SA slicing, while a further 25 sites were prepared to optimize coverage and user experience for an increased customer base. Nokia AirScale 5G base stations formed the foundation of the deployment, integrated with BT Group's multi-vendor transport and core, and managed using Nokia AI-powered MantaRay NM for monitoring and assurance platform.

Key optimizations were introduced to ensure performance under the unique conditions of a large-scale event. Mobility management included Inter-Radio Access Technology (IRAT) optimization was tuned so that users were steered quickly onto 5G SA carriers with slicing enabled, ensuring better throughput. Multiple dedicated slices ensured the performance of event services, while regular mobile traffic continued to flow reliably. Both event participants and the wider community had access to consistent, high-quality connectivity, delivering balanced and assured services for all.

Through this collaboration, BT Group and Nokia successfully created a sliced network environment optimized for mission-critical event services. It demonstrated the ability of slicing to deliver differentiated quality of service in the most demanding real-world conditions.

RESULTS

# Demonstrated value of 5G slicing in a live environment

The deployment proved the value of slicing in a live environment. Across the two-day competition, the network carried more than 427 gigabytes of downlink traffic and 300 gigabytes of uplink over the event-specific slices. Over 8,000 users were active across the footprint, including more than 2,000 on 5G SA. Importantly, assured uplink performance of around 10 Mbps per user was maintained even during event periods of heavy demand.

The event slices ensured that thousands of electronic point-of-sale transactions were processed reliably, avoiding the costly disruptions vendors face when payments fail and enabling them to operate without interruption. Media and photography teams were able to upload large volumes of high-resolution content in real time, benefiting from the dedicated uplink capacity that slicing delivered. Throughout, isolation from the public mobile broadband service was preserved, with no adverse impact on regular visitors using the EE network.

From a business perspective, the deployment provided valuable insight into how customers perceive the benefits of slicing and their willingness to pay for premium services. It marked a key step for BT Group in assessing commercial potential for network slicing, while showcasing the potential of 5G to transform event operations and experiences to the industry.

GLOBAL PERSPECTIVE

# Unlocking 5G monetization with network slicing

The successful delivery of slicing at a major UK sporting event reflects a broader industry shift. We have now enabled several communication service providers (CSPs) around the world to launch nation-wide network slicing-based services that deliver assured connectivity for enterprises, industrial applications, fixed wireless access and high-profile public events. These differentiated services create opportunities to monetize 5G in new ways, by offering value that extends far beyond standard connectivity.

We are at the forefront of this transformation. Our commercially mature slicing solutions have already been deployed to enable sliced enterprise virtual private networks, premium mobile broadband, FWA and multi-access edge applications. By integrating devices, radio, transport, core and cloud into a single orchestrated framework with real-time assurance, we enable operators to design and scale slicing services with confidence.

For BT Group, this event was a major proof point that slicing can deliver tangible business values while enhancing customer experiences. For the wider industry, it highlights the practical steps by which operators can turn 5G's potential into reality, using slicing to unlock new revenue streams and reinforce their role at the heart of digital transformation.

**For more information, visit our Network Slicing webpage.**



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At Nokia, we create technology that helps the world act together.

As a B2B technology innovation leader, we are pioneering networks that sense, think and act by leveraging our work across mobile, fixed and cloud networks. In addition, we create value with intellectual property and long-term research, led by the award-winning Nokia Bell Labs, which is celebrating 100 years of innovation.

With truly open architectures that seamlessly integrate into any ecosystem, our high-performance networks create new opportunities for monetization and scale. Service providers, enterprises and partners worldwide trust Nokia to deliver secure, reliable and sustainable networks today – and work with us to create the digital services and applications of the future.