

# GHELAMCO STADIUM

Ruckus Wireless Connects Fans to Club with Reliable, Fast Wi-Fi



## CASE STUDY



### OVERVIEW:

Ghelamco Stadium is located in Gent, Belgium. It is the newest stadium in the country and home to the KAA Gent soccer club. Serving 20,000 fans at any event, the stadium was in need of reliable and fast Wi-Fi.

### REQUIREMENTS:

- WLAN infrastructure that is scalable and innovative
- Reliable network that meets the high density needs of fans, security personnel, press and visitors
- Provide the best coverage & connectivity anywhere within the stadium

### SOLUTION:

- High performance network solution that meets current and future Wi-Fi needs with superior connectivity and coverage
- Deployed 802.11ac Wave 2 ZoneFlex R710, R500, & 7782 access points to address the need of high density
- Deployed the Ruckus SmartCell Gateway to allow delivery of reliable Wi-Fi
- Improved density capabilities and overall throughput

## FAN EXPERIENCE SOARS WITH 802.11AC WAVE 2 DEPLOYMENT

Excitement mounts as the season draws near for sport enthusiasts to see their favorite sports team in action. Many prepare by purchasing season tickets to attend all the local games at their home stadium. In Europe, it's not just a game to the fans—they are emotionally attached—with an intense need to be identified with part of the club. Today, going to the stadium is a whole different experience than it was in the past. People want to share their experience in real time with friends and family through mobile apps such as Snapchat, Facebook, Instagram or Twitter. So what happens when your beloved team is playing at a stadium where you can't connect to Wi-Fi? You get a bunch of angry fans.

### CHALLENGE

Stadiums and arenas are amongst the most difficult locations to deploy Wi-Fi, mostly due to the requirement for both very high performance and high density. Located in Gent, Belgium the Ghelamco Arena is the newest stadium in the country and is home to the KAA Gent soccer club. The arena was built initially with no Wi-Fi and can hold 20,000 supporters at any event. The stadium was constantly receiving complaints from their fans in regards to the complete lack of connectivity. They absolutely had no contact with anyone outside the stadium or even inside the stadium for that matter through mobile devices—not even a phone call could be made. This was disturbing for both the club and the fans. The club desired to build a personal relationship with its fans to provide an exceptional fan experience while at the stadium and at the same time build its team's brand.

"We needed Wi-Fi. We need to be able to get in touch with our clients while they are in the stadium. We believe in building a society built on class and sportively along with family inclusion. We want to communicate with our fans and that means we need reliable Wi-Fi during our events," states Serge Platel, commercial and marketing director at KAA Gent.

KAA Gent believed it was important to provide its supporters with reliable, fast and high performing Wi-Fi so that the club would be able to communicate with fans while they were in the stadium. It was important that the network handle streaming video as well as a high number of concurrent users. With a network in place, the goal was for the club to create brand awareness around an amazing fan experience. Providing high speed wireless services in such an environment requires carrier class equipment along with deployment expertise.

### SOLUTION

Looking for a solution, Ghelamco turned to the biggest cable operator in Belgium, Telenet for help. As the design of networks vary depending on the nature of the venue,



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**HANS VAN ELSEN**  
CTO, Alcadis

Telenet reached out to partner Alcadis to survey and assess the best way to equip the stadium with the best performing Wi-Fi.

“Telenet has been a partner of the club for a long time and we are all about connectivity so we really needed to provide the best connectivity in the best possible way and that’s why we reached out to partners Alcadis and Ruckus to solve this problem,” comments Stijn Eulaerts, Director Product Management Connectivity at Telenet.

After an extensive evaluation with other suppliers, Ruckus was the clear winner due to its superior performance. To ensure coverage and high performance, Telenet deployed Ruckus’ ZoneFlex R710 802.11ac Wave 2 throughout the stadium along with some ZoneFlex R500 and ZoneFlex 7782. These high performing access points provided an increase in device density with the unprecedented 4x4:4 and MU-MIMO to address the need of high density wireless deployments within the stadium. Additionally, Ruckus’ patented BeamFlex and ChannelFly technologies mitigate interference and boost performance. With BeamFlex, it automatically adjusts the signals to the best performing path and steers around the interference and obstacles. This ensures the strongest signal, highest throughput and the least amount of interference. ChannelFly leverages BeamFlex in order to select the best RF channel to deliver the highest performance Wi-Fi possible, optimizing signals for every client and transmission.

Managing these access points on the backend is the Ruckus SmartCell Gateway. The SmartCell Gateway is the most scalable and versatile WLAN platform. It aggregates all the capacity and also massively scales to thousands of users allowing the delivery of reliable Wi-Fi.

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The deployment of Wave 2 was the perfect solution for the Ghelamco stadium. “The biggest advantage to the network is that it now works! We are able to provide reliable and fast Wi-Fi to our fans, security personnel, press and visitors,” states Serge Platel.

With the Ruckus Wireless Deployment of Wave 2, the fan experience is on a whole different level than before. With an average of 5,000 concurrent clients on the network, fans can now stream videos, receive promotional items on their favorite player and share their experience with the world via social media. In addition, Telenet created an application called Play Sports. With this app, fans can watch games in real time allowing them to review plays from the game they are watching in the stadium or watch other matches that are taking place in Belgium. And on the flip side, this new network allows the club to build fan engagement while strengthening its brand. The data retrieved gives insight on who is coming into the stadium, on what days and what players they enjoy watching the most to allow the club to engage with the fans to direct the correct promotions to the right enthusiast. It’s a win—win for everybody.

“We have had a lot of positive feedback through social media. The fans are excited because now they can share their experience in the stadium with people who are not at the event. The fans are now happy,” concludes Stijn Eulaerts.