

### CASE STUDY



**Kiel.**  
**Kiel**  
Sailing.City.

#### OVERVIEW

Located in Germany, the city of Kiel set its sights on offering public Wi-Fi and an innovative digital city experience to its citizens and visitors. Turning to local operator, ADDIX Internet Services for help with this project, they decided to use Kiel Week as the kick-off to the Smart City Kiel.

#### REQUIREMENTS

- Provide free broadband Internet access in high-density areas
- Must be an Internet access provider
- Increase network density
- Provide maximum user-friendliness

#### SOLUTION

- Deployed ZoneFlex 7782-N access points and ZoneFlex T300 outdoor access points

#### BENEFITS

- Enabled more than 50,000 users to simultaneously access the Internet
- Provided a reliable and innovative network for the city of Kiel
- Kiel Week transformed into a completely new digital experience

## WLAN SOLUTION CREATES AN INNOVATIVE VISITOR EXPERIENCE AT WORLD'S LARGEST SAILING EVENT

Since the days of the industrial revolution, cities have been the engines of economic growth. With the greater use of technology, a number of cities are accumulating data, delivering innovation and enhancing the lives of citizens. However, public Wi-Fi is still not widespread in many cities around the world. In the course of numerous smart city projects, many cities and municipalities have set out to remedy the situation.

Located in Germany, the city of Kiel set its sights on offering public Wi-Fi and an innovative digital city experience to its citizens and visitors. Turning to local operator, ADDIX Internet Services for help with this project, they decided to use Kiel Week as the kick-off to the Smart City Kiel. It's one of the biggest sailing events in the world welcoming more than 3 million visitors a year and features numerous concerts and events where people want to be connected to share their experience with others via social platforms.

#### CHALLENGE

ADDIX Internet Services took up the cause of extinguishing uncovered Wi-Fi spots on the map of Schleswig-Holstein. Since its inception in 1992, the Kiel-based company provides cities, private customers and campsites with Internet access. With high bandwidth, ADDIX distributes Internet per licensed radio to places where fast Internet was previously rare.

Since public Wi-Fi is only useful if it is used, ADDIX decided to partner with the local Kieler Nachrichten. The media partner essentially contributes to inform the public at large on the WLAN and its benefits. Together with the daily, the service provider wanted to provide the city of Kiel with comprehensive public WLAN as OMNIS WLAN and also make this well-known. In order to do so, they launched the wireless network #KN\_WLAN. The aim was to make the city even more attractive for its citizens, students and visitors and offer an entirely new user experience.

Since ADDIX has also been a sponsor of Kiel Week for 20 years, the unique event was the perfect time to jump-start the smart city project. The annual regatta is considered the largest festival in Northern Europe and would provide an ideal platform to test WLAN under high strain. As a sponsor, the IT service provider delivered, among other things, the first websites of the event and provided the technical infrastructure in order to present the Kiel Week online.

"So far we have only temporarily provided some places with WLAN during Kiel Week. This was often used by the visitors, but it was just not comprehensive," explains Björn Schwarze, manager of ADDIX. "This year we wanted to offer

an entirely new user experience to both the Kiel population as well as visitors from around the world by means of a comprehensive WLAN, which offered visitors an added value and established the city of Kiel as a Smart City.”

## SOLUTION

In the past, other vendors tried to provide Kiel Week with public Wi-Fi with OMNIS WLAN claiming to be the first to comprehensively offer Internet with high penetration rate. The search was on to find a vendor who could equip Kiel Week with the reliable Wi-Fi needed. The vendors who were being considered were Cisco, Ubiquity and Ruckus Wireless.

“The outdoor area lacked the necessary fun factor,” says Schwarze. “With Cisco / Meraki, the data are down to Cisco – and it’s difficult to access them. The standalone solutions, however, are all indoor installations. We needed a compact design, easy installation and good ranges. Our partner Allnet suggested Ruckus to us and so we equipped a campsite with the corresponding Ruckus access points for test purposes. The result was clear: more power, better performance. “



“With the successful implementation of the comprehensive public WLAN at Kiel Week, we were able to show that we do WLAN unlike any other.”

### BJÖRN SCHWARZE

Manager of ADDIX

With Ruckus Wireless, a reliable and innovative companion was brought in to create the right infrastructure for Kiel and to prepare Kiel Week for a completely new digital experience. With Ruckus Wireless meeting the high expectations, within two weeks the access points were optimally positioned and installed. This year, an elaborate network of Ruckus’ ZoneFlex T300 and Ruckus ZoneFlex 7782-N access points, for the first time enabled more than 50,000 users to simultaneously access the Internet via Wi-Fi on the entire event area—from the stages to the palace garden to the Olympiazentrum Schilksee. These access points have integrated BeamFlex+ smart antenna technology that focuses RF signals toward each associated client while mitigating interference and are ideal for high density public environments. At Kiel Week this was especially important in front of the six main stages, where up to 12,000 visitors attended the various events. The patented technology solution provides ADDIX with the performance that is required for such a large amount of users. The Ruckus solution provided free Wi-Fi to the visitors of Kiel offering a seamless roaming experience.

In order to attract as many visitors during Kiel Week to use the wireless network as possible, the app Walk & Explore Kiel was developed at the same time. With the app, visitors were able to plan their tour through Kiel. In addition, users were given recommendations and instructions on the more than 2,000 events in real time enabling them to follow collateral events via live streaming thanks to the reliable and innovative wireless technology. This bandwidth-hungry application would have made the regular cellular network collapse during Kiel Week and would thus not be usable without comprehensive WLAN.

“With the help of our app we gave the visitors a reason to try the WLAN. We were able to prove that it is possible to supply such large events with public WLAN. In the future we would like to get other cities to offer public Wi-Fi. We are a pioneer in Smart City projects,” says Schwarze.

After the event, the WLAN solution by Ruckus Wireless will continue to be used in order to advance the project complimentary City WLAN of the city of Kiel. The APs form the backbone of the WLAN network at Kiel Week. Because of the great success, ZoneFlex 7782-N access points are now of a particular interest to other major events such as Wacken.

“With the successful implementation of the comprehensive public WLAN at Kiel Week, we were able to show that we do WLAN unlike any other,” concludes Schwarze.

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