

Network connection on the FHM over Lake Zurich



Reference report on the site survey at the Zürichsee-Fähre Horgen–Meilen AG



Photo: Zürichsee-Fähre Horgen–Meilen AG



The site survey done by onway to improve network connectivity was successful and has made a significant contribution to offering our customers once again a first-class service across Lake Zurich.



Adrian Meier
Technical Manager
Zürichsee-Fähre Horgen–Meilen AG



Starting point

Zürichsee-Fähre Horgen-Meilen AG was faced with the challenge of connecting its cash register and EC systems as well as a Bluetooth printer on board. These devices must be able to communicate without interruption or disruption so that payments for the crossing can be processed quickly. However, connectivity problems occurred time and again, especially when several devices were used simultaneously. In addition to card transactions, the Swiss payment application TWINT also did not work reliably. Despite changing the SIM card several times from different providers, connectivity remained a problem.

Decision

Due to the recurring challenges with the unstable network connection on the ferry, it was essential for Zürichsee-Fähre Horgen-Meilen AG to carry out a comprehensive review of the existing solution. With the aim of resolving the connectivity issues and ensuring a reliable connection, the company commissioned onway to carry out troubleshooting and a site survey.

After a thorough analysis of the existing infrastructure and the identification of weak points, the ferries were equipped with new access points, which in turn communicate with the mobile network via permanently installed routers.

Solution

To ensure a stable network connection, onway decided to use the cost-effective access points from Ruckus. These have already proven themselves in other demanding environments thanks to their beamforming technology. By simplifying the network structure and optimising the routing of the WLAN subnets, it was also possible to achieve high network performance and reliability throughout the entire system.

The performance improvements proved to be significant, which prompted the company to roll out the onway solution on the remaining ferries in the fleet. This move was aimed at ensuring a consistent and reliable network on all ferries and providing passengers with a smooth and enjoyable travelling experience.

Questions for Adrian Meier, Technical Manager FHM

What were the main problems on the ferry due to the unstable network connection?

The impairment of the quality of customer service, in particular due to the partial malfunctioning of payment transactions with the mobile payment terminals. The resulting dissatisfaction among customers also had a negative impact on our employees.

How did you come across onway and what expectations did you have regarding the solution to the problem?

We were looking for a vendor-independent provider to solve the problem. As we had already carried out the initial Wi-Fi measurements with onway (then WLAN-Partner.com AG), we chose them again for the troubleshooting.

What steps were taken to improve the network connection on the ferry?

The site survey identified the need to install stronger access points (APs) to optimise connectivity between the portable payment terminals and the APs. This was realised with the Ruckus APs recommended by onway.

Overall, how satisfied are you with onway's services after the completion of the entire project?

The implementation of the solution by onway has made a significant contribution to providing our customers with a smooth and pleasant service during the crossing again, thanks to the improved network connectivity.



Zürichsee-Fähre Horgen–Meilen AG

Zürichsee-Fähre Horgen-Meilen AG was founded in Meilen in 1932 and operates a fleet of five ferries. The ferries usually run from 6 a.m. to 10 p.m. approximately every ten minutes. This connection shortens the journey for private transport between the Zurich Oberland and central Switzerland by avoiding the diversions via the lake dam in Rapperswil or through the city of Zurich. The journey time is around ten minutes. In 2022, the ferries carried almost two million passengers, around 1.14 million cars, around 17,000 lorries and trailers and just over 105,000 two-wheelers on their approximately three-kilometre route.

onway

Since 2004, the onway ag team has been supporting its customers in the evaluation, planning, implementation, operation and support of their Wi-Fi network access control solutions and has already successfully realised more than 100 projects. We would be happy to support you with your project.