

The image features a blue geometric shape on the left side containing the Zenner logo. The background is a photograph of a cityscape with a prominent cylindrical skyscraper, a river, and green trees in the foreground.

ZENNER

CORPORATE NEWS

SMART CITY BONN: SCALABLE INFRASTRUCTURE
AS THE FOUNDATION FOR THE SMART CITY



Together with ZENNER, Stadtwerke Bonn has established a comprehensive LoRaWAN® network across the city. In doing so, they have laid the strategic foundation for the city's digital transformation. The solution connects the areas of Smart Utility, Smart City, and Smart Building. The city of Bonn is an important center for administration, science, and international cooperation. With its combination of historical significance, vibrant culture, and modern infrastructure, Bonn offers an attractive environment for urban projects and innovative solution approaches. Bonn currently ranks 38th on the Bitkom Smart City Index.



SCALABLE SMART CITY FOUNDATION WITH LORAWAN®

Together with ZENNER, Stadtwerke Bonn is building an open and interoperable LoRaWAN® network. It serves as the technological foundation for digital urban development. LoRaWAN® radio technology offers many advantages, particularly in municipal environments: it combines long range with low energy consumption. Using a single network, various applications in smart metering, submetering, and smart city solutions can be implemented. The architecture can be expanded flexibly and in a future-proof manner. This enables the city of Bonn to easily integrate a wide variety of use cases within the urban environment. By operating its LoRaWAN® network independently, Stadtwerke Bonn strengthens its digital sovereignty while simultaneously building internal expertise. Full control over sensitive metering and infrastructure data enables the secure and cost-efficient operation of thousands of sensors across the entire city area. Thanks to long battery lifetimes, maintenance intervals are reduced and ongoing operational effort remains low.

HOLISTIC DATA STRATEGY FOR SMART UTILITY, SMART CITY, AND SMART BUILDING

Nearly 1,600 meters and 400 smart IoT devices are currently operating within the LoRaWAN® network. On ZENNER's B.One element iot platform, the consumption, environmental, and operational data of the city of Bonn are centrally collected. This creates a standardized data foundation for network operations, infrastructure management, and building control. "Together with ZENNER, Stadtwerke Bonn is implementing numerous projects and use cases. As an infrastructure provider and utility company, we are working with ZENNER as part of the digitalization strategy of both the city and Stadtwerke Bonn to implement a wide variety of use cases in the metering, submetering, and smart city sectors," explains Christian Roosen, Senior Project Manager at Stadtwerke Bonn. Stadtwerke Bonn has also developed its own city dashboard using B.One element apps: Bonn Connect. It visualizes selected data and makes it accessible for different target groups such as internal administration, partners, and the public. In addition to IoT sensor data, external data sources can also be integrated, creating a comprehensive digital representation of the city.

DIGITAL SOVEREIGNTY AND SUSTAINABILITY THROUGH IOT

By digitalizing reading and monitoring processes in smart metering, the city is unlocking significant savings potential. The intelligent integration of LoRaWAN®, smart metering, and the urban data platform establishes a powerful ecosystem for the sustainable development of Bonn as a connected smart city. Patrick Leiner, Senior IoT Project Manager at ZENNER, summarizes: “As a project manager, I particularly value the close collaboration with our customers, such as Stadtwerke Bonn. The wide range of applications results in many sub-projects that we successfully implement together step by step, all contributing to the overarching goal of the Smart City.” Roosen adds: “With ZENNER, we have a partner that is a pioneer in the fields of submetering and infrastructure digitalization. ZENNER also has extensive experience in the large-scale connection and reading of meters. On this basis, we jointly implemented our first pilot projects. These successful projects have developed into a strong and sustainable partnership.”

Smart City Dashboard of the City of Bonn

- Construction Sites
- E-Charging Stations
- Parking Garages
- District Heating

Source: Stadtwerke Bonn



ABOUT ZENNER

ZENNER International GmbH & Co. KG is a leading global provider of innovative solutions for municipal utilities, energy suppliers and local authorities. The company develops and produces measuring technology for recording water, heat and gas consumption as well as digital solutions for the Internet of Things (IoT) for the digitalisation of the smart city. From measuring technology and sensors to LoRaWAN infrastructures and data services to the finished application, ZENNER offers everything from a single source. With well over 10 million measuring instruments and sensors produced each year and experience from over 450 successful IoT projects, ZENNER is a pioneer in the smart city sector. ZENNER, headquartered in Saarbrücken, operates production facilities in Europe, Asia and the USA and has 60 locations worldwide. Founded in 1903, ZENNER is now part of the international Minol-ZENNER Group, which employs more than 4,400 people worldwide.

More information at zenner.de

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