

# Automatic Crowd Management

Bosch and SonoBeacon partner up to develop and pilot an optimized system that automatically measures and analyzes the capacity of passengers in autonomous vehicles

## THE CHALLENGE

The challenges are to extend the proof of maturity of the existing SonoBeacon technology in mass markets, and analyze the performance and cost improvement by changing the SonoBeacon core components to Bosch parts.

## THE SOLUTION

SonoBeacon has integrated one solution in a city bus (Public Transportation Hildesheim) and two solutions in autonomous shuttles (Public Transportation Monheim). The data is transferred from the vehicles to the SonoBeacon cloud via LTE-network in order to be analyzed. Then, this is used to generate recommendations for optimizing the public transportation schedule. In parallel, the SonoBeacon software algorithms have been transferred and integrated into a Bosch telematics platform.

## IMPACT

The SonoBeacon solution is currently operating in 3 vehicles. The data analytics (number of passengers per travel segment and their travel intention) happens in the cloud. Next steps will be the rollout of the SonoBeacon solution with the Bosch hardware to new customers worldwide. Beside this, new use cases will be evaluated.

## SONOBEACON

SonoBeacon is offering a hardware and software solution that allows its customers to reduce carbons for smart mobility operators while increasing customer experience. SonoBeacon offers data based visitors and passenger flow analytics and heat mapping, thus helping investments and operations decision makers.

SonoBeacon is mainly targeting customers in the Smart Mobility - Public Transport, Retail, Tourism, Venues industries. Their focus is on applications in business areas such as controlling, operations, analytics.



### HEADQUARTERS

Germany, Wismar

### FOUNDED

2013

### NO. OF EMPLOYEES

1 – 10

### WEBSITE

[sonobeacon.com](http://sonobeacon.com)

## ACKNOWLEDGEMENTS

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## CONTACT FOR THIS PROJECT

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## ABOUT STARTUP AUTOBAHN

STARTUP AUTOBAHN powered by Plug and Play is an open innovation platform that provides an interface between innovative tech companies and industry-leading corporations. The basis of the program is the partnership that develops between startups and the corporate business units. The two entities hold an equal footing from the get-go: together they evaluate the potential for a joint venture, move forward to pilot the technology, and work to achieve the ultimate goal – a successful production-ready implementation. Designed with the intention to exceed startup acceleration, STARTUP AUTOBAHN powered by Plug and Play moderates a community for collaboration with a focus on implementable results. Over the years, the platform has successfully cultivated over 400 projects with more than 300 startups since its founding in 2016.