



Mobileye Starts Testing Self-Driving Vehicles in Germany

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Mobileye receives an automated vehicle testing permit recommendation from the independent technical service provider TÜV SÜD.

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What's New: Mobileye, an Intel company, received an automated vehicle (AV) testing permit recommendation from the independent technical service provider TÜV SÜD. As one of the leading experts in the field of safe and secure automated driving, TÜV SÜD enabled Mobileye to obtain approval from German authorities by validating the vehicle and functional safety concepts of Mobileye's AV test vehicle. This allows Mobileye to perform AV testing anywhere in Germany, including urban and rural areas as well as the Autobahn at regular driving speed of up to 130 kilometers per hour. The AV testing in Germany in real-world traffic is starting now in and around Munich.

"Mobileye is eager to show the world our best-in-class self-driving vehicle technology and safety solutions as we get closer to making safe, affordable self-driving mobility solutions and consumer vehicles a reality. The new AV Permit provides us an opportunity to instill even more confidence in autonomous driving with future riders, global automakers and international transportation agencies. We thank TÜV SÜD for their trusted collaboration as we expand our AV testing to public roads in Germany."

–Johann Jungwirth, vice president, Mobility-as-a-Service (MaaS), Mobileye

Why It Matters: Mobileye is one of the first non-OEM companies to receive a permit to test AVs on open roads in Germany. Until now, AV test drives in Germany have primarily taken place in closed and simulated environments. The basis for the independent vehicle assessment by TÜV SÜD in Germany builds on Mobileye's existing program in place in Israel, where it has tested AVs for several years.

"With the TÜV SÜD AV-permit we bring in our broad expertise as a neutral and independent third party on the way to safe and secure automated mobility of the future," says Patrick Fruth, CEO Division Mobility, TÜV SÜD. "Our demanding assessment framework and test procedure considers state-of-the-art approaches to safety and combines physical real-world tests and scenario-based simulations."

With the ability to test automated vehicles with a safety operator on public roads in Germany, Mobileye is taking another significant step toward the goal of a driverless future. On the heels of Mobileye's acquisition of Moovit, a leading MaaS solutions company, as well as recent collaborations to test and deploy self-driving vehicles in France, Japan, Korea and Israel, the new testing permit strengthens Mobileye's growing global leadership position as an AV technology as well as complete mobility solutions provider.

How It Works: The new permit will allow Mobileye to demonstrate to the global automotive industry and partners the safety, functionality and scalability of its unique self-driving system (SDS) for MaaS and consumer autonomous vehicles. The Mobileye SDS is comprised of the industry's most advanced vision sensing technology, True Redundancy with two independent perception sub-systems, crowd-sourced mapping in the form of Road Experience Management™ (REM™) and its pioneering Responsibility-Sensitive Safety (RSS) driving policy.

Although the first tests of AVs using Mobileye's SDS will be completed in Munich, the company plans to also perform AV testing in other parts of Germany. In addition, Mobileye expects to scale open-road testing in other countries before the end of 2020.

In order to obtain the authorization, Mobileye-powered AV test vehicles underwent a series of rigorous safety tests and provided comprehensive technical documentation. Part of the application also included a detailed hazard analysis, vehicles safety and functional safety concepts and proof that the cars can be safely integrated into public road traffic – an assessment that was made possible using Mobileye's RSS.

More Context: As Mobileye begins self-driving vehicle testing in Germany, Mobileye and Moovit will start demonstrating full end-to-end ride hailing mobility services based on Moovit's mobility platform and apps using Mobileye's AVs. Intel is pursuing the goal of continuing to develop pioneering technologies together with Mobileye and Moovit that will make roads safer for all road users while also improving mobility access for all.

In addition to the development of market-ready technologies, an important prerequisite is the worldwide mapping of roads. Mobileye has already successfully laid the foundations with REM. In cooperation with various automobile manufacturers, data from 25 million vehicles is expected to be collected by 2025. Mobileye is creating high-definition maps of the worldwide road infrastructure as the basis for safe autonomous driving. Millions of kilometers of roads across the globe are mapped every day with the REM technology.

Together, Intel, Mobileye and Moovit are driving forward the implementation of their mobility-as-a-service strategy. This strategy offers society and individuals solutions to today's major social costs of transportation. The goal is to make mobility safe, accessible, clean, affordable and convenient, so that people can travel efficiently, flexibly and smartly from Point A to Point B. All means of transport — from public transport to car and bike sharing services to ride hailing and ride sharing with self-driving vehicles — will be bundled within one service offering of Moovit and Mobileye, smartly managed by Moovit's mobility intelligence platform. The advantages are manifold: traffic congestion is minimized, emissions are reduced, and people are given equal and affordable access to mobility — an approach that is a top priority at Intel.