

Press Information

October 23, 2023



MOIA

Federal government and Hamburg put autonomous ridepooling project on the road

- Minister of Transport Wissing hands over funding notification
- Project for autonomous ridepooling in the pilot region of Hamburg
- · Alliance of operators, vehicle industry and science



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By 2030, there could be up to 10,000 autonomous shuttles on Hamburg's roads. That's the goal of an agreement between the Federal Ministry of Transport and the Hanseatic City of Hamburg, which is now being brought to reality. A mobility solution will be created in the city using a modern on-demand transport service that supplements the classic public bus and rail transport system with a new product and represents an attractive alternative to private cars. The ALIKE project will test a system with autonomous shuttles that can be easily booked using an app and that picks up passengers and takes them to their destination. The system meets strict safety requirements and is also intended to be scalable across regions, making it also suitable for rural areas. The aim of the pilot project is also to test the acceptance of autonomous driving services in practice.





The Federal Ministry of Digital and Transport is funding the project with €26 million. The Federal Minister of Transport Dr. Volker Wissing today presented the funding decision to the project consortium in the presence of Hamburg's Senator for Transport and Mobility Change Dr. Anjes Tjarks. The consortium brings together six project partners: HOCHBAHN as consortium leader; the on-demand service provider MOIA; vehicle manufacturers HOLON and Volkswagen Commercial Vehicles; as well as the Karlsruhe Institute of Technology (KIT) as research partner and the Hamburg Authority for Transport and Mobility Change (BVM).

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aufgrund eines Beschlusses des Deutschen Bundestages

Volker Wissing, Federal Minister for Digital Affairs and Transport commented: "I want people to continue to have freedom of choice when it comes to mobility in the future. Traffic in Germany will increase, which is all the more



reason why we need new, smart forms of mobility that help us use our infrastructure efficiently. Autonomous driving can be a key to relieving congestion on the roads in major cities while ensuring mobility right up to the front door. The autonomous on-demand shuttle comes exactly when I need it and it takes me directly to my destination. The fully digital booking system makes it easy to book, trips can be combined, travel and costs are saved. I am delighted that in Hamburg we have found a courageous partner who is open to innovation in order to establish autonomous driving in Germany. I am convinced that this good idea will be accepted by the people of Hamburg and will find many imitators."

Anjes Tjarks, Hamburg's Senator for Transport and Mobility Transition: "With this broad alliance for autonomous driving, we are implementing another point of the joint agreement with the federal government, with which we want to develop Hamburg into a model for mobility. Autonomous ridepooling is the missing piece of the puzzle between traditional public transport and the individual mobility needs of citizens. With it, we are creating a completely new pillar of public transport, an attractive alternative to private cars, and an essential prerequisite for being able to run the 'Hamburg-Takt' and offer everyone in Hamburg a public transport service within five minutes. As a result, the public transport of the future will be even more convenient, sustainable and efficient. In keeping with the very successful 'Deutschland Ticket', autonomous vehicles will help us develop a corresponding Germany-wide offer in the future. My thanks go to Federal Minister Wissing for his support in advancing and further shaping the mobility of the future for all of Germany in the Hamburg region."

The consortium partners will initially set up an overall system for booking and using up to 20 autonomously driving vehicles in public transport in Hamburg. Vehicles from different manufacturers will be integrated into an on-demand service to test them in operation and make them digitally bookable for users via apps. The project results are expected to lay the foundation for future commercial deployment and scaling of ridepooling services.













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Combined expertise for operating concept and app development

MOIA

HOCHBAHN

The project consortium includes HOCHBAHN and MOIA, two established operators of mobility solutions whose experience includes using autonomous vehicles. Both have powerful and accepted platforms for bookings in the form of the hvv switch app and the MOIA app. The operations and ridepooling software is provided by MOIA. The company has been operating Europe's largest all-electric ridepooling service with drivers in Hamburg since 2019 and has extensive experience in setting up and operating on-demand transport. HOCHBAHN is Germany's second-largest public transportation company and was responsible for the successful HEAT (Hamburg Electric Autonomous Transportation) research and development project until 2020/21, in which experience was gained for the first time in the operation of an autonomous shuttle in regular service in Hamburg.





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Henrik Falk, CEO of HOCHBAHN: "ALIKE brings together very different project partners with their respective strengths. For the first time, transport companies, ridepooling providers, vehicle manufacturers and experts from science and politics are working together to advance the topic of autonomous driving. The goal is a mobility solution that can be expanded and transferred to other cities and regions. There's no comparable model anywhere in the world for such a holistic system."

Sascha Meyer, CEO MOIA: "In the ALIKE project, MOIA seamlessly integrates an autonomous fleet with two operators and different vehicles into a ridepooling offering. It's precisely this collaboration between public and private companies that makes the project unique. MOIA's ridepooling system is the cornerstone of the project that joins the providers' components together into an attractive offering. In the future, people in Hamburg will be able to order autonomous mobility via both the MOIA and hvv switch apps. With this project, we are putting into practise our strategic goal of an open mobility platform for shared autonomous transport."

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Two types of vehicles for varying use cases

ALIKE will enter service with two models of fully electric autonomous driving shuttles. One shuttle comes from the BENTELER subsidiary HOLON and was first presented at the Consumer Electronics Show (CES) in Las Vegas in January of this year. The HOLON Mover is one of the first built to automotive standards and offers maximum safety and comfort for up to 15 passengers. With a top speed of 60 km/h, the shuttle will fit perfectly into city traffic. It can be used barrier-free thanks to an automated ramp, secured wheelchair space, and auditory and visual assistance for passengers.

The second vehicle is the ID. Buzz AD from Volkswagen Commercial Vehicles. It has already successfully completed the first tests on public roads and will be Volkswagen's first autonomous production vehicle. The ID. Buzz AD offers the ideal size for operation in congested areas – compact, maneuverable, and with optimal use of space.

Henning von Watzdorf, CEO HOLON: "All ALIKE members are united by a common goal: to change mobility. With our HOLON Mover, we're providing an important building block for this. The vehicle will make mobility safer, more sustainable and more inclusive. It's not designed for drivers but exclusively for passengers. In this way, we're creating a completely new mobility experience – and we're starting here in Hamburg."

Christian Senger, Member of the Board of Management for Autonomous Driving Development at Volkswagen Commercial Vehicles: "With the production of autonomous and fully electric shuttles, we're making a decisive contribution to the ALIKE project. The VW ID. Buzz AD offers high-volume technology, a self-driving system from Mobileye, and the ideal size for use in major cities such as Hamburg. Our vehicles use cameras, radars and lidars, as well as high-performance computers. On this basis, 360° environment recognition superior to human perception is created for safe driving commands. The vehicles have already been successfully tested under real conditions in Munich and Austin. Now we are bringing the ID. Buzz AD to Hamburg. We are delighted to have Federal Minister of Transport Dr. Volker Wissing as our first guest for an autonomous ride in Hamburg today."













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Accompanying research on social acceptance and traffic impact

The Institut für Verkehrswesen (ifV – Institute of Transportation) at the Karlsruhe Institute of Technology (KIT) has proven expertise in accompanying research on ridepooling and will provide scientific support. The IfV at KIT deals with all aspects of mobility, ranging from overall societal planning concepts to technical developments in transport. The IfV uses an interdisciplinary concept to pursue the goal of organizing traffic efficiently and sustainably, researching the effects of new mobility systems on users, and ensuring system integration. The Transport and Mobility Change Authority (BVM) as another consortium partner provides the political connection and plays an essential role in the approval process. The ALIKE project plans to achieve and implement SAE automation level 4 (highly automated driving).

The project will also research the social acceptance of autonomous driving in public transport and model users' mobility behavior. Among other things, extensive information offerings and surveys are planned for this purpose. The results will then be used in modeling to evaluate the effects of autonomous service based on various scenarios.

Another associate partner is DRM Datenraum Mobilität GmbH. The company will help the consortium define a suitable use case for a European Mobility Data Space to strengthen data sharing.

The project officially starts with funding from the Federal Ministry of Transport. In the coming weeks, the main contents of the project will be defined on the basis of the preliminary work by the consortium partners. The project is scheduled to run for three years and is divided into three main phases: The preparation phase includes detailed project planning and software development. In the integration phase, the vehicles will be linked to the operating software. In addition, permits will be obtained for vehicles and the operating area, for example, in accordance with the new legislation on autonomous driving. The autonomous ridepooling service is scheduled to start in 2025, when passengers will be able to ride in the shuttles.













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Contact persons for the media:

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Hamburger Hochbahn AG (HOCHBAHN)

Constanze Salgues - presse@hochbahn.de - +49 170 5255 650

MOIA

MOIA

David Gölnitz - david.goelnitz@moia.io - 49 152 28 46 54 11

HOLON

Stephan Knüttel - public.relations@benteler.com - +49 172 5727 25

Volkswagen Nutzfahrzeuge (VWN)

Christian Buhlmann – <u>christian.buhlmann@volkswagen.de</u> – +49 152 22 99 56 03



Karlsruher Institut für Technologie (KIT)

Aileen Seebauer - aileen.seebauer@kit.edu - +49 (0) 721 608 41,163

SINE

Behörde für Verkehr und Mobilitätswende (BVM)

Dennis Heinert - pressestelle@bvm.hamburg.de - +49 176 42,864,684

Hamburg

Bundesministerium für Digitales und Verkehr

Florian Druckenthaner – presse@bmdv.bund.de – +49 (0) 30 18300 5844

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Project partners



Hamburger Hochbahn AG (HOCHBAHN)

Founded in 1911, HOCHBAHN transports more than 1.2 million passengers a day with its own fleet of more than 280 subway trains and 1,100 buses. As one of 34 partners in the Hamburg Transport Association (HVV), HOCHBAHN serves more than 1,400 stops and is the largest transport company in the HVV operating area. 6,300 employees work around the clock at HOCHBAHN to ensure attractive local public transport and convenient, future-oriented mobility in Hamburg.



MOIA

MOIA is a subsidiary of the Volkswagen Group. The company develops mobility services at its Berlin and Hamburg locations and works in partnership with cities and local public transport operators. MOIA is currently developing and implementing a ridepooling system to reduce individual vehicle traffic and use road infrastructure more efficiently. Cities are relieved of congestion, noise and exhaust fumes. MOIA has provided its ridepooling service in Hanover since summer 2018, followed by Hamburg, the first city with a million inhabitants, on April 15, 2019. Together with Volkswagen Commercial Vehicles, MOIA is currently developing and testing autonomous ridepooling in a pilot project in Hamburg. The goal is to develop an autonomous, internationally scalable ridepooling system and put it on the road in Hamburg after 2025. www.moia.io.



HOLON

HOLON is a legally independent entity and a subsidiary of BENTELER Automotive. With well-founded know-how in automotive technology and industrialization as well as the continuous implementation of new technologies for electromobility, the company develops autonomous movers for the vehicle market of the future. To do this, HOLON works with technology companies, local public transport companies and mobility-as-a-service providers. www.driveholon.com



Volkswagen Nutzfahrzeuge (VWN)

Volkswagen Commercial Vehicles: As a leading manufacturer of light commercial vehicles, Volkswagen Commercial Vehicles (VWN) is fundamentally reshaping the movement of goods, people and services in a sustainable way. Our vehicles carry construction workers, families and adventurers, bread rolls, packages and surfboards. Every day, they help countless people around the world to do a great job, serve as mobile workshops, and transport emergency doctors, police officers, and more to their destinations. At the sites in Hanover (D), Poznań (PL), Września (PL) and Pacheco (ARG), around 24,000 employees produce the Transporter, Caddy, Crafter and Amarok series and, from 2022, the ID. BUZZ – the all-electric version of our iconic Bulli. VWN is also the Volkswagen Group's leading brand for autonomous driving and mobility services such as mobility-as-a-service and transport-as-a-service – areas where we shape the future of mobility to meet all the requirements of clean, intelligent, and sustainable mobility. This is what Volkswagen Commercial Vehicles stands for with its brand promise: We transport success, freedom and the future.



Hamburg

Karlsruher Institut für Technologie (KIT)

As "The Research University in the Helmholtz Association", KIT creates and imparts knowledge for society and the environment. The aim is to make significant contributions to the global challenges in the fields of energy, mobility and information. To this end, around 9,800 employees work together on a broad disciplinary basis in natural sciences, engineering, economics, and the humanities and social sciences. KIT is one of the German universities of excellence. The Institut für Verkehrswesen (ifV) at KIT deals with all aspects of mobility, ranging from overall societal planning concepts to technical developments in transport. The IfV uses an interdisciplinary concept to pursue the goal of organizing traffic efficiently and sustainably, researching the effects of new mobility systems on users, and ensuring system integration.

Behörde für Verkehr und Mobilitätswende (BVM)

Founded in 2020, BVM is one of eleven specialized authorities of the Free and Hanseatic City of Hamburg. It's led by Senator Dr. Anjes Tjarks and State Councillor Martin Bill together with department heads Kirsten Pfaue, Diether Schönfelder and Dr. Tina Wagner. The central task of the authority is to promote and implement the mobility transition in Hamburg. The goal is that by 2030, 80% of all journeys in Hamburg will be completed via the environmental network (public transport + cycling + walking). One elementary means of achieving this is the Hamburg-Takt, which is intended to provide all Hamburg residents with a public transport service within five minutes during the day by 2030. The BVM is assigned to the State Office for Roads, Bridges and Waterways (LSBG) and the State Office for Transport (LBV).

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