Joint press release

Press

from Siemens Mobility GmbH, Bavarian State Ministry Munich, 12 July 2021 of Economic Affairs, Regional Development and Energy, Bavarian State Ministry for Housing, Building, and Transport and Bayerische Regiobahn

State of Bavaria supports hydrogen-powered train – trial operation in Bavaria

- Minister of Economic Affairs Aiwanger: "An important component in Bavaria's hydrogen strategy"
- Minister of Transport Schreyer: "Ambitious climate goals in the transport sector"

The Bavarian State Ministers for Economic Affairs and for Transport support the testing in Bavaria of a hydrogen-powered train developed by Siemens Mobility GmbH. The two-car train is to be tested on the Augsburg - Füssen route, among others, beginning in mid-2023. The pilot operation in the rail network of Bayerische Regiobahn (BRB) is initially planned for 30 months. The hydrogen-powered train will be stationed in Augsburg during this time.

A Memorandum of Understanding to this effect was signed on Monday by Minister for Economic Affairs Hubert Aiwanger, Minister for Transport Kerstin Schreyer, and top representatives of Siemens Mobility and Bayerische Regiobahn (BRB).



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Bavaria's Minister of Economic Affairs Hubert Aiwanger is especially pleased about the development partnership. "The train is another important component in Bavaria's hydrogen strategy. My ministry is promoting research, development and applications in the field of hydrogen technology. We're organizing this rail project together with our partners because we're convinced that hydrogen technology will make a significant contribution to decarbonizing transport. We'll prove in Bavaria that business and climate protection can be reconciled with green hydrogen."

Kerstin Schreyer, Bavarian State Minister for Housing, Building and Transport explained: "The Free State of Bavaria sets itself ambitious climate targets and wants to implement a clear climate protection strategy in the transport sector. Innovative technologies and green hydrogen play a special role in this. In addition to the direct use of electricity, hydrogen has the potential to be used in a wide range of flexible applications, so that the rail transport sector can also be completely converted to renewable energies in the future. I am pleased that the Free State can also test this innovative technology in regular operation in this project."

Karl Blaim, Managing Director of Siemens Mobility: "Siemens Mobility is a leading supplier in the development of alternative drives, which can contribute significantly to reducing emissions, especially in regional transport where there are no electrified overhead lines. The technology partnership between Siemens Mobility and the State of Bavaria enables the further development of the Mireo Plus H for Bavaria and supports climate-friendly passenger transport in the state."

Arnulf Schuchmann, technical Managing Director of Bayerische Regiobahn,

said: "We agreed to test hydrogen technology and to test the Siemens Mobility train in passenger service because we are curious and open to alternative forms of propulsion in the railway sector as well. Within the Transdev Group, to which we belong, there is already a lot of experience with alternative drives in the bus sector."

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However, it is by no means enough to put the hydrogen train on the track, since many aspects have to be taken into account during operation. Safety requirements have to be implemented, staff training, the refueling of the vehicle, the routes on which it will travel, and many other activities have already begun.

The hydrogen-powered train is being developed on the basis of the Mireo Plus H platform from Siemens Mobility. It is designed to operate on non-electrified rail lines and has a range of up to 800 kilometers. The main components of the hydrogen traction drive are two fuel cells mounted on the roof. The system uses the latest generation of batteries from the Saft company that are installed beneath the floor. The train will be presented to the public in the spring of 2022. The first test runs in Bavaria are planned for 2023, before the train officially enters passenger service in January 2024.

The development of alternative drives in rail transport is part of Siemens Mobility's sustainability strategy. The company is a pioneer when it comes to sustainable mobility and will offer the successful Mireo regional train as both a hydrogen and a battery-powered unit. The well-known Mireo Plus H platform is being used but is being equipped with a new generation of batteries to further improve both performance and passenger comfort.

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This press information and further material are available at https://sie.ag/2T2kZaW

For further information about alternative drives please see: <u>https://www.mobility.siemens.com/global/en/portfolio/rail/rolling-stock/alternative-drives.html</u>

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