

Siemens Mobility GmbH

Munich, September 15, 2023

Press

Siemens Mobility completes first test runs with hydrogen train in Bavaria

- Mireo Plus H hydrogen train reduces CO₂ emissions on routes around Augsburg
- Passenger service starts in mid-2024

Siemens Mobility has completed the first test runs with the Mireo Plus H hydrogenpowered train in Bavaria. The two-car trainset will enter passenger service in mid-2024 on routes between Augsburg and Füssen and Augsburg and Peissenberg on the rail network of Bayerische Regiobahn (BRB). Pilot operations of the train are planned for 30 months and are supported by the State of Bavaria. Siemens Mobility and Bavaria signed the corresponding development partnership in 2021.

Karl Blaim, Managing Director and CFO of Siemens Mobility: "Partnering with the State of Bavaria, we have reached an important milestone today for the future of alternative drive systems for trains. Our hydrogen-powered Mireo Plus H train will operate completely emission-free between Augsburg, Füssen and Peissenberg. With this train, we are offering a sustainable solution for rail routes that are not electrified."

Bavaria's Transport Minister Christian Bernreiter: "By conducting 30 months of passenger operations, we will test the hydrogen train under a full range of everyday conditions. The results of these tests will then determine whether we decide to use hydrogen-powered trains on additional routes in Bavaria. Our goal is to end diesel operations in Bavaria's local and regional rail passenger transport by 2040. In

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addition to electrifying routes and using battery-powered trains, hydrogen propulsion can be an important factor in achieving this goal."

Bavaria's Economics Minister Hubert Aiwanger: "With this first hydrogen train, Bavaria is taking another step towards a hydrogen future. By implementing the pilot project together with our partners Siemens and Bayerische Regiobahn, we are making the hydrogen future a tangible experience and at the same time gaining key practical know-how for the broad application of sustainable hydrogen innovations."

Arnulf Schuchmann, Managing Director of Bayerische Regiobahn (BRB): "Today we can experience the Siemens Mobility hydrogen train live on a normal line for the first time, and are preparing intensively for passenger operations next year. As the second largest railway company in Bavaria, we are especially pleased with the confidence that politicians, the Bayerische Eisenbahngesellschaft and Siemens Mobility have shown in entrusting us with the test operations. Green hydrogen is an additional climate-friendly solution for local passenger transport. As part of the Transdev Group, we attach great importance to environment protection and are happy to support innovative, future-focused projects."

The Mireo Plus H is a state-of-the-art hydrogen-powered train based on Siemens Mobility's proven Mireo regional train platform. Two roof-mounted fuel cells and a lithium-ion battery ensure completely CO₂-free mobility. The H₂ energy supply system, combined with the electric drive, provide high 1.7 MW traction power for acceleration of up to 1.1 m/s² and a top speed of 160 km/h. The train has an operating range between 1,000 and 1,200 kilometers with one tank filling. The Mireo Plus H also impressively features the lowest lifecycle costs compared to other fuel cell trains on the market and can be quickly refueled in just 15 minutes. The Mireo is designed to be energy-saving and environmentally friendly with its monocoque, welded lightweight aluminum structure. In addition, its improved aerodynamics, energy-efficient components, and intelligent electrical system management effectively reduce the use of resources as well as emissions.

The development of alternative drives in rail transport is part of Siemens Mobility's sustainability strategy. The company is a pioneer in sustainable mobility solutions and offers the successful Mireo regional train platform not only as an electric train

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for routes with overhead power lines, but also as hydrogen and battery-powered variants.

This press release and additional material can be found at: https://sie.ag/6G3zPx

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For further information about Siemens Mobility GmbH, please see:

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Siemens Mobility is a separately managed company of Siemens AG. As a leader in intelligent transport solutions for more than 175 years, Siemens Mobility is constantly innovating its portfolio. Its core areas include rolling stock, rail automation and electrification, a comprehensive software portfolio, turnkey systems as well as related services. With digital products and solutions, Siemens Mobility is enabling mobility operators worldwide to make infrastructure intelligent, increase value sustainably over the entire lifecycle, enhance passenger experience and guarantee availability. In fiscal year 2022, which ended on September 30, 2022, Siemens Mobility posted revenue of \in 9.7 billion and employed around 38,200 people worldwide. Further information is available at: www.siemens.com/mobility