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Press

Siemens Mobility GmbH

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Siemens Mobility builds emission-free hydrogen-powered trains for Südostbayernbahn

- **Second fleet order for Siemens Mobility's Mireo Plus H**
- **Emission-free rail transport using hydrogen technology on the Mühldorf (Upper Bavaria) - Burghausen line**
- **Presentation of the innovative hydrogen train design for Südostbayernbahn**

Siemens Mobility has started production of the hydrogen-powered trains that will begin operating on the Südostbayernbahn network in late 2026. The order is for three 2-car Mireo Plus H trains. Ordered by the state of Bavaria, the ultra-modern hydrogen trains will replace diesel trains currently operating from the network's Mühldorf hub and significantly reduce CO_2 emissions as well as noise and exhaust gas in the region. The new trains will feature nine spaces for bicycles, special high-frequency-permeable windows for improved mobile phone reception, and comfortable car access thanks to their low-floor design. Equipped with the European Train Control System (ETCS), the Mireo Plus H ensures maximum operational safety and efficiency. Along with the series contract, Siemens Mobility was also awarded a service contract for the trains' hydrogen supply system.

The hydrogen trains will serve eight stations on the Mühldorf (Upper Bavaria) – Tüßling – Burghausen non-electrified route, which is 32.3 kilometers long. Deutsche Bahn (DB) will build an electrolysis plant in Mühldorf that will be 100-percent powered by green electricity.

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Andre Rodenbeck, CEO Rolling Stock at Siemens Mobility: "We are proud to be delivering Mireo Plus H hydrogen trains to Deutsche Bahn and thus enabling emission-free mobility in our home region. Our hydrogen trains feature mature technology, high energy efficiency, strong drive power, long operating range, and low noise levels."

"Hydrogen trains are an important building block for DB on its path to achieving climate neutrality," said **Cornelia Würtz, Managing Director of DB RegioNetz Verkehrs GmbH**. "By introducing the Mireo Plus H, we are helping drive the climate-friendly rail transport transition at Südostbayernbahn."

The Mireo Plus H is a state-of-the-art hydrogen train based on Siemens Mobility's proven regional train platform, which is available with electric, battery, or hydrogen-powered drives. On the hydrogen-powered variant, a roof-mounted fuel cell and lithium-ion batteries installed beneath the car floor ensure operation completely free of CO_2 emissions. With its hydrogen supply system and electric drive, the train has a high drive power of 1.7 MW that enables it to accelerate up to 1.1 m/s^2 and reach a top speed of 140 km/h. The train has a range of up to 1,200 kilometers on a single tank of fuel, depending on factors such as the route topography and driving style. The trains also have impressively low lifecycle costs and a rapid fueling function that allows refueling in approximately 15 minutes, depending on the fueling station. The Mireo design, based on an integrated lightweight aluminum structure, is energy-saving and environmentally friendly. The train's improved aerodynamics, energy-efficient components and intelligent onboard network management system also help reduce resources and emissions.

Hydrogen trains are acknowledged as an environmentally friendly alternative to conventional diesel trains and offer several advantages:

- Environmental friendliness: Hydrogen trains only emit water vapor during operation and no harmful emissions such as carbon dioxide (CO_2) or nitrogen oxides (NO_x), helping to reduce air pollution and combat climate change.
- Flexibility: Hydrogen trains can operate on non-electrified railway lines since they convert their tanked hydrogen into electrical energy using on-board fuel cells and needn't rely on overhead contact lines or other power sources.

A two-car Mireo Plus H train has a range of up to 1,200 kilometers on a single tank of hydrogen.

- Noise reduction: Hydrogen trains are quieter than conventional diesel trains since they are electrically powered and produce less mechanical noise.

This press release and additional material can be found at: https://sie.ag/2usvqw.

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