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World Premiere: Siemens Proves Unique Signaling X Solution In Live Metro Operation

- **Signaling X live demonstration in Singapore shows that Communications-Based Train Control (CBTC) functions in a real-world environment in the private cloud at the Singapore Rail Test Centre**
- **Proven CBTC and interlocking software runs on standard IT hardware in a Signaling Data Center – scalable, cyber-secure and the data available for AI applications in the future**
- **Major leap for cities: Up to 20% higher operational efficiency and up to 30% energy savings - more trains, shorter waits, more sustainable mobility**

This week, Siemens Mobility carries out the world's first live demonstration of metro operations with Signaling X at the Singapore Rail Test Center (SRTC), in front of mass transit operators and journalists from around the world. As global mobility demand continues to rise, this breakthrough brings Communications-Based Train Control (CBTC), the state-of-the-art system for metro and urban networks, into a centralized cloud-ready infrastructure, a signaling data center. Safety-critical functions run on commercial off-the-shelf (COTS) hardware with Siemens Mobility's Distributed Smart Safe System (DS3) platform. The result: up to 20% higher operational efficiency and up to 30% energy savings – delivering more capacity and sustainable mobility by enabling more trains to run safely at closer intervals. Following its launch at InnoTrans 2024 and successful introduction in mainline rail, Signaling X is now ready for the mass transit market.

"Today marks a milestone in the digital transformation of mass transit as we unveil Signaling X in a live urban rail environment here in Singapore. Signaling X brings together various signaling systems onto one platform, expanding capabilities through open interfaces," **says Marc Ludwig, CEO of Rail Infrastructure at**

Siemens Mobility. "Our groundbreaking solution has already demonstrated its reliability in mainline applications as a globally proven platform with a strong track record. Today is the first live showcase in a CBTC mass transit test setting, and we are grateful to MSI Global for partnering with us to present Signaling X."

Cloud-ready platform: Future of Railway Signaling

Signaling X represents a groundbreaking advancement in signaling and control for both mainline and urban rail. This cloud-ready platform integrates interlockings, signaling systems, and control systems into a centralized, virtualized data center. By deploying safety-critical railway functions, like interlocking logic, and non-safety systems such as timetable management and traffic optimization on the same type of commercial off-the-shelf hardware and through standardized APIs, it provides a seamless, efficient approach to rail operations. Unlike proprietary systems that rely on older chip technology and occupy entire rooms with specially built electronics, Signaling X demonstrates that the software can run in systems worldwide on COTS standard hardware - simplifying infrastructure and reducing complexity.

The foundation of this innovation is the DS3, introduced in 2020, which utilizes COTS hardware to ensure safety-critical applications operate securely within a scalable, redundant network. This cyber-secure environment enhances operational efficiency, offers significant energy savings, and reduces headways, paving the way for a more flexible and future-proof rail ecosystem.

This press release and a press picture / press pictures/ further material are available at https://sie.ag/wNR7C

Contact for journalists

Moritz Krause
Phone: +49 162 3480575; E-mail: moritz.krause@siemens.com

Claas Belling
Phone: +49 173 6901586; E-Mail: claas.belling@siemens.com

For further information about Siemens Mobility, please see:
www.siemens.com/mobility

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, and the use of industrial AI, Siemens Mobility is enabling mobility operators worldwide to make their infrastructure intelligent, increase value sustainably over the entire lifecycle, enhance passenger experience, and guarantee availability. In fiscal year 2024, which ended on September 30, 2024, Siemens Mobility posted revenue of €11.4 billion and employed around 41,900 people worldwide. Further information is available at: www.siemens.com/mobility