

New innovative Brake Monitoring System for freight trains

- **Siemens Mobility and VTG Rail Europe collaborate to innovate rail freight transport**
- **Contract covers a one-year trial to prove the system's operational capability**
- **Brake Monitoring System has European-wide market potential due to time and cost savings for rail-bound freight transport**

Siemens Mobility GmbH and VTG Rail Europe GmbH signed a contract to test the innovative Brake Monitoring System (BMS) for automated brake testing of freight trains to prove the system's operational capability. The BMS ensures an automatic brake test on each wagon of a train. The expected efficiencies generated for freight operators will result in a great market potential across Europe.

Reduction of CO₂ emissions is on top of the global agenda. A shift of transport volumes from road to rail is an important enabler to achieve climate targets. Hence the need to make rail freight transport more efficient becomes more important.

"The Brake Monitoring System, developed by Siemens Mobility, is a crucial step towards a further automated and digitalized freight railway. Reduced time-consuming manual processes, increased efficiency and guaranteed availability, are key drivers to make sustainable rail transport more competitive." said Anne Fischer, Head of Rail Automation Products, Siemens Mobility.

SIEMENS



Siemens Mobility GmbH
Otto-Hahn-Ring 6
81739 München
Deutschland

VTG Aktiengesellschaft
Nagelsweg 34
20097 Hamburg
Deutschland

“The idea for a brake monitoring system was born at VTG back in 2016 and first developments started early. With Siemens Mobility we have found a strategic technology partner with whom we can continue to drive innovations forward and develop smart cutting-edge rail technology. The overriding premise of the project is to have direct productivity and efficiency effects for the industry. With the implementation of the Brake Monitoring System, the network capacity can be used more efficiently, train staff will benefit from reduced workload and overall safety will be enhanced,” said Dr. Hanno Schell, Head of Technical Innovations at VTG.

As part of the one-year trial, individual components of the system are being tested and optimized. The first out of two wagon sets has been fully equipped with the BMS and tests have been running since November 2020.

The system provides train staff with status data visible on each side of the wagon, as well as automated reporting of complete wagon-status, and live updates of all wagon-settings on a display in the locomotive. BMS also improves overall security, allowing for detailed visualization of incorrect settings, tightened hand brakes or other problems with wagon components upon inspection by the wagon inspector and directly before the departure. The data obtained helps to prevent unexpected outages, reduces maintenance costs and provides early indication of wear and tear.

The initial concept of the BMS was developed already at the end of 2016. After one year of successful field tests all over Europe and some enhancements of the system until 2019, the results of the current joint trial operation are an essential input for development of a series product by Siemens Mobility.

This press release is available at <https://sie.ag/3s0psaw>

Unrestricted

Siemens Mobility GmbH
Otto-Hahn-Ring 6
81739 München
Deutschland

VTG Aktiengesellschaft
Nagelsweg 34
20097 Hamburg
Deutschland

Contact for journalists:

Silke Thomson-Pottebohm, Phone: +49 174 306 3307

E-mail: silke.thomson-pottebohm@siemens.com

Dr. René Abel, Phone: +49 (0) 40 23 54-1341

E-mail: Rene.Abel@vtg.com

Follow us on Twitter at: www.twitter.com/SiemensMobility

For further information about Siemens Mobility, please see:

www.siemens.com/mobility

Headquartered in Hamburg, **VTG Aktiengesellschaft** is a global asset owner and logistics company with a strong focus on rail. Besides hiring out rail freight wagons and tank containers, it also provides multimodal logistical services and integrated digital solutions. The company's fleet includes around 95,000 rail freight wagons – mostly tank wagons, intermodal wagons, standard freight wagons and sliding-wall wagons – as well as about 9,000 tank containers. This diversified service portfolio gives VTG's customers a robust platform for international freight transportation, based on which the company develops made-to-measure logistical solutions for any and every industry. Over many years, VTG has accumulated granular expertise across the entire transport chain – expertise that is now flanked by smart technology. The Group likewise combines a wealth of experience with a specialized knowledge of the transportation of liquid and sensitive goods in particular. Its customers include a plethora of leading companies representing the chemicals, petroleum, automotive and paper industries, agriculture and virtually every other sector besides.

VTG posted revenue of EUR 1,221 million and an operating profit (EBITDA) of EUR 512 million in the 2019 financial year. The Hamburg-based company's subsidiaries and affiliates give it a sizable footprint in Europe, North America, Russia and Asia. Effective December 31, 2019, VTG employed around 1,750 people worldwide. For further information, please visit <http://www.vtg.com/>

Unrestricted

Siemens Mobility GmbH
Otto-Hahn-Ring 6
81739 München
Deutschland

VTG Aktiengesellschaft
Nagelsweg 34
20097 Hamburg
Deutschland

Joint Press Release
Siemens Mobility GmbH & VTG Aktiengesellschaft

Siemens Mobility is a separately managed company of Siemens AG. As a leader in transport solutions for more than 160 years, Siemens Mobility is constantly innovating its portfolio in its core areas of rolling stock, rail automation and electrification, turnkey systems, intelligent traffic systems as well as related services. With digitalization, 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 2020, which ended on September 30, 2020, Siemens Mobility posted revenue of €9.1 billion and had around 38,500 employees worldwide. Further information is available at: www.siemens.com/mobility.

Unrestricted

Siemens Mobility GmbH
Otto-Hahn-Ring 6
81739 München
Deutschland

VTG Aktiengesellschaft
Nagelsweg 34
20097 Hamburg
Deutschland