

**Press Release**

Munich, October 25, 2018

**Rheinbahn Düsseldorf to equip light rail vehicles with iCOM digital platform from Knorr-Bremse**

- **iCOM installed in three Rheinbahn Düsseldorf vehicles**
- **iCOM serves as central data hub and monitors condition of rail vehicles**
- **System provides basis for predictive and lower-cost maintenance**

**Munich, October 25, 2018 – In June of this year, Düsseldorf mass transit operator Rheinbahn began installing the iCOM digital platform from Knorr-Bremse, the global market leader for braking systems and a leading supplier of other safety-critical rail and commercial vehicle systems. As a result, Rheinbahn will be able to achieve more efficient maintenance of the three units currently fitted with iCOM, along with reductions in downtimes and costs.**

Knorr-Bremse and Rheinbahn Düsseldorf initially embarked on the joint iCOM project in January 2018. The first step involved Knorr-Bremse equipping several of the local mass transit operator's Type NF8U (low-floor eight-axle metro) light rail vehicles, built between 2006 and 2012, with the digital platform. Knorr-Bremse supplied Rheinbahn with all the necessary hard and software to support wireless data transfer from its light rail vehicles to its workshops. Acting as the central data hub, iCOM monitors the condition of the rail vehicles, helping operators to introduce predictive and lower-cost maintenance. For Rheinbahn this makes ongoing operations more transparent, while potential problems are identified early on.

As Dr. Jürgen Wilder, Member of the Executive Board of Knorr-Bremse AG responsible for the Rail Vehicle Systems division, explains: "The online transmission of data from moving vehicles will help improve the organization of workshop operations, reduce vehicle downtimes and cut operating costs. This project also breaks new ground in terms of the close collaboration between fleet operator and component manufacturer. Through iCOM, Knorr-Bremse's proximity to the customer leads to high availability of the vehicle fleet and falling operating costs."

For his part, Jörg Klaeden, Head of Vehicle Operations at Rheinbahn Düsseldorf, explains what it is about iCOM that has impressed the mass transit operator since the digital platform was first installed in January 2018: "The Rheinbahn workshops receive online data that enables them to reach well-founded conclusions about the need for maintenance, repairs or component replacement," he says. "The resultant benefits, such as eliminating costs at an early stage, are initially to be found on the preventive side, as vehicle breakdowns can be avoided by means of preventive maintenance." As Klaeden goes on to say, at the same time the operator can plan its maintenance activities more flexibly, instead of adhering to a fixed schedule in terms of time or mileage. "Now we carry out maintenance in line with the actual level of wear shown by the components," he says. "This leads to optimized vehicle downtimes." Other data helps analyze and evaluate the performance of energy-consuming components, facilitating timely intervention, enhanced maintenance and thus greater efficiency.

**Caption 1:** Three Type NF8U light rail vehicles are equipped with iCOM. | © Rheinbahn

**Caption 2:** Key players from Rheinbahn Düsseldorf and Knorr-Bremse at InnoTrans 2018 in Berlin (from left): Mario Beinert, Vice President RailServices, Knorr-Bremse; Jörg Klaeden, Head of Vehicle Operations, Rheinbahn; Sabine Auer, Head of Urban Transport RailServices Germany, Knorr-Bremse; Michael Clausecker, Management Board, Rheinbahn; Markus Schumann, Head of Value Added Services, Knorr-Bremse. | © Knorr-Bremse

Knorr-Bremse is the global market leader for braking systems and a leading supplier of other safety-critical rail and commercial vehicle systems. Knorr-Bremse's products make a decisive contribution to greater safety and energy efficiency on rail tracks and roads around the world. For more than 110 years the company has been the industry innovator, driving innovation in mobility and transportation technologies with an edge in connected system solutions. Knorr-Bremse is one of Germany's most successful industrial companies and profits from the key global megatrends: urbanization, eco-efficiency, digitization and automated driving.

Approximately 29,000 employees (per June 30, 2018) at over 100 sites in more than 30 countries use their competence and motivation to satisfy customers worldwide with products and services. Localization is a central focus of Knorr-Bremse's strategy. Knorr-Bremse delivers braking, entrance, control and auxiliary power supply systems, HVAC and driver assistance systems for rail vehicles, as well as braking, steering, powertrain and transmission control solutions, and driver assistance systems for commercial vehicles.

In 2017, Knorr-Bremse's two divisions together generated revenues of EUR 6.2 billion (IFRS). A comprehensive aftermarket & services business with high entry barriers gives these revenues increasingly cyclically independent stability. The company benefits from strong, entrepreneurial and experienced management. Technical excellence, reliability, passion and responsibility are deeply embedded in its corporate culture.

**Contact:**

Alexandra Bufe  
Head of Corporate Communications  
Tel.: +49 (0) 89 3547 1402  
E-mail: [alexandra.bufe@knorr-bremse.com](mailto:alexandra.bufe@knorr-bremse.com)

Knorr-Bremse AG  
Moosacher Straße 80  
D-80809 Munich  
[www.knorr-bremse.com](http://www.knorr-bremse.com)