



Knorr-Bremse wins supply contract for new generation of Alstom very high-speed trains

- Knorr-Bremse initially to supply braking and HVAC systems for up to 100 trains of the new Avelia Horizon generation
- Knorr-Bremse cooperation with Alstom and SNCF leads to innovative train concept for future mobility
- Knorr-Bremse meets stringent requirements of SNCF in terms of low life cycle costs, energy
 efficiency, connectivity and environmental balance sheet

Munich, September 10, 2019 – Knorr-Bremse, the world's leading manufacturer of braking systems and supplier of additional sub-systems for rail and commercial vehicles, is to equip the new generation of France's TGV high-speed train Avelia Horizon from Alstom. Within the scope of a platform agreement with manufacturer Alstom, the contract signed in July 2019 governs the supply of braking and HVAC systems for initially up to 100 Avelia Horizon trains, with call-up options for further trains.

"Knorr-Bremse's strategy and product development activities are geared toward low life cycle costs, energy efficiency and eco-efficiency. The resultant solutions that we presented thoroughly impressed SNCF and Alstom. We are proud to be on board in such a significant and prestigious project as the new generation of the TGV", said Dr. Jürgen Wilder, Member of the Executive Board of Knorr-Bremse AG and responsible for the Rail Vehicle Systems division.

Knorr-Bremse is to equip the new high-speed trains built on Alstom's Avelia platform with braking systems (air supply, brake control, bogie equipment) and HVAC systems. In the Avelia Horizon for the first time the French national rail operator SNCF has opted for the direct braking systems that have proven their worth in high-speed trains around the world. The initial delivery of braking and HVAC systems from Knorr-Bremse for the Avelia Horizon are scheduled in 2020. The new Alstom high-speed train will enter scheduled commercial service in 2023.

"This contract for the Avelia platform represents the next step in our successful collaboration with SNCF and Alstom that already covers several generations of high-speed trains," said Mark Cleobury, Member of the Management Board of Knorr-Bremse Rail Vehicle Systems. "We have considered the requirements of both SNCF and Alstom from the very beginning. Through our expertise we are helping to assure the establishment and long-term success of the new TGV." Back in 2015, SNCF and Alstom formed a taskforce together with preferred suppliers including Knorr-Bremse charged with developing the new Avelia Horizon. For more than three years they collaborated on the concept and realization of the new generation of trains, with Knorr-Bremse providing valuable input by proposing innovative product and system solutions.

"Eco-efficiency and environmentally compatible mobility are important considerations for us," said Dr. Peter Radina, Member of the Management Board of Knorr-Bremse Rail Vehicle Systems and responsible for On-Board Systems.

Caption:

Photo 1: "Knorr-Bremse's strategy and product development activities are geared toward low life cycle costs, energy efficiency and eco-efficiency. The resultant solutions that we presented thoroughly impressed SNCF and Alstom. We are proud to be on board in such a significant and prestigious project as the new generation of Alstom very high-speed trains," Dr. Jürgen Wilder, Member of the Executive Board of Knorr-Bremse AG responsible for the Rail Vehicle Systems division. |© Knorr-Bremse





Photo 2: Knorr-Bremse will initially supply braking and HVAC systems for up to 100 Avelia Horizon very high-speed trains built by Alstom. | © Alstom

Photo 3: Alstom and Knorr-Bremse sign the platform agreement for high-speed trains (from left): Christophe Gourlay, Chief Purchasing Officer, Alstom, and Mark Cleobury, Member of the Management Board of Knorr-Bremse Rail Vehicle Systems. | © Alstom

Knorr-Bremse (ISIN: DE000KBX1006, Ticker symbol: KBX) 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. About 28,500 employees at over 100 sites in more than 30 countries use their competence and motivation to satisfy customers worldwide with products and services. In 2018, Knorr-Bremse's two divisions together generated revenues of EUR 6.6 billion. For more than 114 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, ecoefficiency, digitization and automated driving.

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