Efficiency: Smart Solutions for Cost and Energy-Efficient Transport

- **BOMBARDIER PRIMOVE**, the first intermodal e-mobility system for trams, trucks, trains, metros and even cars
- **BOMBARDIER TRAXX**, locomotives for freight and passenger transportation set new standards for efficiency and optimized life cycle costs
- **BOMBARDIER INTERFLO 550**, state-of-the-art rail control solution to optimize urban transport and reduce costs

**Berlin, September 18, 2014** – Transportation today is facing the challenges of a changing world. In many European and North American nations, populations are going through demographic shifts that will put even more pressure on transportation networks, while in South America and Asia, rapidly emerging megacities are stretching current transportation services to the limit. For rail operators and rail manufacturers alike, the main challenge in keeping up with these trends will be finding cost-effective ways to reduce emissions, lower wear and tear, and improve travel times.

Bombardier is leading the way by delivering even greater efficiency and reduced lifecycle costs for rail systems. For example, the BOMBARDIER ECO4 technologies offer 15 innovative solutions that ensure minimal environmental impact, maximize cost effect, and increase operator competitiveness. To further reduce emissions, Bombardier is continuously developing PRIMOVE, its innovative, induction-based e-mobility, wireless charging platform.

Since a train’s efficiency ultimately depends on its locomotive, the right locomotive can deliver enhanced performance while reducing lifecycle costs. The energy-efficient TRAXX F140 AC locomotive with the Last Mile feature enables trains to run on both diesel and electric power. The TRAXX P160 DE Multi-Engine locomotive for freight and passenger transportation is another example of how Bombardier is delivering the performance and efficiency rail operators need. Today, more than 1,600 TRAXX locomotives are in use around the world, with approximately 700 operating in Germany alone. Each day, TRAXX locomotives run on a variety of rail networks, electrically or with diesel engines.

In addition to locomotives, BOMBARDIER FLEXX bogies are key to a train’s smooth and efficient ride. Every day, more than 200,000 FLEXX Compact and Eco bogies are used around the world, travelling a combined distance equal to 130 return trips from the Earth to the moon. Often under a variety of challenging conditions, ranging from Scandinavian winters to the Saudi Arabian desert and reaching altitudes of more than 5,000m near the roof of the world in China, FLEXX bogies are changing the way rail operators think about efficiency.
**Rail Control Solutions Reduce Constraints on Networks**

Featured at InnoTrans is the *INTERFLO 550* signalling solution which combines the ERTMS standard for onboard automatic train protection (ATP) with a radio-based wayside system, thereby minimising trackside equipment. Specifically designed to provide the capacity, adaptability and cost-effectiveness needed for regional, secondary lines, its modular design concept enables Bombardier to offer scalable and flexible solutions for future growth while consistently ensuring safe and efficient train operation.

State-of-the-art train control systems from Bombardier can also boost urban flow by allowing operators to reduce the constraints of their existing rail networks. The MyBTfleet’s tool allows fleet managers to easily communicate and integrate a fleet’s data and applications centrally. The *BOMBARDIER ORBITA* system, on the other hand, combines data gathered from rolling stock together with Bombardier’s fleet knowledge and engineering expertise to improve the active management of vehicles and infrastructure maintenance, performance and operation. Likewise, Bombardier’s IGBT power semiconductors help optimise rail vehicle traction systems, while ComPPete enables effective lifecycle cost control.

With the *BOMBARDIER MITRAC* Train Control and Management System (TCMS), Bombardier provides a high-capacity, infrastructure backbone built on open standard Ethernet technology that allows easy integration of all control and communications functions on board the train. These intelligent services and solutions mean better business opportunities for vehicle builders, maintenance suppliers and operators.

Visit Bombardier at stand 101 in hall 2.2 and outdoors at tracks 7-10 and the adjacent area.

**About Bombardier Transportation**

Bombardier Transportation, a global leader in rail technology, offers the broadest portfolio in the rail industry and delivers innovative products and services that set new standards in sustainable mobility. *BOMBARDIER ECO4* technologies – built on the four cornerstones of energy, efficiency, economy and ecology – conserve energy, protect the environment and help to improve total train performance for operators and passengers. Bombardier Transportation is headquartered in Berlin, Germany, and has a very diverse customer base with products or services in more than 60 countries. It has an installed base of over 100,000 vehicles worldwide.

**About Bombardier**

Bombardier is the world’s only manufacturer of both planes and trains. Looking far ahead while delivering today, Bombardier is evolving mobility worldwide by answering the call for more efficient, sustainable and enjoyable transportation everywhere. Our vehicles, services and, most of all, our employees are what make us a global leader in transportation.

Bombardier is headquartered in Montréal, Canada. Our shares are traded on the Toronto Stock Exchange (BBD) and we are listed on the Dow Jones Sustainability World and North America Indices.
In the fiscal year ended December 31, 2013, we posted revenues of $18.2 billion. News and information are available at bombardier.com or follow us on Twitter @Bombardier.

Note to Editors
For news releases, related material and photos, visit our media centre at www.bombardier.com/en/media-centre.html. Follow Bombardier Transportation on Twitter @BombardierRail.

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