

For Immediate Release
Contact: Media Center
(81-3)3563-6811

Bridgestone Announces New Tire Technology for Determining Road Surface Conditions based on the concept of "CAIS"

New technology to be displayed at the "64th International Motor Show (IAA)"^{*1}

Tokyo (September 13, 2011) – Bridgestone Corporation announced today that it has developed new technology that can provide real time road surface condition information to the driver by way of the tires. The new technology is based on a concept called Contact Area Information Sensing (CAIS^{*2}).

CAIS is a general term for future technology which collects and evaluates road surface condition information. Capable of sensing instantaneous vibration input data and digitalizing it by in-vehicle analysis equipment, the new technology classifies the current state of the road surface into seven conditions^{*3} and transmits this information directly to the driver through an in-car display^{*4}.

By providing immediate road surface information, the new technology will allow the driver to be better prepared for rapid changes in dangerous driving conditions, such as ice, snow and rain, and also provides the opportunity to alert other motorists traveling with them on the same road^{*5}. This new technology is one more way Bridgestone is promoting safety and peace of mind for drivers.

*1. The International Motor Show is held September 13, 2011 through September 15 in Frankfurt, Germany.

*2. Contact Area Information Sensing. "CAIS" is a registered trademark of Bridgestone Corporation.

*3. Dry, semi-dry, wet, slush, fresh snow, compacted snow, ice

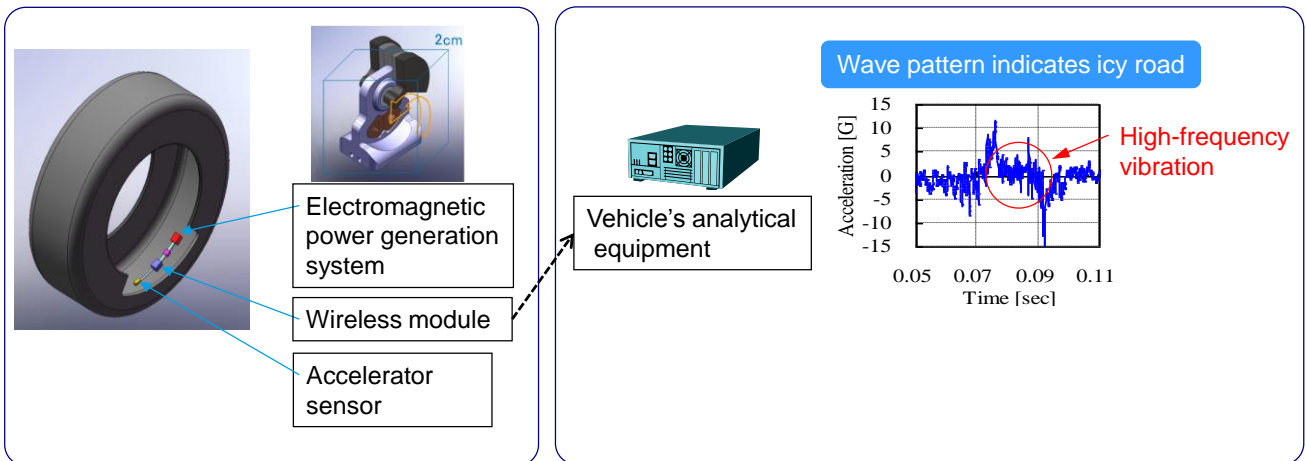
*4. The high precision of this road surface determination technology in various environments has been verified through extended testing over two winters on public roads in Japan (Hokkaido) where dangerous conditions like snow and ice are likely to appear. Detailed results of the tests were announced at the 2010 Annual Congress (Spring) of the Society of Automotive Engineers of Japan and at the World Automotive Congress of the International Federation of Automotive Engineering Societies.

*5. A driver of a car equipped with CAIS can share information on potentially dangerous road surface changes with other motorists who may be traveling with them on the same road.

The following is an overview of the technology:

1. Overview of Technology for determining road surface conditions

- ① An accelerator sensor located inside the tread of a tire detects vibrations in the tire's tread and wirelessly sends that information to the vehicle's analytical equipment. Moreover, CAIS is powered by Bridgestone's proprietary power generation equipment.
- ② The analytical equipment analyzes the vibrations in real time, and determines which of seven road surface conditions (dry, semi-dry, wet, slush, fresh snow, compacted snow, ice) exist.
- ③ The results of the determination of road surface conditions are displayed on a monitor inside the vehicle.



About Bridgestone Corporation:

Bridgestone Corporation, headquartered in Tokyo, is the world's largest tire and rubber company. In addition to tires for use in a wide variety of applications, it also manufactures a broad range of diversified products, which include industrial rubber and chemical products and sporting goods. Its products are sold in over 150 nations and territories around the world.

