



NEWS RELEASE

Technology at Mobile World Congress Will Energize the Next-Generation Connected Car

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By Martin Green

Now that most of us are comfortable with 4G LTE communications, which is no more than five years old, it's time to start preparing for 5G – the fifth generation of wireless technology. It's about to change our lives significantly, because it will allow us to interconnect nearly every electronic device we use, especially the technologies in our cars.

The capabilities of 5G will be a particularly exciting focal point of the Mobile World Congress (MWC) in Barcelona during the first week of March. This new generation of powerful wireless systems is designed to facilitate the Internet of Things (IoT) by furnishing multiple connections to distribute data, instead of relying on just the one connection at a time.

Innovations like connected cars will rely on 5G functionality, which is why we'll be showcasing both Visteon's traditional telematics interfaces and our vision for connectivity gateway solutions in Barcelona. Within that vision, we're looking at innovations like Verizon's LTE Multicast (applied in the automotive industry for the first time with the Visteon Connected Vehicle Hub), which lets mobile broadcasters send video, messages, software, firmware over-the-air (FOTA) updates, telematics content and other information to multiple vehicles or other receivers simultaneously.

At MWC we'll be eager to move beyond traditional telematics control units to demonstrate the Visteon Wireless Gateway, which is designed to manage and connect with multiple external wireless carriers such as cellular, Wi-Fi, global positioning systems (GPS) and dedicated short-range communications (DSRC). It does so while providing a



high-integrity connection to the car and services to its occupants as the vehicle drives through an ever-changing external wireless environment.

The Wireless Gateway is designed to function as an integral part of the map to the IoT and is crucial to supporting the multiple interfaces that 5G enables – including the distribution of data from vehicle-to-vehicle (V2V), vehicle-to-infrastructure (V2X) and within vehicles.

One of the interesting connected car dilemmas emerging from multi-path data distribution involves basic account management for consumers. With the neighbor's kids in the back seat sharing data with your spouse in the front, and with passing cars using bandwidth to communicate with your vehicle, how do we determine who pays for which data? We're likely to see more industry alliances forming to lay out easier-to-manage billing plans.

MWC participants will also be debating how more spectrums for wireless can best be obtained from the "digital dividend" provided by channels once dedicated to analogue television and the use of white space between TV and radio channels. Any way you look at it, the demand for data on the move is insatiable, and we'll need to provide more room for it.

Automakers and Tier 1 suppliers will be challenged in the years ahead to collaborate ever more closely with the mobile network industry for solutions that are both backward and forward compatible. This will help ensure that next generation of connected vehicles will remain capable and current as the wireless environment evolves.

During his 22- year career in the automotive industry, Martin Green has held a number of positions including roles in advanced systems engineering with a focus on hybrid and fuel economy technologies and marketing manager for Visteon electronics. In his current role as a technology planning manager, Martin is responsible for analyzing global technology trends and customer needs to identify and bring to market next-generation connectivity solutions.