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FISITA Recommendation that Vehicle Communications Be Updateable

Dear UNECE members,

FISITA wants to draw your attention on the highest importance to consider updateable communication for the vehicles, especially for safety reasons. Please find below our arguments.

1. Background

The UNECE World Forum for Harmonization of Vehicle Regulations (WP.29) has released Regulation 156 for updates over the air. Regulation 156 is being implemented in vehicles using wireless communications. This is a significant advance in bring vehicles into the modern age of electronics, software, and wireless communications.

Unfortunately, the wireless communications capability currently being used for implementing Regulation 156 is not itself updateable. Given the current life of this wireless communications technology, over-the-air updates will stop being available for vehicles long before the vehicles are retired from service.

In addition, many DCAS products now on the market and initial ADS products conforming to Regulation 157 depend on over-the-air updated HD maps, which will stop being available for vehicles long before the vehicles are retired from service. Similarly, current V2X products in vehicles depend on over-the-air updated security certificates, which will stop being available for vehicles long before the vehicles are retired from service.

The status of eCall in Europe is an example of a regulation with wireless communications equipment that is not updateable.

2. Recommendation

Update Regulation 156 to require the over-the-air wireless communications technology to itself be updateable to match the operating life of vehicles. The phase in for this requirement should be three or four years.

3. Technology

The technology for software-based radios is available. The technology for software-controlled antenna filters is available. The new vehicle market is almost 100 million units. Supplying to this market can make the equipment economic.

Alternatively, the communications module can be treated as replaceable similar to a brake pad.

4. Follow Up

FISITA is available to provide additional information.

With warm regards



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Chief Executive Officer



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Chief Technology Officer