

European Commission
Directorate-General for Communications, Networks, Content and
Technology
Digital Decade and Connectivity Radio Spectrum Policy Group RSPG
Secretariat

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SUBJECT: 5GAA response to the public consultation regarding RSPG25-008 Draft Opinion on the EU-level policy approach to satellite Direct-to-Device connectivity and related Market issues

The 5G Automotive Association (5GAA) welcomes the RSPG's call for feedback on the DRAFT RSPG opinion on the EU's policy approach to Direct-to-Device (D2D) services in Europe.

Seamless and ubiquitous connectivity is very important for the European automotive industry, and satellite-based D2D services are perceived as a key enabler to reach that goal. Connected car services using cellular networks are already operational in millions of vehicles using frequencies below 6 GHz. Therefore, we assume this is the preferred operating range from our point of view for satellite connectivity to offer narrowband and wideband data rate services. To further illustrate our position, we would like to refer to our publications: [Position Paper](#) "on-the-secure-space-based-connectivity-programme-and-focus-on-the-european-communication-satellite-constellation" and the [Technical Report](#) "Maximising the benefit of future satellite communications for automotive."

In response to the RSPG draft opinion, which outlines recommendations for four types of D2D services, the 5GAA has several key messages to convey:

Chapter 4.1 D2D – IMT services

A harmonized regulatory and technical framework for D2D IMT in Europe is essential. While we anticipate that European harmonization may not be achievable in the short to mid-term (before 2032), it is crucial to start discussions on harmonization aspects immediately. The European Commission should implement measures to protect terrestrial networks from interference by satellite D2D services. This service would greatly benefit the automotive industry, requiring only minor modifications to existing radio equipment. Although potentially technically feasible, regulatory challenges make D2D-IMT impractical in the short term.

Chapter 4.2. D2D – MES services

3GPP has specified NTN technology using MSS frequencies, but there are limited chipset suppliers supporting these frequencies. Utilizing MSS frequencies with standardized 3GPP NTN technology would significantly benefit the automotive industry, enabling satellite D2D services with minimal hardware changes. D2D-MES services for European citizens should be under European control. We propose that the European Commission incentivize the use of 3GPP technology within the upcoming spectrum regulation

for the frequency bands 1980 - 2010 MHz and 2170 - 2200 MHz. Efficient use of existing MSS spectrum and the availability of additional frequencies are vital.

Chapter 4.3. D2D – IoT-SRD (Short range devices)

This technology may only serve automotive use cases with very low data rates. Since 3GPP has not specified NTN technologies based on SRD frequencies, NTN chipsets are unavailable. 5GAA is still assessing the relevance of D2D-SRD for identified use cases.

Chapter 4.4. D2D – IoT MSS < 1 GHz

The bandwidth in MSS bands below 1 GHz may be too narrow to meet automotive needs. Future 3GPP evolutions might be compatible with these bandwidths, but currently, NTN technologies using frequencies below 1 GHz are not specified, and NTN chipsets are unavailable. This option is not attractive in the short to mid-term.

Chapter 4.6. and 4.7. Access to national/European markets

For the automotive industry, harmonized regulations across Europe are essential. National fragmentation hinders the creation of a unified European market.

Conclusion

Operating in 3GPP-supported frequencies is key to enabling a true mass market, allowing millions of existing devices, including vehicles, to access satellite connectivity. Other options, using proprietary technology, do not meet the automotive industry's requirements.