The FiRa Consortium is a member-driven organization dedicated to transforming the way we interact with our environment by enabling precise location awareness for people and devices using the secured fine ranging and positioning capabilities of Ultra-Wideband (UWB) technology. FiRa does this by driving the development of technical specifications and certification, advocating for effective regulations and by defining a broad set of use cases for UWB. To learn more about UWB and the FiRa Consortium, visit www.firaconsortium.org.

Herewith the comments from FiRa on the call for comments on the RSPG draft opinion on the ITU-R World Radio Conference 2023, specifically the opinion on WRC-23 Agenda Item 1.2 (IMT mid-band identifications) and Agenda Item 10 (WRC-27 Agenda).

UWB is a crucial pillar for the future wireless society.
UWB provides unique, precise and secure, unintrusive position awareness needed by many personal and IoT applications in the near future. UWB requires access to mid-band spectrum. UWB can operate co-channel with many other technologies due to its extremely low emission power, low duty cycle and low activity factor as well as its relatively high resilience against narrow-band interference. However, it will suffer severe performance degradation from ubiquitous wideband technologies where transmitters operate in close proximity with a power substantially higher than UWB, potentially high duty cycles and high activity factors, such as IMT.

Agenda Item 1.2
UWB channel 5 (6240 - 6739.2 MHz) is one of two main UWB channels in use for UWB applications developed within FiRa. Given the potential impediment on this UWB channel through the deployment of IMT we request RSPG to take the position of:
Option 2 on the band 6 425 - 7 125 MHz - "No IMT identification".

Agenda Item 10
Recent discussions carried out in CPG PTA suggest that a new Agenda Item for IMT/6G is likely to be established.

Though UWB devices operate on a non-interference/non-protection basis, they nevertheless deliver many valuable services to end users and are embedded in mass market personal devices.

In particular, the spectrum up to 9GHz is the core spectrum for UWB applications developed within FiRa. UWB channel 9 (7,737.60 - 8,236.80 MHz) is one of two main UWB channels in use for UWB applications developed within FiRa. Also, consideration is given for a possible use of channel 10 (8,236.80 - 8,736.00 MHz).

We recommend that any future investigation of spectrum for 6G should not consider bands below 9 GHz, to avoid severely disrupting existing and future UWB services.