



**Comments of the**

**Ultra Wide Band (UWB) Alliance**

**to the**

**Telecommunications Regulatory Authority of Oman  
Public Consultations on the Draft  
Regulation for Ultra-Wide Band Devices in Oman**

**About the UWB Alliance**

*The Ultra Wide Band (UWB) Alliance is a global not-for-profit organization that works to collectively establish ultra-wideband (UWB) technology as an open-standards industry. A coalition made up of vendors that either design, manufacture, or sell products that use ultra-wideband technology, the UWB Alliance aims to promote and protect the current allocation of bandwidth as well as promote the continuing globalization of the technology. As part of our mission, we advocate UWB technology and use cases to promote verticals showing the value of UWB for IoT and Industry 4.0 and to build a global ecosystem across the complete UWB value chain, from the silicon to the service. In addition, the Alliance is promoting and assuring interoperability through its work with Standards Development Organizations such as the IEEE and ETSI and then working with members to define upper layers and testing to assure compliance. For more information, please visit us at [www.UWBAlliance.org](http://www.UWBAlliance.org).*

## Introduction

The Ultra Wide Band (UWB) Alliance thanks the Telecommunications Regulatory Authority for the opportunity to comment on the Draft Regulation for Ultra-Wide Band Technology. We commend TRA for recognizing the ETSI EN302 065 series of standards. The use of the ETSI standards harmonizes the radio rules with many regions worldwide. This harmonization creates economies of scale which benefits businesses and consumers by reducing costs to bring products to market. The ETSI 302 065 series of standards brings many benefits to society by providing the unique capabilities of UWB technology.

## Detailed Comments (Question 4)

UWB is used worldwide for many applications including short range communications, precision measurement, locating, through-wall imaging, surveillance, and medical systems. UWB is presently available in many consumer devices such as smartphones and their ecosystems complimenting the operation of other technologies such as Bluetooth and Wi-Fi. The use of UWB is growing rapidly.

The availability in mid-band spectrum is limited, and UWB is an efficient user of spectrum. The negligible impact on other technologies allows UWB to share spectrum effectively with many other services. It expands the diversity of uses within the limited spectrum resource of the mid-band. Diversity of use is an important metric in measuring the efficient utilization of the radio spectrum. UWB supports many concurrent uses and users at the same time. These characteristics of UWB will help TRA meet its goals of maximizing the efficient utilization of its RF spectrum.

## Move forward with the draft regulations now

We commend TRA for enabling flexible use of the mid-band spectrum via UWB. This assures that multiple compatible technologies can be used to promote innovation and economic growth.

We endorse the draft Regulation for UWB Devices. It is a significant step in enabling the value of UWB to become available to consumers. We strongly endorse adopting the draft regulation as soon as practical.

We note that the reference to EN 302 500 is to an older standard. The Technical characteristics and methods of measurement for UWB location tracking is covered in EN 302 065-2 (Location Tracking) standards. We recommend changing the reference in the current draft to the latest ETSI EN 302 065-2 harmonized standard.

## Considerations for future expansion of the rules

It may be of interest to TRA that studies on extending the band above 8.5 are in progress in Europe. When those studies are completed, TRA may wish to consider updating its rules to expand extend the UWB band the band based on the results. We further note that new applications are being developed in ETSI and elsewhere. As new and amended standards become available, we encourage TRA to review these and consider allowing new applications as they are added to the ETSI harmonized standards.

## Conclusion

UWB alliance thanks TRA for this opportunity and commends TRA for taking this key step in bringing the value of UWB to Oman. The updated regulations expanding access for UWB will complement the other conventional technologies currently allowed and will keep pace with the rapid development and growth of UWB. Considering UWB as an important part of the spectrum planning for TRA will support development of local innovative businesses.