**Before the  
Federal Communications Commission**

**Washington, D.C. 20554**

In the Matter of )

)

Petition for Rulemaking: Amendment of ) CG RM-11844

Rules Governing Ultra-Wideband Devices )

and Systems )

**Comments of Novelda US, Inc**

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Novelda fully supports Robert Bosch LCC’s request[[1]](#footnote-1) to review the ultra-wideband (UWB) rules.

Novelda is a manufacturer of radar semiconductor devices and modules operating under the ultra-wideband rules of FCC Part 15, Subpart F. Our products are used in a wide variety of applications including:

* Monitoring of elderly people and infants in a hospital / care unit / home settings
* Monitoring of drivers or operators of vehicles to avoid drowsiness or falling asleep
* Counting and localization of people in buildings or meeting rooms to optimize HVAC energy consumption
* Robust detection of presence in office buildings, hotels etc. to increase safety and enable more efficient evacuation in case of fire, earthquakes etc.
* Non-contact monitoring of vital signs
* In-car presence sensing to avoid leaving infants or pets in overheated parked cars
* Presence detection and gesticulation control for consumer electronics user-interfaces
* Fully automated, remote sleep monitoring
* Non-invasive monitoring of cardiovascular diseases
* Non-destructive material inspection

Many of these applications will benefit from a review of the UWB rules as proposed by Robert Bosch LCC in its Petition for Rulemaking. A more globally harmonised set of rules will promote UWB technology worldwide and help Novelda and its customers to bring the benefits of our technology to many more consumers. While the waiver process is very valuable, the associated costs and delays prevent smaller manufacturers from realising their innovations.

Novelda is particularly interested in reviewing the restriction on fixed outdoor usage. As highlighted in Bosch’s submission, many surveillance applications could be implemented very spectrum efficiently if it wasn’t for this restriction. In the Second Report and Order[[2]](#footnote-2), this restriction was motivated to prevent wide-area communication systems from using ultra-wideband. The radar and imaging techniques used in surveillance applications are an unintended victim of these restrictions even though they don’t support communications at all.

Novelda would therefore like to urge the FCC to accept this Petition for Rulemaking and would like to confirm its readiness to contribute to the decision-making process.

1. Robert Bosch LLC, Petition for Rulemaking, 18 Jun 2019, CG RM-11844 [↑](#footnote-ref-1)
2. UWB Second R&O, 19 FCC Rcd at 24571, paragraph 27 [↑](#footnote-ref-2)