

SICK Pty Ltd • Australia
May, 2025

Subject: Response to ACMA Consultation on Remaking the Low Interference Potential Devices Class Licence

Dear Sir/Madam,

I am writing to provide my input on the proposed remaking of the Low Interference Potential Devices (LIPD) Class Licence, specifically regarding the removal of provisions for Ultra-wideband (UWB) transmitters, Item 78 Limitations – “~~from any fixed outdoor location~~”.

Background and Rationale

Ultra-wideband (UWB) technology has shown significant potential in various applications, including **personal and workers safety**, high-precision location tracking, secure communications, and high-speed data transfer. The current restrictions on fixed outdoor installations of UWB devices limit the full utilization of this technology, particularly in applications that require stable and continuous operation in outdoor environments.

Proposal

I propose that the ACMA consider amending the LIPD Class Licence to allow for the deployment of fixed UWB installations in outdoor settings. This amendment would involve:

1. **Fixed UWB Installations:** Removing the current restrictions for UWB transmitter use in Fixed Outdoor Location.
2. **Operational Guidelines:** UWB alliance have provided clear guidelines for the use of UWB for use in fixed outdoor location.
3. **Additional consideration:** If required ACMA may pose restrictions on for not using fixed outdoor UWB transmitter in certain location.

Proposed Change to Item 78

I propose changing Item 78 Ultra-wideband transmitters, limitation (b) to remove the phrase "from any fixed outdoor location." This change would allow for the operation of UWB transmitters from fixed outdoor locations, thereby enabling broader applications and benefits.

International Context

Regarding fixed outdoor UWB, quite a few countries allow fixed outdoor installations of UWB transmitters. For example, China only has a restriction on use within 1 km from radio astronomy sites.

Since Australia is inspired by the EU regulations, it would be helpful to point to the latest update of ECC Decision (06)04. Annex A1.3.1 has the conditions for fixed outdoor use between 6.0 and 8.5 GHz. The technical studies underlying this change in the regulations are reported in ECC Report 327. Last May, the European Commission also updated its Decision on UWB, based on CEPT Report 84.

Other notable countries that have specific regulations for outdoor use are Japan (allowed in 7.25-9 GHz) and Korea (outside 3.735-4.8 GHz).

Distinguishing Between Locations

One of the concerns with the current regulations is the difficulty in clearly distinguishing between fixed outdoor, temporary, and mobile locations. This ambiguity can lead to compliance challenges and enforcement issues. By providing clear definitions and guidelines for each type of installation, the ACMA can ensure that UWB devices are used responsibly..

Benefits

Allowing fixed UWB outdoor installations would bring several benefits, including:

- **Enhanced Precision and Reliability:** Fixed installations can provide more stable and accurate location tracking and communication services.
- **Innovation and Development:** Encouraging the development of new applications and services that leverage the unique capabilities of UWB technology.
- **Economic Growth:** Supporting industries that rely on advanced communication and tracking technologies, thereby contributing to economic growth.

Specific Benefits for Australia

1. **Mining:** UWB technology can significantly enhance mining operations by providing high-precision location tracking of equipment and personnel, improving safety and operational efficiency. It can also facilitate real-time monitoring and management of assets in harsh and complex mining environments.
2. **Outdoor Asset Management:** UWB can revolutionize outdoor asset management by enabling precise tracking and monitoring of high-value assets, reducing loss and misplacement. It can also optimize workflow and improve safety compliance through real-time location systems.

Expert Insight


Praveen Kannan, with extensive experience in UWB and RFID regulation worldwide, has contributed significantly to the development and harmonization of these technologies. His work includes advising on regulatory frameworks and ensuring compliance with international standards, which has been instrumental in shaping the current landscape of UWB and RFID regulations.

Conclusion

In conclusion, I believe that the inclusion of provisions for fixed UWB outdoor installations in the LIPD Class Licence would be a forward-looking step that aligns with the evolving technological landscape. I urge the ACMA to consider this proposal and take the necessary steps to facilitate the deployment of this promising technology.

Thank you for considering my submission. I look forward to the positive outcomes of this consultation process.

Yours sincerely,



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