

Proposed Allocation of 6GHz Band in Singapore

Comments for proposed allocation

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Summary of Major Points

- 1) The proposed allocation does not mention non-RLAN use of 6GHz band.
- 2) Provisions should be made for SRD (Short range devices) in this frequency band for non-RLAN uses.


Existing use of 6Ghz in Instrumentation

The first commercial use of electromagnetic waves for level indication started with Saab Marine Electronics on oil tankers in 1976. Since then, this has expanded to use of different frequency bands including 6GHz for indication and control of process level in industrial applications.

Currently there are various applications where 6GHz is being used. The most prominent uses are for large oil storage tanks /marine vessels and process vessels like the digester tanks used for sewage treatment. The 6GHz instruments tend to be operating in the VLP (Very Low Power Range – Table 1, Appendix A, IMDA, Short Range Devices)

Examples of installations in process industry

Radars for Level Measurement



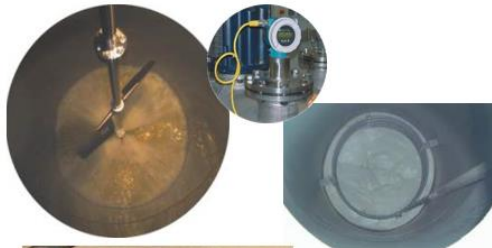
26 GHz
PTFE - disco




6 GHz
rod

Free Space Radar for Level Measurement

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In most instances, the electronic sensors are mounted on top of enclosed vessels directed at a downward direction where interference towards external LAN signals are either negligible or non-existence.

Impact for allocation of 6GHz for RLAN

In the proposal, there is no mention of the existing use of this band frequency for non RLAN usage. With the implementation of this band allocation, there should be also provision for the continual use or new installations of 6GHz level measurements in the process industries. The alternative would be that existing installations would need to be replaced with a different band radar frequencies or measurement technologies. This would mean considerable cost impact to existing installations.