



**Electromagnetic compatibility
and Radio spectrum Matters (ERM);
Short Range Devices (SRD);
Technical characteristics of Detect And Avoid (DAA)
mitigation techniques for SRD equipment using
Ultra Wideband (UWB) technology**

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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Electromagnetic compatibility and Radio spectrum Matters (ERM).

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1 Scope

The present document provides the technical specifications of Detect And Avoid (DAA) mitigation techniques. These techniques are focused on the protection of active radio services.

The following DAA mechanisms have been identified to protect the:

- radio location services in the band 3,1 GHz to 3,4 GHz;
- broadband wireless access services in the band 3,4 GHz to 3,8 GHz;
- radio location services in the band 8,5 GHz to 9,0 GHz.

NOTE: The DAA mitigation techniques are to some extent generic and may also be used with modifications for the protection of other radio services in the future if the technical requirements are identified. The proposed methods can be deployed by all kinds of Ultra WideBand (UWB) based applications and can be extended to other radio technologies.

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the reference document (including any amendments) applies.

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2.1 Normative references

The following referenced documents are necessary for the application of the present document.

- [1] ETSI TS 102 883 (V1.1.1) (2012-08): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD) using Ultra Wide Band (UWB); Measurement Techniques".

2.2 Informative references

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] ECC DEC(06)04: "ECC Decision of 24 March 2006 on the harmonised conditions for devices using UWB technology in bands below 10.6 GHz; amended 9 December 2011".
- [i.2] ECC Report 120 (March 2008): "ECC Report on Technical requirements for UWB DAA (Detect and avoid) devices to ensure the protection of radiolocation in the bands 3.1-3.4 GHz and 8.5-9 GHz and BWA terminals in the band 3.4-4.2 GHz".
- [i.3] ECC TG3#18-18R0: "Flexible DAA mechanism based on "isolation criteria" between victim service and UWB devices", ECC TG3 Meeting 18, Mainz, March 2007.
- [i.4] Void.
- [i.5] Void.
- [i.6] Void.
- [i.7] Void.