DFS TESTING & COMPLIANCE MANAGEMENT

DFS (Dynamic Frequency Selection) is a spectrum-sharing mechanism that allows wireless devices, notably those that use the 5250–5350 MHz and 5470–5725 MHz bands, to coexist with radar systems. DFS requirements have been established by the European Union, the FCC, and regulatory bodies in other markets.

OVERVIEW

As the 5 GHz band has been increasingly used by manufacturers of wireless devices for a wide variety of different applications (most notably WLAN devices) there have been growing concerns over the functionality of military or weather radar systems that operate in this same portion of the radio frequency spectrum. To address these concerns the DFS requirements were established. The requirements have been published in the relevant rule parts for BRAN (Broadband Radio Access Networks)/ RLAN (Radio Local Area Network) respectively UNII (Unlicensed National Information Infrastructure) devices:

- Europe (ETSI EN 301 893 and ETSI EN 302 502)
- US (Title 47, §15.407)
- Canada (RSS-247)
- Japan (Article 2 Paragraph 1 of Item 19-3-1/19-3-2)

FUNCTIONALITY

Any device operating in the above mentioned frequency bands have to meet the DFS requirements as stated in the relevant rules of the target markets. Devices shall not start operating on a frequency unless this frequency has been scanned and identified to be available respectively not in use by a radar system. Furthermore used frequencies must continuously be scanned for radar signal patterns during normal operation. DFS detects radar interference and moves to another "available" frequency.

WHAT CETECOM CAN DO?

- CETECOM has the necessary knowledge to be a leading provider for DFS compliance testing and certification.
- CETECOM is the sole partner for fast and reliable DFS testing. Take the chance and discuss the specific requirements of your product with one of our experts
- CETECOM makes sure that products like all kinds of radio equipment, bluetooth or WLAN devices, base stations, repeaters, mobiles and PMS radio devices meet the new requirements.

ABOUT CETECOM

For over twenty years, the CETECOM Group has been renowned as an independent test laboratory for mobile phones and other wireless devices. With over 400 employees and test labs in Europe, North America and Asia, CETECOM offers a unique service portfolio covering the entire range of cellular and consumer wireless products. CETECOM provides testing services, consulting and training for wireless technologies: GSM, WCDMA, LTE, CDMA, Bluetooth, Wi-Fi, NFC and other systems. We also perform a wide range of testing in the areas of mobile software applications, OTA, SAR, FCC, EMC, field trials, acoustics, batteries and accessories. CETECOM participates in the development of global standards and test specifications.

BECAUSE QUALITY MATTERS

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