

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	DFS: Primary user detection	
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Re:	Text for the comment proposing a new subclause under DFS clause.	
Abstract	This contribution contains text for the new subclause discussing primary user detection mechanism in DFS.	
Purpose	Adopt the text proposed to the TG3&4 MAC draft.	
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DFS: Primary user detection

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Introduction

This paper contains text for a new subclause discussing use of DFS in certain license exempt bands with primary users. In these cases the primary target of the DFS is to avoid usage of channels occupied by the primary users, e.g. radars. The proposed subsection is to emphasize this fact and to evince that the standard has been designed to conform to the requirements.

Primary User Detection

In some regulatory domains the 5 GHz license exempt bands have been allocated to certain services on a primary basis. Operation at these bands is allowed only for devices capable of avoiding occupied channels by employing a dynamic frequency selection mechanism. The DFS shall be employed to detect interference from other systems and therefore the equipment is able to avoid co-channel operation with other systems, notably radar systems. When selecting the channel to operate at the device shall first assess whether the channel is occupied by a primary user and only after that shall use other selection criteria, e.g. C/I and RSSI. This is illustrated in the following figure as a high-level flow diagram of the DFS with primary user detection capability.

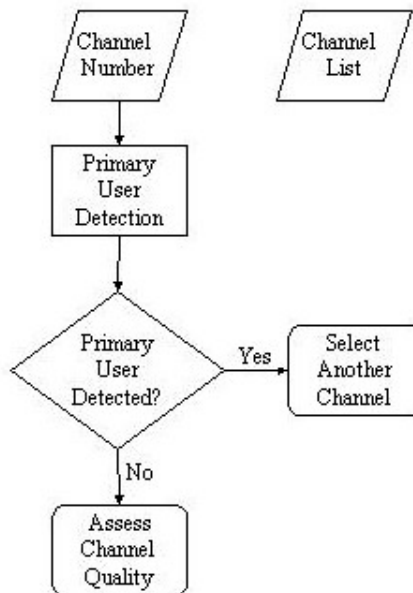


Figure 1. High-level diagram of the primary user detection mechanism of DFS