|  |
| --- |
| Chapter 7.1. terminology amendment proposal |
| Date: 2017-09-25 |
| **Authors:**  |
| Name  | Affiliation  | Phone  | Email  |
| Max Riegel | Nokia |  | maximilian.riegel@nokia.com |
|  |  |  |  |
|  |  |  |  |
| **Notice:**This document does not represent the agreed view of the OmniRAN TG It represents only the views of the participants listed in the ‘Authors:’ field above. It is offered as a basis for discussion. It is not binding on the contributor, who reserve the right to add, amend or withdraw material contained herein.  |
| **Copyright policy:**The contributor is familiar with the IEEE-SA Copyright Policy <<http://standards.ieee.org/IPR/copyrightpolicy.html>>.  |
| **Patent policy:** The contributor is familiar with the IEEE-SA Patent Policy and Procedures:<[http://standards.ieee.org/guides/bylaws/sect6-7.html#6](http://standards.ieee.org/guides/bylaws/sect6-7.html)> and <[http://standards.ieee.org/guides/opman/sect6.html#6.3](http://standards.ieee.org/guides/opman/sect6.html)>. |

Abstract

This document proposes text to address the 802.1CF-Draft 0.6 issue:

* Definition of unlicensed and authorized spectrum at the begin of chapter 7.1

# Functional Decomposition and Design

## Access network setup

### Introduction and overview

When being powered up or activated, an access network has to be configured before becoming operational. Assuming that all configuration attributes of the network elements are set to some default value after power-up, initial configuration consists of adjusting the base operational parameters of the network elements and establishing the connections among the network elements of the AN and toward the associated SSs, ARs, NMS, and CIS of the AN. Depending on the implementation of the AN, the configuration may also include adjustments to the radio interfaces, either to comply with regulatory requirements or to optimize radio resource usage. Depending on the regulatory requirements and the intended use of the spectrum, special preparatory steps are required before turning on radio interfaces and operating access networks in unlicensed or authorized spectrum.

Unlicensed spectrum is spectrum which is assigned for general use without requiring a license to access the spectrum. Nevertheless, regulation for unlicensed spectrum exists and defines not only the lower and upper bound of the spectrum but also operational rules like maximum transmission power, duty cycles, or special procedures to enable coexistence among the various deployments. Well-known examples of unlicensed spectrum are the ISM band in the 2.4 GHz range, or the spectrum bands in the 5 GHz range used for Wi-Fi.

Authorized spectrum is licensed spectrum with an owner, who allows others to make temporary use of parts or the whole spectrum at particular locations. Usually an electronic authorization procedure is deployed to process spectrum usage requests and grant or deny authorization to access the spectrum to requesters. Such secondary usage can follow exclusive spectrum access procedures, or can allow multiple requesters to make use of the spectrum in an unlicensed fashion with defined coexistence methods of multiple requesters.

Most of the IEEE 802 radio technologies for access networks are designed for operation in unlicensed bands, or for operation in TV white space (TVWS). TVWS is locally or temporarily unused spectrum assigned for TV broadcast and made available for general use through authorization procedures involving a spectrum database. According to FCC definitions, the TVWS spectrum is primarily assigned to provide TV broadcast service, or is used for the purpose of generating broadcast content, e.g., by making use of wireless microphones. Secondary users may leverage the designated TVWS spectrum for other kind of services only when the primary users are not demanding the spectrum and the general use of the spectrum at a geographic location is authorized by the spectrum database.

The following subsections describe both the necessary actions for initiating access network operation and the special procedures to adjust radio channels in unlicensed bands or in TV white space (TVWS).

### Roles