|  |
| --- |
| Chapter 7.5.8 Mapping to IEEE 802 technologies |
| Date: 2017-05-02 |
| **Authors:**  |
| Name  | Affiliation  | Phone  | Email  |
| Max Riegel | Nokia Bell Labs |  | 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 content for the chapter 7.5.8 Mapping to IEEE 802 technologies.

Revision #1 provides a more consistent term for the forwarding behavior in the mapping table.

### 7.5.8 Mapping to IEEE 802 technologies

Datapath management involves functions across many IEEE 802 technologies. It includes the encapsulation of user data into datagrams transmitted over interfaces, the establishment of data flows over interfaces, but also the forwarding of data flows in network elements. Main IEEE 802 specification defining forwarding behavior for Ethernet frames is IEEE 802.1Q, that details the operation of Bridges, but also introduces the basic functions for handling multiple virtual LANs within a common infrastructure.

The following table provides references for datapath management related functions within IEEE 802 interface specifications:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | IEEE 802.3 | IEEE 802.11 | IEEE 802.16 | IEEE 802.22 |
| Encapsulation | Clause 3 (EPD) | Annex H, M(LPD) | Clause 5.2(Packet-CS) | Clause 6(Packet-CS) |
| Data path forwarding | IEEE 802.1QClause 8.6.3 | - | Clause 11.13 | Clause 7.7.8.9 |
| VLAN | IEEE 802.1QClause 7 | - | Yes, ETH-CS | Yes, ETH-CS |
| Security | IEEE 802.1AE | Clause 12 | Clause 7 | Clause 8 |
| MAC Service | Clause 4 | Clause 5 | Clause 6.3 | Clause 7.6 |
| MAC Mgmt. | Clause 5.2.2 | Clause 6.3 | Clause 14.2 | Clause 7.7 |