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| Project | **IEEE 802.21 Working Group for Media Independent Services**  **<**[**http://www.ieee802.org/21/**](http://www.ieee802.org/21/)**>** |
| Title | **Proposal to study media specific mapping for MIS SAPs** |
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| Re: | IEEE 802.21 Session #77 in San Antonio, Texas, USA |
| Abstract | This contribution proposes to study media specific mapping for MIS SAPs. |
| Purpose | To propose future study item of IEEE 802.21 WG |
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For implementing the Media Independent Services of IEEE 802.21 in various networks, it is necessary to map MIS\_LINK\_SAP primitives to technology specific link-layer primitives.

The media specific mappings for MIS SAPs are recommended in Annex D of IEEE P802.21 Revision and also in Annex D of IEEE P802.21.1. These Annexes provide MIS\_LINK\_SAP mapping tables to specific link-layer technologies such as IEEE 802.16, IEEE 802.11-2012, IEEE 802.3-2012, IEEE 802.1Q-2014, and cellular technologies (3GPP and 3GPP2). However, still we need MIS\_LINK\_SAP mapping tables to other link-layer technologies such as IEEE 802.15 link-layer technologies.

IEEE 802.15 WG developed several standards of different PHY/LINK-layer technologies such as IEEE 802.15.1 for WPANs based on Bluetooth technology, IEEE 802.15.3 for high-rate WPANs, IEEE 802.15.4 for low-rate WPANs, IEEE 802.15.6 for WBANs, and IEEE 802.15.7 for short-range wireless optical communication. Also, IEEE 802.15 WG has been developing IEEE P802.15.8 for Peer Aware Communications (PAC), and recently started Project IEEE P802.15.12 to define Upper Layer Interface (ULI) for IEEE 802.15.4 low-rate wireless networks. The scope of P802.15.12 is to define an ULI sublayer in Layer 2 (L2), between Layer 3 (L3) and the IEEE 802.15.4 Media Access Control (MAC) sublayer. The ULI provides data and management service access points (SAPs) for interface to the IEEE 802.15.4 MAC.

As a future study item of IEEE 802.21 WG, we propose to study MIS\_LINK\_SAP mapping to specific link-layer technologies for updating existing mapping tables according to revised link-specific standards, and for adding new mapping tables for other link-specific technologies such as IEEE 802.15.