**IEEE P802.15**

**Wireless Personal Area Networks**

|  |  |
| --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | Draft for an IEEE 802 position on AI 1.15 WRC19 |
| Date Submitted | 01. March 2017 |
| Source | Thomas Kürner, Sebastian Rey ,Technische Universität BraunschweigSchleinitzstr. 22,38106 Braunschweig, Germany | Voice: +49 531 391 2416 Fax: +49 531 391 5192 E-mail: kuerner@ifn.ing.tu-bs.de  |
| Re: | [] |
| Abstract | This document contains a draft text for an IEEE 802 position on WRC19 AI1.15. |
| Purpose | Input to IEEE 802.18 |
| Notice | This document has been prepared to assist the IEEE P802.15. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein. |
| Release | The contributor acknowledges and accepts that this contribution becomes the property of IEEE and may be made publicly available by P802.15. |

#

# Draft of IEEE 802 position

IEEE 802 welcomes the work carried out under AI 1.15 in preparation of the World Radiocommunication Conference (WRC) 2019. The wide bandwidths above 275 GHz will enable future high data rate communication links with 100+ Gbit/s.

With IEEE P802.15.3d a new standard is currently in the balloting process and expected to be published in the beginning of 2018. This new standard targets point-to-point links in the frequency range of 252 to 325 GHz with data rates ranging from 1 to 10 Gb/s on the lower end and up to 100 Gb/s on the upper end. The application scenarios comprise wireless back-/fronthaul links, kiosk downloading, reconfigurable wireless links for data centers in addition to fibers and intra-device communications. Therefore, IEEE 802 especially supports the identification of the frequency bands 275 GHz to 325 GHz for active services such as THz communications.

Higher frequency bands beyond 325 GHz, e. g. up to 450 GHz, are highly appreciated for future wireless communication applications. No task group for a new standard at these higher frequencies has been formed yet, because the technology at 300 GHz seemed most promising in 2014 when the project for the first standard in the THz range was initiated. However this may change in the future.