**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | Draft liaison statement to ITU-R WP1A (Copy to WP5A, WP5C, WP7C and WP7D) |
| Date Submitted | [September 2015] |
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| Re: |  |
| Abstract | This contribution proposes a drfat liaison statement to ITU-R WP1A. |
| Purpose | To respond ITU-R WP1A regarding the frequency range in which TG3d is interested, as well as the information on compatibility study results by TG3d. |
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| **Radiocommunication Study Groups** |  |
| **INTERNATIONAL TELECOMMUNICATION UNION** |  |
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| Received:  |  |
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| **English only** |
| Institute of Electrical and Electronics Engineers, Inc. |
| draft liaison statement to working party 1A ON NEW REPORT ITU-R SM.2352-0 |
| Copy for information to Working Parties 5A, 5C, 7C and 7D |
| Technology trends of active services in the band above 275 GHz |

**1 Source information**

This contribution was developed by IEEE Project 802®, the Local and Metropolitan Area Network Standards Committee (“IEEE 802”), an international standards development committee organized under the IEEE and the IEEE Standards Association (“IEEE-SA”).

The content herein was approved for submission by the IEEE 802.15™ Working Group for WPAN, the IEEE 802.18 Radio Regulatory Technical Advisory Group, and the IEEE 802 Executive Committee, in accordance with the IEEE 802 policies and procedures, and represents the view of IEEE 802.

**2 Discussion**

WP 1A informed to IEEE that since the bands 275-325 GHz are identified for the passive services by No. **5.565** of the Radio Regulations (RR), the studies are needed to review RR No. **5.565** for use of these bands by active services in the future. WP1A further informed to IEEE that since the band 252-275 GHz is also allocated to the mobile and fixed services, the additional contiguous bandwidth of 23 GHz could be utilized for terahertz communications discussed within IEEE 802 group. IEEE is also invited to provide information on spectrum requirements and technical and operational characteristics of their systems operating in these bands or other bands for sharing studies to Working Parties 5A and 5C.

IEEE 802 has initiated the sharing study between passive and active services. Although the results are still discussed by IEEE 802.15™ Working Group, IEEE 802 would like to inform ITU-R WP1A the follwoing input contributions related to the sharing issues for information only.

Doc.: IEEE 802.15-15-10-0829-00-0thz

Doc.: IEEE 802.15-15-12-0101-00-0thz

Doc.: IEEE 802.15-15-12-0324-00-0thz

Doc,: IEEE 802.15-12-0582-01-0thz

IEEE 802 has reviewed the frequency range 252-275 GHz as well as 275-325 GHz and agreed to conduct studies on theses frequency bands for terahertz applications which utilize a contiguous bandwidth of 78 GHz. IEEE 802 is now drafting Technical Requirement Document (TRD) to complete the requirements and specifications for terahertz systems. Due to this stage, IEEE 802 does not have any technical and operational chracteritics which can be used for sharing studies at the moment.

IEEE 802 also interested in other higher frequency ranges above 325 GHz for close proximity terahertz applications. If IEEE 802 initiates technical progress in these frequency ranges, these results will be informed accordingly.

**3 Summary**

We applaud the efforts of the participants in WP 1A for undertaking this work and giving IEEE 802 the opportunity to respond to the terahertz related matters.

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