**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 Text for Letter to FCC | |
| Date Submitted | 15 July 2013 | |
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| Re: |  | |
| Abstract | Draft Letter to support Support of IEEE-USA Petitions FCC for Spectrum Ruling to Spur New Technologies | |
| Purpose | Providing input to the drafting process within 802.15 and 802.18 | |
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To

FEDERAL COMMUNICATIONS COMMISSION

Washington, DC 20554

Support of IEEE-USA Petitions FCC for Spectrum Ruling to Spur New Technologies

IEEE 802 get aware of IEEE-USA Petitions FCC for Spectrum Ruling to spur New Technologies. IEEE 802 generally supports the spirit of the declaratory ruling from IEEE-USA and believes that innovation should be supported at the FCC.

802 has an active process that would benefit from such a rule making. In 2008 802.15's Terahertz (THz) Interest Group has been established, which has industry participation that do not want to see regulatory uncertainty prevent innovative technology from getting to market in these bands.

The 802.15 THz Interest Groups’ focus is primarily concerned with THz communications and related network applications operating in the THz frequency bands between 275 – 3000GHz. Such THz communications applications would include; component to component, board to board, machine to machine, human to machine and human to human, (indoor and outdoor) wireless communications. As envisioned, THz communications would overall employ wireless modulation methods of limited complexity, omni and/or directional antenna systems, and would typically offer very high data transfer rates in multiples of 10 Gbps, and up to possibly 1 Tbps, for parity with future fiber optic capacities. THz wireless systems could support transmission distances ranging from the very short (few centimeters or less) to relatively long distances of several kilometers. Recently, a couple of possible applications and usage scenarios for THz wireless data transmission have been defined by the Interest Group. It is expected that as a first step towards the development of a standard, a first study group on “100GbW (100 Gbit/s over beam switchable wireless point-to-point links)” will be established in 2013 addressing amongst others wireless links in data centers.

During a teleconference on July 8, 2013 a briefing of the US FCC Spectrum Frontiers WG has been made by IEEE 802.15. IEEE 802 would be glad to be in further contact with the Commission to expand on these innovations and offers to support rule making by OET.